

**OVERVIEW OF IMPACT
OF POSSIBLE RS 2477 RIGHTS-OF-WAY
ON ALASKA NATIONAL PARK UNITS**

The impact of RS 2477 rights-of-way on Alaska national park units could be devastating. The actual impact would depend on how many potential rights-of-way are validated, how long the rights-of-way would be, what resources they would affect, how each right-of-way would be used, and to what extent the National Park Service (NPS) can regulate and manage valid RS 2477 rights-of-way.

Number of Possible RS 2477 Rights-of-way

The State of Alaska's 1973 inventory of existing trails identified approximately 200 possible RS 2477 rights-of-way in Alaska national park units. The State's 1995 RS 2477 Project consolidated these trails into 164 possible routes and identified 111 of them as RS 2477 rights-of-way. The other 53 possible rights-of-way were not completely analyzed and were categorized as "hold," "defer," or "pending;" the State could pursue these routes later.

The 164 possible RS 2477 rights-of-way identified by the State in 1995 are located in the following national park units and include the following approximate mileages:

94 - 1612 mi	- Wrangell-St. Elias National Park & Pres.
24 - 405 mi	- Denali National Park & Preserve
16 - 257 mi	- Bering Land Bridge National Preserve
10 - 202 mi	- Yukon-Charley Rivers National Preserve
4 - 130 mi	- Gates of the Arctic National Park & Pres.
3 - 22 mi	- Glacier Bay National Park & Preserve
3 - 66 mi	- Katmai National Park & Preserve
3 - 113 mi	- Lake Clark National Park & Preserve
2 - 22 mi	- Klondike Gold Rush National Hist. Park
1 - 30 mi	- Aniakchak National Monument
1 - 53 mi	- Cape Krusenstern National Monument
1 - 1 mi	- Kenai Fjords National Park
1 - 73 mi	- Kobuk Valley National Park
1 - 1 mi	- Noatak National Preserve
164 - 2987 mi	TOTAL

Possible RS 2477 Rights-of-way on Section Lines

The State also contends that rights-of-way were accepted on all section lines by legislative proclamation. If this position is validated, the mileage of RS 2477 rights-of-way in any Alaska national park unit would be limited only by the number of square miles within its boundaries. Furthermore, pending the current reconsideration of a case (*Shultz*) by the 9th Circuit Federal Court of Appeals, the State may argue that use of a right-of-way need not remain on an actual section line. If section lines are recognized to be valid RS 2477 rights-of-way, Alaska national park units will be completely covered by north/south and east/west rights-of-way at one-mile intervals.

The potential mileage of section line RS 2477 rights-of-way in Alaska national park units is estimated to be approximately:

41212 mi	- Wrangell-St. Elias National Park & Preserve
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26476 mi	- Gates of the Arctic National Park & Preserve
20545 mi	- Noatak National Preserve
12777 mi	- *Denali National Park & Preserve
12637 mi	- Lake Clark National Park & Preserve
10259 mi	- Glacier Bay National Park & Preserve
9487 mi	- *Katmai National Park & Preserve
8703 mi	- Bering Land Bridge National Preserve
7885 mi	- Yukon-Charley Rivers National Preserve
5470 mi	- Kobuk Valley National Park
2092 mi	- Kenai Fjords National Park
2061 mi	- Cape Krusenstern National Monument
1883 mi	- Aniakchak National Monument
96 mi	- Alagnak Wild and Scenic River
40 mi	- Klondike Gold Rush National Historical Park
1 mi	- Sitka National Historical Park
161624 mi	TOTAL

* The mileage for these parks does not include 6060 miles (Denali) and 3400 (Katmai) miles of section lines within areas of these parks that were established prior to 1923.

Affected Resources

Congress established the National Park System to conserve scenic, natural, historic, and wildlife resources for the enjoyment of current and future generations. The Alaska National Interest Lands Conservation Act specifically established or expanded 14 of the 16 national park units in Alaska to maintain and protect, in a natural, undeveloped, and unimpaired state: habitat for and populations of fish and wildlife, natural environments, geologic and biological processes, and wilderness character.

The possible RS 2477 rights-of-way identified by the State would cross approximately 3,000 miles of undeveloped fish and wildlife habitat, historical and archeological resources, and sensitive coast lines and wetlands in Alaska national park units. Eleven of the 16 park units would be completely bisected by these possible rights-of-way. Some individual routes would be over 100 miles long and many routes would join in extensive networks to overlay and fragment primary resource areas.

The possible RS 2477 rights-of-way identified by the State would also cross designated Wilderness in five Alaska national park units and areas suitable for Wilderness designation in seven other park units. Approximately 520 miles of the possible RS 2477 rights-of-way in park units would cross lands conveyed to or selected by Alaska Native corporations.

Validation of the 164 possible RS 2477 rights-of-way identified by the State would open Alaska national park units to derogation of resource values and impairment of their legislative purposes. Validation of section line easements pursuant to RS 2477 would have even greater impacts on all resources because of the extensive mileage and comprehensive location of such easements.

Use of Possible RS 2477 Rights-of-way

Off-road vehicles (ORV) and road vehicles have rarely been used on possible RS 2477 rights-of-way in Alaska national park units. Nonmotorized or snowmachine access is generally allowed without permit and, where such access occurs,

it does not typically affect resource values. The use of ORV and road vehicles is generally prohibited off of maintained roads and designated trails. The NPS has determined that these modes of access create unacceptable resource impact and are, therefore, inconsistent with resource values and legislative purposes.

The State has stated that it intends to use RS 2477 to develop a modern transportation network for resource development and extraction. Use of possible RS 2477 rights-of-way for this purpose would be expected to have a negative impact on the affected national park unit(s).

Conclusion

To summarize, the State of Alaska has identified at least 164 possible RS 2477 rights-of-way across Alaska national park units. The State also believes that all section lines are RS 2477 rights-of-way. Together, these possible rights-of-way would affect approximately 164,600 lineal miles in Alaska national park units and would be expected to impair scenic, natural, historic, wildlife, and wilderness resources if validated. ORV or road-vehicle use of these possible rights-of-way would significantly derogate Alaska national park unit values and purposes. The NPS has some authority to prevent derogation, but this authority is not complete and remains untested.

**RS-2477 Rights-of-Way
Denali National Park and Preserve
Alaska**

Denali National Park and Preserve (DENA) is one of the largest national park units in the United States with over 6 million acres. It includes a unit of the National Wilderness Preservation System with 1.9 million acres. DENA was originally established on February 26, 1917, and expanded on December 2, 1980, pursuant to the Alaska National Interest Lands Conservation Act (ANILCA).

The State of Alaska has identified approximately 24 possible RS-2477 rights-of-way that it may claim within DENA with a total length of approximately 405 miles. There are also approximately 12,777 miles of section lines in those portions of the park established after 1923 that could be considered RS 2477 rights-of-way under Alaska State law.

Current Access: DENA is accessible from the Alaska State highway system and the Alaska Railroad. The park is about 120 miles from Fairbanks and 230 miles from Anchorage. DENA has approximately 90 miles of park road, and an additional 20 miles of State rights-of-way, including: a 4.5 mile extension of the park road in Kantishna, 6 miles of Alaska Highway #3, and under 10 miles of untraveled road which connected a coal mine to the Alaska Railroad in the 1940's. DENA has maintained a high standard of visitor experience and wildlife habitat protection by careful management of access on the park road.

Potential RS-2477 Rights of Way: The State's 1995 RS 2477 Project identified approximately 24 routes within DENA that the State believes should be rights-of-way. Many of these routes have not been verified on the ground. Many routes that may have been used in the past would have been used only for winter travel by dog team due to wet soils and, consequently, there is no evidence of construction. Because many of the routes cross mountains, rivers, permafrost and wet meadows, they would be extremely expensive to develop and would have significant effects on DENA's park and wilderness resources.

Some of these routes may have been used during periods of active mining in DENA (i.e., the early 1920's and the late 1930's). Access to the Kantishna area of DENA, however, was predominantly by the Kantishna and Bearpaw Rivers or, after 1938, the park road.

None of the possible RS 2477 rights-of-way identified by the State would provide access to State or private land that does not currently have access by river or existing road. State management of these routes could lead to their use for ATV/ORV recreation, hunting, etc. Such uses would conflict with park management implementing the legislative purposes of DENA.

Section Line Easements: The State of Alaska asserts that RS 2477 rights-of-way were reserved on section lines by legislative proclamation in 1923. If this assertion is valid, there are approximately 12,777 miles of section line rights-of-way in DENA. These rights-of-way would exist every one mile both north to south and east to west and provide a comprehensive grid across the entire park established after 1923 (4,088,772 acres).

Number of Acres Impacted: If a road were built on each possible RS 2477 right-of-way identified by the State, approximately 1570 acres of DENA would be directly impacted (assuming a 24 ft. road surface with four ft. shoulders). 109 acres of this acreage would be in designated Wilderness. If these routes were opened to ATV use, even greater impacts would be expected due to trail braiding across wetlands.

Acreage impacts for possible section line easements could be far greater depending on how many of the approximately 12,777 miles of section lines were developed.

Cost to Construct: Cost estimates to develop a northern access route in DENA are between \$1 and \$2 million per mile. Using the lower estimate (prepared in the mid-1980's), construction of roads on the possible RS 2477 rights-of-way identified by the State would cost approximately \$405 million dollars. This does not include maintenance costs.

Effects on Fish and Wildlife Habitat: Most of the possible RS-2477 rights-of-way identified by the State follow river drainages and valley bottoms that are prime habitat for caribou, brown bear, black bear, wolf, and moose. Direct impacts from road construction would result in a loss of 1570 acres of habitat. Some routes would traverse significant wolf pack territories, intrude on caribou calving grounds, and cross important caribou wintering grounds. Proximity to streams during construction would determine loss of fisheries habitat.

Effects on Fish and Wildlife Populations: The legislative history of ANILCA states that "the prime resource for which the north addition (to DENA) is established is the critical range necessary to support populations of moose, wolf, and caribou as part of an integral ecosystem. Public enjoyment of these outstanding wildlife values would thus continue to be assured."

If possible RS 2477 rights-of-way were developed in the northern portion of DENA, the additional access would be expected to increase animal harassment by snowmachine, noise disturbance, feeding and human food conditioning, garbage pilfering, and disruption of foraging and reproduction behavior. Fish and wildlife mortality rates could increase due to vehicle accidents, increased recreational pressure on fish resources, subsistence activities and poaching. These impacts would be similar in the southern and western portions of the park but less severe since the possible RS 2477 rights-of-way identified by the State are not as extensive in these areas.

Effects on Fish and Wildlife Migration Routes: While roads are not known to significantly impede caribou or other wildlife migrations, they are important access points for subsistence users. Harvest of migrating species would be expected to increase. Development of the possible RS 2477 rights-of-way identified by the State in the Dunkle Hills and Wolf Townships areas of DENA would be expected to limit use of these important caribou migratory destinations for calving and over-wintering.

Effects on Endangered Species: There would be no expected impact to threatened or endangered species although several species utilize DENA on a permanent or seasonal basis. Species of possible concern include the American peregrine falcon, the North American lynx, the Harlequin duck, the Northern Goshawk, and the Tule greater white-fronted goose.

Effects on Wetlands: The majority of the possible RS 2477 rights-of-way identified by the State are within a zone of discontinuous permafrost. Studies in the 1980's (Ahlstrand) and current research indicate that repetitive passage (over 10 passes) by mechanized equipment such as ATV's results in removal of protective vegetation. Once this happens, the dark soils warm and melt the permafrost to form large mudholes. Continued ATV use results in trail "braiding" as operators try to avoid mudholes and cause further damage. Braided trails can grow over 1/4 mile wide; without constant and expensive maintenance, braiding continues and wetlands are significantly modified.

Effects on Cultural Resources: Many important cultural and historic resources are located on or near the possible RS 2477 rights-of-way identified by the State. Development of these routes would make such resources accessible and subject to vandalism or unauthorized collection. Improved access to some historic mining sites would increase risks to public health and safety because of unsafe structures, unsecured mine entrances and shafts, and the presence of hazardous materials.

Effects on Subsistence Activities: Many areas of DENA are currently difficult to reach for subsistence activities. Development of the possible RS 2477 rights-of-way identified by the State would effectively open much of DENA to new subsistence use.

Wilderness Resources: DENA includes a 1.9 million acre designated Wilderness. Approximately 28 miles of the possible RS 2477 rights-of-way identified by the State are within the DENA Wilderness and would directly affect the solitude, quiet, wildlife, aesthetics and other wilderness resources of this area. The other routes would cross approximately 377 miles of proposed Wilderness; the wilderness resource values of northern DENA would be significantly impaired by development of these routes.

Contact: Stephen P. Martin, Superintendent, DENA; 907/683-2294

**RS 2477 RIGHTS-OF-WAY
WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE
ALASKA**

Wrangell-St. Elias National Park and Preserve (WRST) is the largest national park unit in the United States with 13.2 million acres. It includes the largest unit of the National Wilderness Preservation System with 9.7 million acres. WRST was established on December 2, 1980, pursuant to section 201(9) of the Alaska National Interest Lands Conservation Act.

To maintain, unimpaired, the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl and marine mammals; and to provide continued opportunities, including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities.

The State of Alaska has identified approximately 94 possible RS 2477 rights-of-way within WRST with a total length of approximately 1612 miles. There are also approximately 41,212 miles of section lines that could be considered RS 2477 rights-of-way under Alaska State law.

Current Access: WRST is accessible from the Alaska State highway system and is only 200 miles from Anchorage and 100 miles from the port city of Valdez. Two State roads enter WRST: the McCarthy Road is 56 miles long and enters at Chitina; the Nebesna Road is 45 miles long and enters at Slana. The mileage of the possible RS 2477 rights-of-way identified by the State would increase the total mileage of State highway rights-of-way in WRST to 1713 miles, an increase of about 1700%.

Potential RS 2477 Rights of Way: The State's 1995 RS 2477 Project identified approximately 94 routes within WRST that the State believes should be rights-of-way. Many of these routes have not been verified on the ground. Many routes that may have been used in the past would have been used only for winter travel due to wet soils and, consequently, there is no evidence of construction. Because many of the routes identified by the State cross permafrost and wet meadows, they would have significant effects on WRST's park and wilderness resources.

Four extensive new "trunk routes" with multiple spurs would cross WRST:

Mallard Trail - RST #139 in 1995 State RS 2477 Project (±72 miles) This route crosses the entire front range of Mt. Drum and Mt. Sanford and the prime calving grounds for the Mentasta caribou herd. Expected increases in hunting this declining herd due to improved access would be significant.

Hanagita Trail - RST #425 in 1995 State RS 2477 Project (±80 miles) This route travels through the designated Wilderness south of the Chitina River, an area currently reachable only by aircraft. Since subsistence activities are not generally permitted by aircraft, this area would be effectively opened to new subsistence use.

Nizina-Chisana/Nebesna-Chisana Trails: RST #325 & #12 in 1995 State RS 2477 Project (±120 miles) This route extends from McCarthy to Chisana and on to Nebesna, forming a loop through designated Wilderness. Vehicular access would greatly impact hiking and wilderness resources.

Access from the Yukon: At least five of the possible RS 2477 rights-of-way identified by the State would provide access from the Yukon Territory in Canada to WRST in the United States. This would increase problems with customs, the potential entrance of illegal aliens, and poaching.

Section Line Easements: The State of Alaska asserts that RS 2477 rights-of-way were reserved on section lines by legislative proclamation in 1923. If this assertion is valid, there are approximately 41,212 miles of section line rights-of-way in WRST. These rights-of-way would exist every one mile both north to south and east to west and constitute a comprehensive grid across the entire park unit.

Number of Acres Impacted: If a road were built on each possible RS 2477 right-of-way identified by the State, approximately 6250 acres of WRST would be directly impacted (assuming a 24 ft. road surface and four ft. shoulders). 2167 acres of this acreage would be in designated Wilderness. If these routes were opened to ATV use, even greater impacts would be expected due to trail braiding across wetlands.

Acreage impacts for possible section line easements could be far greater depending on how many of the approximately 41,212 miles of section lines were developed.

Cost to Construct: Current cost estimates for upgrading the existing McCarthy road are about \$400,000 per mile. Using this estimate (which is low for new road construction), construction of roads on the possible RS 2477 rights-of-way identified by the State would cost approximately \$645 million dollars. This does not include the cost of maintenance or the cost of constructing bridges over numerous streams and rivers.

Effects on Fish and Wildlife Habitat: Most of the possible RS 2477 rights-of-way identified by the State follow river drainages and valley bottoms that are prime habitat for caribou, brown bear, black bear, wolf, and moose. Direct impacts from road construction would result in a loss of 6250 acres of habitat. Proximity to streams during construction would determine loss of fish habitat.

Effect on Fish and Wildlife Populations: There is a direct correlation between access and the taking of fish and wildlife. The possible RS 2477 rights-of-way identified by the State could make sport hunting, subsistence activities, and poaching in WRST as much as 1700% more accessible by vehicle. Caribou cows with calves typically reduce their use of habitat within two miles of a road, depending on visibility and vegetation. In open areas, grizzly bears avoid traveling within 0.6 to 1.25 miles of development and avoid denning and feeding within 2.4 to 4.5 miles of development. Therefore, assuming a conservative estimate that the impact on wildlife would reach only 0.5 miles on either side of a road, approximately 1612 square miles (over one million acres) of habitat would be affected by construction of roads on the possible RS 2477 rights-of-way identified by the State.

Effects on Fish and Wildlife Migration Routes: While roads are not known to significantly impede caribou migration, they are important access points for subsistence and sport hunters. Harvest of migrating species would be expected to increase significantly.

Effects on Wetlands: The majority of the possible RS 2477 rights-of-way identified by the State are within a zone of discontinuous permafrost. Studies in the 1980's (Ahlstrand) and current research indicate that repetitive passage (over 10 passes) by mechanized equipment such as ATV's results in removal of protective vegetation. Once this happens, the dark soils warm and melt the permafrost to form large mudholes. Continued ATV use results in trail "braiding" as operators try to avoid mudholes and cause further damage. Braided trails can grow over 1/4 mile wide; without constant and expensive maintenance, braiding continues and wetlands are significantly modified.

Effects on Marine Mammals: The State has identified several possible RS 2477 rights-of-way on the Malaspina forelands in WRST. Currently, ATV's are used in this area only by local rural residents for subsistence activities. The possible impact to marine mammals from developing these routes and opening them to the public is unknown.

Effects on Cultural Resources: Hundreds, if not thousands, of historic items have been removed from Kennecott National Historic Landmark on private land within WRST due to it's accessible location near the end of the McCarthy Road. Similar historic resources from the mining era would be made accessible, and thereby subject to vandalism and unauthorized collection, by opening the possible RS 2477 rights-of-way identified by the State to development and vehicular use. Native village sites, such as Batzulnetas, important for their historic resources and current meaning to the Native community, would be crossed by these routes. Open access would conflict with the traditional uses and values of the native Ahtna culture and subject these sites to "pot hunting."

Effects on Subsistence Activities: Local rural residents currently use ATVs in WRST for subsistence activities. Such vehicular access is not generally allowed by sport hunters. Opening the possible RS 2477 rights-of-way identified by the State to the general public would greatly increase competition for subsistence resources.

Wilderness Resources: WRST has the largest designated Wilderness in the National Park System with 9.7 million acres. Approximately 559 miles of the possible RS 2477 rights-of-ways identified by the State are located within the WRST Wilderness and would directly affect the solitude, quiet, wildlife, aesthetics and other wilderness resources of this area. These routes would bisect or cross every major drainage and pass within the WRST Wilderness and leave only areas of high rock and ice untrammelled.

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APPROXIMATE MILEAGE OF POSSIBLE RS 2477 RIGHTS-OF-WAY IN ALASKA NATIONAL PARK UNITS

This table presents data on possible RS 2477 rights-of-way identified in two sources: (1) *RS 2477 Project, Historic Transportation Routes*, ADNR, LRIS; August 1995 (digital maps; mileage derived by GIS); and (2) *Inventory of Existing Trails*, ADOT; December 1973 (paper maps; mileage derived by lineal map measurer). Data from each source is presented separately and distinguished by a "/"; the 1995 data is first and the 1973 data is second. The 1995 data includes all of the possible RS 2477 rights-of-way identified in 1973 that were categorized as "qualify" in 1995. The 1973 data includes only those possible RS 2477 rights-of-way that were listed as "hold," "defer," or "pending" in 1995; these possible rights-of-way could still be added to the "qualify" list. The mileage of possible RS 2477 rights-of-way on section lines was calculated by the National Park Service.

NATIONAL PARK UNIT	NUMBER OF R/Ws	MILEAGE BY LAND STATUS ¹					SECTION LINE MILEAGE ²	TOTAL MILEAGE	MILEAGE DESIGNATED WILDERNESS
		PUBLIC LAND ³	NAT CORP CONVEYED	NAT CORP SELECTED	STATE CONVEYED	TOTAL CSU MILEAGE			
ALAGNAK	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	96	96	0 / 0
ANIAKCHAK	1 / 0	30 / 0	0 / 0	0 / 0	0 / 0	30 / 0	1883	1913	0 / 0
BERING LAND BRIDGE	9 / 7	119 / 126	0 / 0	12 / 0	0 / 0	131 / 126	8703	8960	0 / 0
CAPE KRUSENSTERN	0 / 1	0 / 53	0 / 0	0 / 0	0 / 0	0 / 53	2061	2114	0 / 0
DENALI	17 / 7	347 / 55	0 / 0	3 / 0	0 / 0	350 / 55	12777	13182	2 / 26
GATES OF THE ARCTIC	2 / 2	75 / 15	26 / 13	0 / 1	0 / 0	101 / 29	26476	26606	36 / 29
GLACIER BAY	0 / 3	0 / 22	0 / 0	0 / 0	0 / 0	0 / 22	10259	10281	0 / 7
KATMAI	0 / 3	0 / 63	0 / 3	0 / 0	0 / 0	0 / 66	9487	9553	0 / 0
KLONDIKE GOLD RUSH	1 / 1	0 / 0	0 / 0	0 / 0	16 / 6	16 / 6	40	62	0 / 0
KENAI FIORDS	1 / 0	0 / 0	0 / 0	1 / 0	0 / 0	1 / 0	2092	2093	0 / 0
KOBUK VALLEY	0 / 1	0 / 67	0 / 4	0 / 2	0 / 0	0 / 73	5470	5543	0 / 0
LAKE CLARK	3 / 0	60 / 0	0 / 0	52 / 0	1 / 0	113 / 0	12637	12750	42 / 0
NOATAK	1 / 0	0 / 0	0 / 0	1 / 0	0 / 0	1 / 0	20545	20546	0 / 0
SITKA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1	1	0 / 0
WRANGELL- ST. ELIAS	69 / 25	1121 / 111	178 / 12	162 / 15	11 / 2	1472 / 140	41212	42824	525 / 34
YUKON- CHARLEY RIVERS	6 / 4	149 / 17	15 / 16	0 / 4	1 / 0	165 / 37	7885	8087	0 / 0
SUBTOTALS (%: 1995 & 1973)	110 / 54 (67% / 33%)	1901 / 531 (78% / 22%)	219 / 48 (82% / 18%)	231 / 22 (91% / 9%)	29 / 8 (78% / 22%)	2380 / 607 (80% / 20%)			605 / 96 (86% / 14%)
TOTALS (%: CSU MI.)	164	2432 (81%)	267 (9%)	253 (8%)	37 (1%)	2987 (100%)	161624	164611	701

¹ No information is available on the mileage of possible RS 2477 rights-of-way across small tract entries (i.e., private patented land, Native allotments and Native allotment applications) or State selected land in Alaska national park units. This mileage is expected to be minimal; however, in Cape Krusenstern National Monument, 31 miles of the 53 miles noted as public land may in fact cross Native allotments and Native allotment applications.

² As defined by ANILCA § 102(3).

³ Calculated by dividing all acreage within the boundaries of Alaska national park units so designated after 1923 by 23,040 (to determine the number of townships) and multiplying by 72 (to determine the number of one-mile long un-shared section sides in contiguous townships).

POSSIBLE RS 2477 RIGHTS OF WAY IN ALASKA'S NATIONAL PARKS

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Mileage of Possible RS 2477 R/Ws

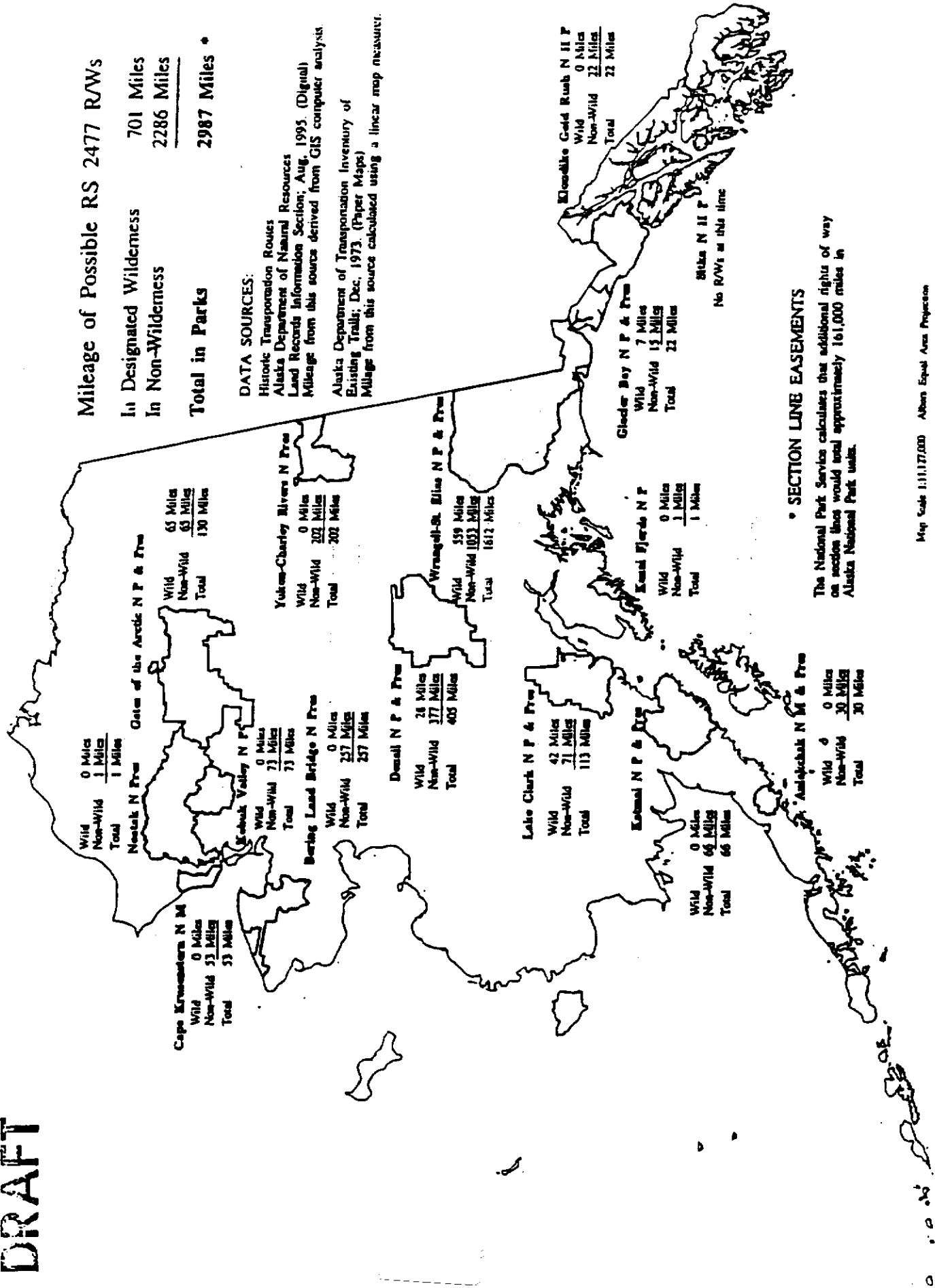
In Designated Wilderness 701 Miles

In Non-Wilderness 2286 Miles

Total in Parks • 2987 Miles •

DATA SOURCES:

Historic Transportation Routes
Alaska Department of Natural Resources
Land Records Information Section; Aug. 1993 (Digital)
Mileage from this source derived from GIS computer analysis
Alaska Department of Transportation Inventory of
Existing Trails; Dec. 1973 (Paper Maps)
Mileage from this source calculated using a linear map measurement.




SECTION LINE EASEMENTS


The National Park Service calculates that additional rights of way on section lines would total approximately 161,000 miles in Alaska National Park units.

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WRANGELL-ST. ELIAS NATIONAL PARK & PRESERVE POSSIBLE RS 2477 RIGHTS OF WAY

LEGEND

Designated Wilderness  ANCSA Patented

Non-Wilderness  State Patented or TA'd

MILEAGE OF POSSIBLE RS 2477 R/Ws *

# R/Ws	CSU - (Total)	Public Land	ANCSA Patented	ANCSA Selected	State Patented or TA'd
92	1612 Mi	1232 Mi	190 Mi	177 Mi	13 Mi

* 559 Miles are in Designated Wilderness

DATA SOURCES:

Historic Transportation Routes
Alaska Department of Natural Resources
Land Records Information Section; Aug. 1995. (Digital)
Mileage from this source derived from GIS computer analysis.

Alaska Department of Transportation Inventory of
Existing Trails; Dec. 1973. (Paper Maps)
Mileage from this source calculated using a linear map measure.

SECTION LINE EASEMENTS

The National Park Service calculates that additional rights of way on section lines would total approximately 41,200 miles in Wrangell-St. Elias National Park and Preserve.

* This map shows only the available digital data for 66 of 92 possible RS 2477 rights of way measuring 1471 miles. Not available digitally and therefore not shown are 26 possible RS 2477 rights of way measuring approximately 141 miles.

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WRANGELL-ST. ELIAS NATIONAL PARK & PRESERVE POSSIBLE RS 2477 RIGHTS OF WAY

• This map shows only the available digital data for 66 of 92 possible RS 2477 rights of way measuring 1471 miles. Not available digitally and therefore not shown are 26 possible RS 2477 rights of way measuring approximately 141 miles.

• SECTION LINE EASEMENTS
The National Park Service calculates that additional rights of way on section lines would total approximately 41,200 miles in Wrangell-St. Elias National Park and Preserve.

MILEAGE OF POSSIBLE RS 2477 R/W's *

# R/W's	CSU * (Total)	Public Land	ANCSA Patented	ANCSA Selected	State Patented or TA'd
92	1612 Mi	1232 Mi	190 Mi	177 Mi	13 Mi

• 559 Miles are in Designated Wilderness

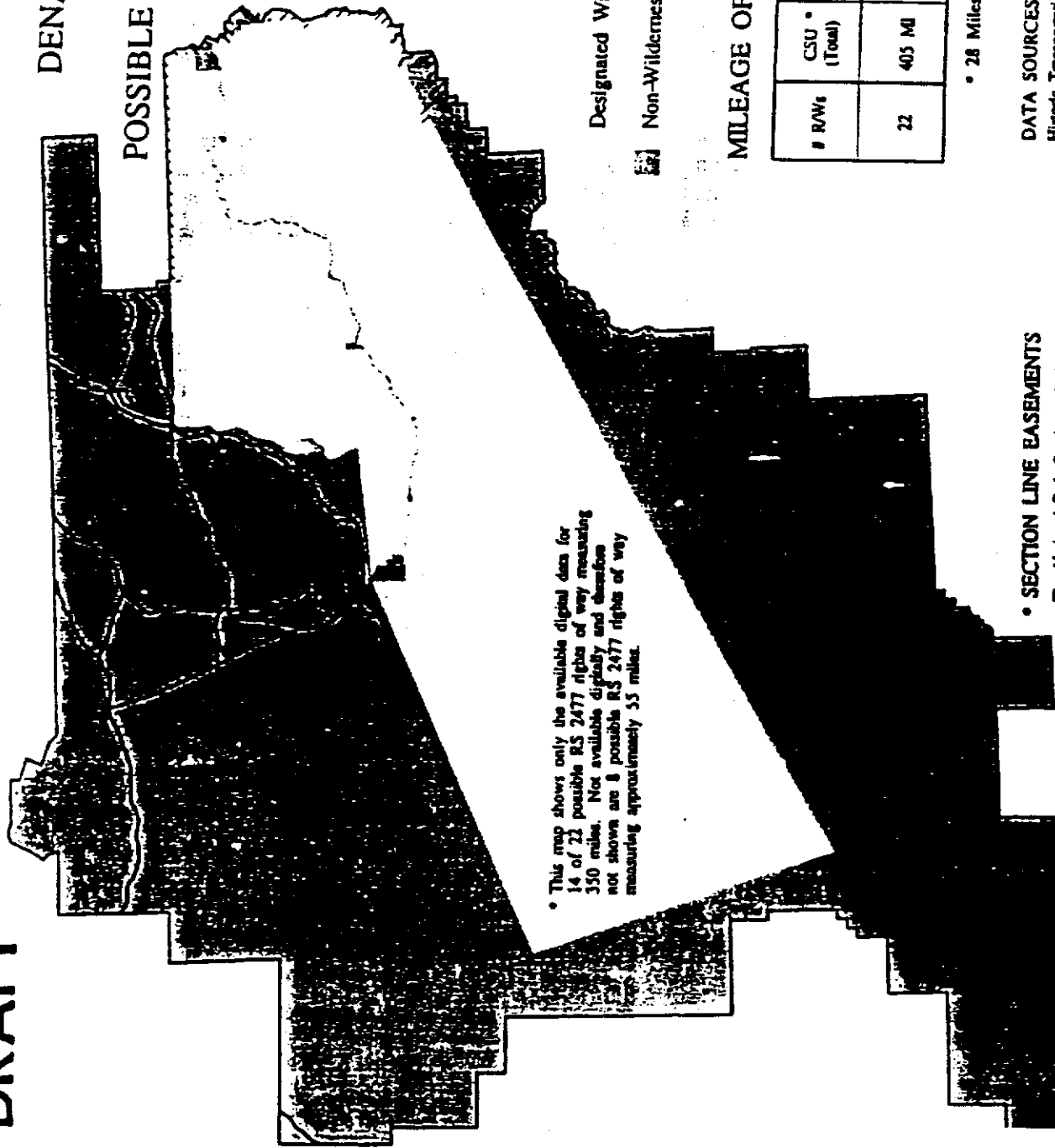
DATA SOURCES:

Historic Transportation Routes
Alaska Department of Natural Resources
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Mileage from this source derived from GIS computer analysis.
Alaska Department of Transportation Inventory of Existing Trails; Dec. 1973. (Paper Maps)
Mileage from this source calculated using a linear map measurer.

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DENALI NATIONAL PARK AND PRESERVE

POSSIBLE RS 2477 RIGHTS OF WAY



LEGEND

- Designated Wilderness
- Non-Wilderness
- ANCSA Patented
- State Patented or TA'd

MILEAGE OF POSSIBLE RS 2477 R/Ws *

# R/Ws	CSU * (Total)	Public Land	ANCSA Patented	ANCSA Selected	State Patented or TA'd
22	405 MI	402 MI	0 MI	3 MI	0 MI

* 28 Miles are in Designated Wilderness

DATA SOURCES:

Historic Transportation Routes
Alaska Department of Natural Resources
Land Records Information Section; Aug. 1995. (Digital)
Mileage from this source derived from GIS computer analysis.

Alaska Department of Transportation Inventory of Existing Trails; Dec. 1973. (Paper Maps)
Mileage from this source calculated using a linear map measure.

SECTION LINE EASEMENTS

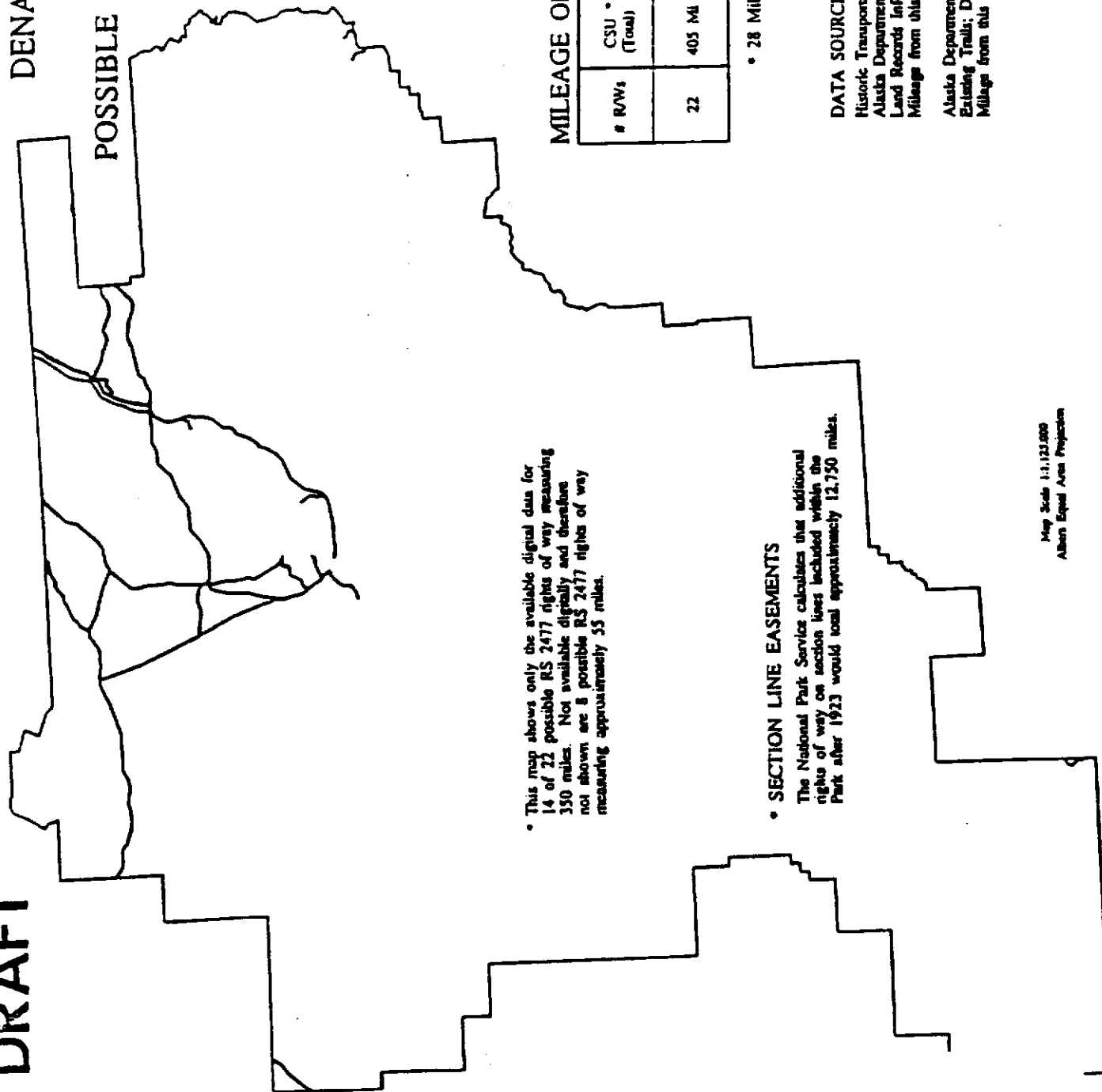
The National Park Service calculates that additional rights of way on section lines included within the Park after 1923 would total approximately 12,750 miles.

Map Scale 1:1,131,000
Albers Equal Area Projection

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DENALI NATIONAL PARK AND PRESERVE

POSSIBLE RS 2477 RIGHTS OF WAY



• This map shows only the available digital data for 14 of 22 possible RS 2477 rights of way measuring 350 miles. Not available digitally and therefore not shown are 8 possible RS 2477 rights of way measuring approximately 35 miles.

• SECTION LINE EASEMENTS

The National Park Service calculates that additional rights of way on section lines included within the Park after 1923 would total approximately 12,750 miles.

MILEAGE OF POSSIBLE RS 2477 RAWs *

# RAWs	CSU * (Total)	Public Land	ANCSA Patented	ANCSA Selected	State Patented or TA'd
22	405 MI	402 MI	0 MI	3 MI	0 MI

• 28 Miles are in Designated Wilderness

DATA SOURCES:

Historic Transportation Routes
Alaska Department of Natural Resources
Land Records Information Section; Aug, 1995. (Digital)
Mileage from this source derived from GIS computer analysis.
Alaska Department of Transportation Inventory of
Existing Trails; Dec, 1973. (Paper Maps)
Mileage from this source calculated using a linear map measurer.