

Report to the Alaska Legislature

FEMA National Flood Insurance Program Premium Analysis



Nome, Alaska in West Coast Storm Event – Typhoon Merbok September 2022

Department of Commerce, Community, and Economic Development
Division of Community and Regional Affairs

December 20, 2022

Background

In 2022 the Legislature included the following language in House Bill 281 (p. 5):

“It is the intent of the legislature that the Department of Commerce, Community and Economic Development submit a written report to the co-chairs of the Finance Committees and the Legislative Finance Division by December 20, 2022 that indicates: (1) the amount each community in the state that participates in the National Flood Insurance Program has paid into the program since 1980, the amount that has been paid out of the program for claims, and the average premium for a home in a special flood hazard area; (2) for the top five states that have received more in funds paid out than premiums paid into the National Flood Insurance Program since 1980, the amount paid into the program, the amount of claims paid out of the program, and the average premium for a home in a special flood hazard area; and (3) the number of properties in each community in the state that has been added to a special flood hazard area through mapping efforts by the Federal Emergency Management Agency since 2010.”

The information contained in this report is in response to this legislative intent.

Introduction

Flooding is the most common, destructive, and costly natural disaster in Alaska and the nation.

In response to the rising cost of taxpayer-funded disaster relief for flood victims and the increasing amount of damage caused by floods, the U.S. Congress established the National Flood Insurance Program (NFIP) in 1968. The NFIP is a voluntary federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. The intent of the NFIP is two-fold:

1. To mitigate future flood losses through sound, community-enforced floodplain management using building and zoning ordinances
2. To provide access to affordable, federally backed flood insurance protection for property owners, renters, and businesses located in flood hazard areas

Participation in the NFIP is based on an agreement between local jurisdictions and the Federal Emergency Management Agency (FEMA). If a community regulates and manages the floodplain to program standards, the federal government will make federally-backed flood insurance available within the community as a financial protection against flood losses.

In Alaska, municipalities have voluntarily participated in the NFIP since 1970, when the Fairbanks North Star Borough joined the program.

A list of the 32 Alaska municipalities that currently participate in the NFIP is contained in Table 5. Two communities are currently in the process of revising their regulations in order to join the NFIP and allow for the acceptance of grant funding for U.S. Army Corps of Engineers community protection environmental mitigation projects.

All data in this report, except Table 5, was provided by FEMA Headquarters. Due to FEMA data retention policies, the data from 1980 through 2007 was not available.

The Flood Insurance Rate Map (FIRM) & the Flood Insurance Study (FIS)

The FIRM and the FIS are fundamental tools for the local implementation of the NFIP. Both are funded and developed by FEMA to assist NFIP-participating communities in fulfilling the intent of the program: to implement sound floodplain management and to establish actuarial flood insurance rates and premiums for high-risk properties.

The FIS report summarizes the engineering analysis of flood hazards in the community and the data in the FIS is used to create the FIRM. The FIRM is the basis for floodplain management, mitigation, and insurance activities in the NFIP because the maps delineate Special Flood Hazard Areas (SFHA) boundaries, which show the land areas subject to inundation by a flood that has a 1-percent probability of being equaled or exceeded in any given year (hence, the terms “1-percent annual chance flood” and “100-year flood”). The FIRM and FIS describe the types of flooding hazards and potential severity with wave height or water levels during a flood event. This information is used in the determination of flood insurance rates and premiums, and the minimum regulatory elevations on which community floodplain management ordinances are based.

After the Risk Mapping, Assessment, and Planning (Risk MAP) process of providing new or updated mapping to a community, the FIRM becomes effective. The effective FIRM maps are then used by any federally-backed mortgage lenders, and those lenders require owners of property in the SFHA to purchase flood insurance.

QUESTION 1: The amount each community in the state that participates in the National Flood Insurance Program has paid into the program since 1980, the amount that has been paid out of the program for claims, and the average premium for a home in a special flood hazard area:

The information in Table 1 includes the cumulative flood insurance premiums, average premiums, and claims paid by the community from 2008-2021 in Alaska for a home in the Special Flood Hazard Area (SFHA). Communities that do not have insured homes in the SFHA do not have an average premium.

Beginning in October 2021, FEMA has been implementing a new rating methodology, Risk Rating 2.0, that uses more comprehensive data in comparison to the Flood Insurance Rate Map (FIRM) approach to rate calculations that the NFIP was using for rating premiums. The Risk Rating 2.0 has resulted in premium declines for 86% of Alaska policyholders by ensuring home values and premiums are aligned with a property's actual risk. The transition of existing NFIP policies to Risk Rating 2.0 rating methodology will be complete by April 1, 2023.

Table 2 shows the premium changes for Alaska single-family home policyholders using the current Risk Rating 2.0 system that will be in effect by April 1, 2023.

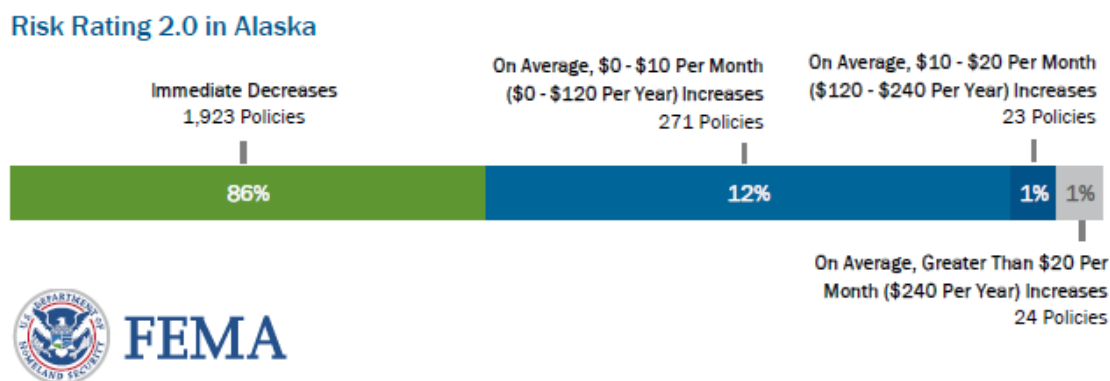
Table 1: Flood Premiums Paid & Claim Payments Received by Communities in Alaska

Community Name	Premium + Fees (2008-2021)	Claims (2008-2021)	Average Premium Single- Family Homes	# Insured Family Homes	Differences Premiums - Payments
ANCHORAGE, MUNICIPALITY OF	\$ 5,186,750	\$ 171,644	\$ 543	92	\$ (5,015,106)
ANIAK, CITY OF	\$ 1,189,600	\$ 21,455	\$ 478	23	\$ (1,168,145)
BETHEL, CITY OF	\$ 2,203,720	\$ -	\$ 492	10	\$ (2,203,720)
CORDOVA, CITY OF	\$ 174,505	\$ -	\$ 441	6	\$ (174,505)
DELTA JUNCTION, CITY OF	\$ 29,667	\$ -	\$ -	-	\$ (29,667)
DILLINGHAM, CITY OF	\$ 166,805	\$ -	\$ -	-	\$ (166,805)
EMMONAK, CITY OF	\$ 152,206	\$ 13,411	\$ -	-	\$ (138,795)
FAIRBANKS NORTH STAR BOROUGH	\$ 11,132,449	\$ 1,716,209	\$ 664	271	\$ (9,416,240)
FORT YUKON, CITY OF	\$ 17,381	\$ -	\$ -	-	\$ (17,381)
GALENA, CITY OF	\$ 473,705	\$ 3,071,425	\$ 439	12	\$ 2,597,720
HAINES BOROUGH	\$ 17,740	\$ -	\$ -	-	\$ (17,740)
HOMER, CITY OF	\$ 304,377	\$ 28,031	\$ 544	4	\$ (276,346)
HOONAH, CITY OF	\$ 102,040	\$ -	\$ -	-	\$ (102,040)
JUNEAU, CITY AND BOROUGH OF	\$ 4,166,267	\$ 435,979	\$ 590	58	\$ (3,730,288)
KENAI PENINSULA BOROUGH	\$ 3,686,390	\$ 103,556	\$ 682	137	\$ (3,582,834)
KETCHIKAN GATEWAY BOROUGH	\$ 1,566,131	\$ 106,952	\$ 421	3	\$ (1,459,179)
KOTZEBUE, CITY OF	\$ 356,325	\$ 3,626	\$ 1,856	10	\$ (352,699)
KWETHLUK, CITY OF	\$ 32,305	\$ 10,886	\$ -	-	\$ (21,419)
MATANUSKA-SUSITNA, BOROUGH OF	\$ 5,948,812	\$ 742,937	\$ 956	56	\$ (5,205,875)
MCGRATH, CITY OF	\$ 73,393	\$ -	\$ 339	1	\$ (73,393)
NENANA, CITY OF	\$ 465,152	\$ 45,510	\$ 587	16	\$ (419,642)
NOME, CITY OF	\$ 913,960	\$ -	\$ 1,189	13	\$ (913,960)
PETERSBURG, CITY OF	\$ 313,939	\$ -	\$ 911	11	\$ (313,939)
SEWARD, CITY OF	\$ 240,282	\$ 40,342	\$ 347	1	\$ (199,940)
SHISHMAREF, CITY OF	\$ 313,610	\$ -	\$ -	-	\$ (313,610)
SITKA, CITY AND BOROUGH OF	\$ 1,542,827	\$ 20,130	\$ 2,400	14	\$ (1,522,697)
SKAGWAY, CITY OF	\$ 43,767	\$ -	\$ -	-	\$ (43,767)
TOGIAK, CITY OF	\$ 40,560	\$ -	\$ -	-	\$ (40,560)
VALDEZ, CITY OF	\$ 503,663	\$ -	\$ 384	8	\$ (503,663)

* Average written premium excluding fees and surcharges for single-family homes within the SFHA.

** Data provided by FEMA Headquarters

Table 2: Risk Rating 2.0 Changes in Alaska to Premiums in Single-Family Homes



* Data provided by FEMA Headquarters

QUESTION 2: For the top five states that have received more in funds paid out than premiums paid into the National Flood Insurance Program since 1980, the amount paid into the program, the number of claims paid out of the program, and the average premium for a home in a special flood hazard area:

Table 3 shows the top five states of Texas, New York, New Jersey, Missouri, and Iowa that have received more in funds paid out than premiums paid into the National Flood Insurance Program from 2008 to 2021. Due to FEMA data retention policies, the data from 1980 through 2007 was not available.

Table 3: The Top Five States Receiving More in Claim Funds Received than Premiums Paid in the U.S.

State	Premium + Fees (2008-2021)	Claims	Difference
TEXAS	\$ 6,696,657,183	\$ 14,021,081,327	\$ 7,324,424,144
NEW YORK	\$ 3,102,808,737	\$ 4,962,737,369	\$ 1,859,928,632
NEW JERSEY	\$ 3,606,842,474	\$ 5,333,391,932	\$ 1,726,549,458
MISSOURI	\$ 371,392,154	\$ 460,482,925	\$ 89,090,771
IOWA	\$ 224,219,015	\$ 262,934,207	\$ 38,715,192
NORTH DAKOTA	\$ 119,613,217	\$ 126,154,779	\$ 6,541,562
Unknown	\$ 194,450	\$ 227,776	\$ 33,326
AMERICAN SAMOA	\$ 387,644	\$ 36,086	\$ (351,558)
N. MARIANA ISLAND	\$ 357,704	\$ -	\$ (357,704)
VIRGIN ISLANDS	\$ 36,236,764	\$ 33,329,165	\$ (2,907,599)
GUAM	\$ 6,676,130	\$ 417,577	\$ (6,258,553)
DISTRICT OF COLUMBIA	\$ 21,435,024	\$ 3,144,287	\$ (18,290,737)
TENNESSEE	\$ 392,764,833	\$ 374,017,113	\$ (18,747,720)
VERMONT	\$ 80,399,210	\$ 58,571,402	\$ (21,827,808)
SOUTH DAKOTA	\$ 64,809,529	\$ 39,245,610	\$ (25,563,919)
WYOMING	\$ 32,283,243	\$ 1,803,512	\$ (30,479,731)
ALASKA	\$ 41,473,803	\$ 6,532,094	\$ (34,941,709)
UTAH	\$ 46,577,007	\$ 1,854,897	\$ (44,722,110)
MONTANA	\$ 61,838,625	\$ 6,519,219	\$ (55,319,406)
ARKANSAS	\$ 224,078,534	\$ 154,610,236	\$ (69,468,298)
IDAHO	\$ 80,733,045	\$ 5,008,007	\$ (75,725,038)
OKLAHOMA	\$ 196,545,917	\$ 116,865,828	\$ (79,680,089)
NEBRASKA	\$ 162,163,987	\$ 74,457,043	\$ (87,706,944)
MINNESOTA	\$ 148,284,180	\$ 36,257,790	\$ (112,026,390)
KANSAS	\$ 152,794,560	\$ 34,819,437	\$ (117,975,123)
NEW HAMPSHIRE	\$ 140,627,823	\$ 13,557,908	\$ (127,069,915)
WISCONSIN	\$ 212,168,566	\$ 82,573,472	\$ (129,595,094)
NEVADA	\$ 147,174,697	\$ 7,908,406	\$ (139,266,291)

State	Premium + Fees (2008-2021)		Claims	Difference
MAINE	\$	151,292,184	\$ 10,041,050	\$ (141,251,134)
KENTUCKY	\$	326,945,555	\$ 179,147,317	\$ (147,798,238)
NEW MEXICO	\$	189,741,884	\$ 8,650,169	\$ (181,091,715)
WEST VIRGINIA	\$	283,409,252	\$ 101,592,513	\$ (181,816,739)
INDIANA	\$	402,506,599	\$ 190,309,487	\$ (212,197,112)
COLORADO	\$	298,931,895	\$ 78,137,025	\$ (220,794,870)
PUERTO RICO	\$	272,278,874	\$ 48,295,853	\$ (223,983,021)
RHODE ISLAND	\$	316,578,780	\$ 88,138,675	\$ (228,440,105)
MICHIGAN	\$	365,728,039	\$ 95,178,986	\$ (270,549,053)
DELAWARE	\$	321,814,779	\$ 38,285,467	\$ (283,529,312)
ARIZONA	\$	369,896,648	\$ 26,126,947	\$ (343,769,701)
ILLINOIS	\$	692,522,812	\$ 336,811,692	\$ (355,711,120)
ALABAMA	\$	630,646,210	\$ 266,208,554	\$ (364,437,656)
OREGON	\$	420,846,576	\$ 20,697,565	\$ (400,149,011)
CONNECTICUT	\$	810,731,303	\$ 403,184,872	\$ (407,546,431)
OHIO	\$	563,066,638	\$ 125,412,977	\$ (437,653,661)
PENNSYLVANIA	\$	1,103,886,601	\$ 663,880,025	\$ (440,006,576)
WASHINGTON	\$	570,316,170	\$ 106,643,202	\$ (463,672,968)
MISSISSIPPI	\$	756,701,698	\$ 282,810,518	\$ (473,891,180)
HAWAII	\$	611,829,877	\$ 67,614,006	\$ (544,215,871)
NORTH CAROLINA	\$	1,760,041,388	\$ 1,212,269,273	\$ (547,772,115)
MARYLAND	\$	683,790,131	\$ 90,427,952	\$ (593,362,179)
LOUISIANA	\$	5,939,871,542	\$ 5,181,032,342	\$ (758,839,200)
GEORGIA	\$	1,083,608,532	\$ 284,407,035	\$ (799,201,497)
VIRGINIA	\$	1,307,229,822	\$ 305,796,312	\$ (1,001,433,510)
MASSACHUSETTS	\$	1,179,803,869	\$ 142,371,714	\$ (1,037,432,155)
SOUTH CAROLINA	\$	2,236,565,986	\$ 516,589,887	\$ (1,719,976,099)
CALIFORNIA	\$	3,389,097,577	\$ 150,754,693	\$ (3,238,342,884)
FLORIDA	\$	17,105,678,740	\$ 2,345,419,569	\$ (14,760,259,171)

* Data provided by FEMA Headquarters

QUESTION 3: The number of properties in each community in the state that has been added to a special flood hazard area through mapping efforts by the Federal Emergency Management Agency since 2010:

Table 4 shows the FEMA flood mapping in Alaska with the changed number of structures that have been added or removed in the Special Flood Hazard Area (SFHA) in communities in studies from 2010 to the effective FIRMs used currently. The SFHA in Table 4 are broken down into the 1% SFHA within the A-Zone, (Riverine Special Flood Hazard Areas), and the V-Zone, (Coastal Special Flood Hazard Areas).

The green highlighted cells show a decrease in structures from the previous or historic FIRM. The red highlighted cells indicate an increase in structures in the SFHA from the updated FIRM. The light-yellow cells indicate an estimated number provided by FEMA that has not been finalized.

FEMA has established administrative procedures to change the designation for properties on the FIRM located in the SFHA to remove the property from the SFHA. These processes are referred to as the Letter of Map Amendment (LOMA) process and the Letter of Map Revision-Based on Fill (LOMR-F) process. Through these processes, an individual who owns, rents or leases property may submit certain mapping and survey information to FEMA and request that FEMA issue a document that officially removes a property and/or structure from the SFHA.

Table 4: Alaska Properties Identified in SFHA through FEMA’s Flood Mapping Efforts

Previous or Historic Flood Insurance Rate Maps							Current Flood Insurance Rate Maps through Risk MAP Program							
Project Area	Coverage (Square Miles)	Map Date	Approximate No. of Structures Not Mapped or Flood Risk Not Determined	Approximate No. of Structures outside of the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain (SFHA A Zone)	Approximate No. of Structures within the Regulatory 1% Floodplain (SFHA V Zone)	Coverage (Square Miles)	Project Start Date	Project Finish Date (estimated Finish Date in italics)	Approximate No. of Structures Not Mapped or Flood Risk Not Determined	Approximate No. of Structures outside of the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain (SFHA A Zone)	Approximate No. of Structures within the Regulatory 1% Floodplain (SFHA V Zone)	Note
City and Borough of Juneau	N/A	September 28, 1990	0	13,015	866	429	N/A	September 26, 2013	August 2020	0	13,917	303	90	Revised Preliminary as of November 30, 2018. Doesn't include Tee Harbor as the study had an inconsequential net-change. Historic FIRMs dating pre-2000s.
City and Borough of Sitka	46	September 29, 2010	120	2,487	121	5	51	August 5, 2013	August 1, 2019	48	2,564	77	44	Effective August 1, 2019.
City of Cordova	6	April 2, 1979	Unknown	Unknown	55	0	16	March 4, 2011	December 16, 2015	Unknown	Unknown	55	0	Approximate visual assessment performed. Effective December 16, 2015. Considerable expansion of floodplain between initial and Risk MAP study, number of structures impacted is relatively identical even with the SFHA expansion.
City of Valdez	215	December 1, 1983	0	1,599	350	0	275	January 24, 2011	January 3, 2019	0	1,836	112	1	Effective January 3, 2019.
Fairbanks North Star Borough	Chena Slough	March 17, 2014	0	11,144	948	0	Chena Slough	November 23, 2016	October 2020	0	11,640	452	0	Preliminary as of February 15, 2019. Chena Slough project area only. Compares preliminary data to March 17, 2014 Effective.
Fairbanks North Star Borough, Unincorporated Areas of	N/A	March 17, 2014	0	9,734	924	0	N/A	November 23, 2016	October 2020	0	10,226	432	0	
Fairbanks, City of	N/A	March 17, 2014	0	27	0	0	N/A	November 23, 2016	October 2020	0	27	0	0	
North Pole, City of	N/A	March 17, 2014	0	1,383	24	0	N/A	November 23, 2016	October 2020	0	1,387	20	0	
Kenai Peninsula Borough	151	September 27, 2013	9,834	5,822	630	139	172	March 2, 2011	October 20, 2016	8,943	6,664	740	78	Initial Effective (December 10, 2016); LOMR Effective (March 31, 2017).
Kenai Peninsula Borough, Unincorporated Areas of	N/A	September 27, 2013	5,188	3,501	533	31	N/A	March 2, 2011	October 20, 2016	4,310	4,294	641	8	
Homer, City of	N/A	November 6, 2013	2,800	748	51	102	N/A	March 2, 2011	October 20, 2016	2,800	776	61	64	
Kenai, City of	N/A	May 19, 1981	1,829	422	21	0	N/A	March 2, 2011	October 20, 2016	1,820	436	16	0	
Seward, City of	N/A	September 27, 2013	17	1,151	25	6	N/A	March 2, 2011	October 20, 2016	13	1,158	22	6	
Ketchikan Gateway Borough	4	Unmapped	392	100	162	0	54	August 7, 2013	April 2021	0	431	216	7	Project is undergoing a revised preliminary. Structure count is based on a visual assessment where parcels intersected the

Previous or Historic Flood Insurance Rate Maps

Current Flood Insurance Rate Maps through Risk MAP Program

Project Area	Coverage (Square Miles)	Map Date	Approximate No. of Structures Not Mapped or Flood Risk Not Determined	Approximate No. of Structures outside of the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain	Coverage (Square Miles)	Project Start Date	Project Finish Date (estimated Finish Date in italics)	Approximate No. of Structures Not Mapped or Flood Risk Not Determined	Approximate No. of Structures outside of the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain	Approximate No. of Structures within the Regulatory 1% Floodplain	Note
														effective or proposed Special Flood Hazard Area.
Ketchikan Gateway Borough, Unincorporated Areas of	N/A	Unmapped	338	0	0	0	N/A	August 7, 2013	April 2021	0	252	79	7	
Ketchikan, City of	N/A	April 16, 1990	47	100	162	0	N/A	August 7, 2013	April 2021	0	177	132	0	
Saxman, City of	N/A	Unmapped	7	0	0	0	N/A	August 7, 2013	April 2021	0	2	5	0	
Matanuska-Susitna Borough	Various Reaches	March 17, 2011	2,243	44,544	1,744	0	Various Reaches	April 23, 2013	September 27, 2019	1,900	45,743	888	0	Effective as of September 27, 2019.
Matanuska-Susitna Borough, Unincorporated Areas of	N/A	March 17, 2011	2,243	37,518	1,616	0	N/A	April 23, 2013	September 27, 2019	1,900	38,677	800	0	
Houston, City of	N/A	March 17, 2011	0	1,075	94	0	N/A	April 23, 2013	September 27, 2019	0	1,085	84	0	
Palmer, City of	N/A	March 17, 2011	0	2,196	2	0	N/A	April 23, 2013	September 27, 2019	0	2,196	2	0	
Wasilla, City of	N/A	March 17, 2011	0	3,755	32	0	N/A	April 23, 2013	September 27, 2019	0	3,785	2	0	
TOTAL	422		12,589	78,711	4,876	573	568			10,891	82,795	2,843	220	

Note: Green highlighted cells show an improved condition from the previous or historic Flood Insurance Rate Maps and red highlighted cells indicate where there may be an increase in structures in SFHA, and light-yellow `cells are estimates.
* Data provided by FEMA Headquarters

Table 5: Alaskan NFIP-Participating Communities & NFIP Date of Entry

Municipality	Date joined NFIP	Municipality	Date joined NFIP
Anchorage, Municipality of	9/5/1979	Kotzebue, City of	7/18/1983
Aniak, City of	4/2/1990	Koyukuk, City of (E)	1/15/2002
Bethel, City of	3/16/1976	Kwethluk, City of (E)	10/26/1999
Cordova, City of	4/2/1979	Lake and Peninsula Borough	2/3/2010
Dillingham, City of	9/30/1982	Matanuska-Susitna, Borough of	5/1/1985
Emmonak, City of	9/21/1998	McGrath, City of	10/4/2011
Fairbanks North Star Borough	5/15/1970	Nenana, City of	6/9/1972
Fort Yukon, City of	2/3/2010	Nome, City of	9/1/1983
Galena, City of	3/1/1984	Northwest Arctic Borough (E)	5/17/2005
Haines Borough	2/2/2005	Petersburg, City of	6/1/1982
Homer, City of	6/2/2003	Seward, City of	11/20/1986
Hoonah, City of	4/2/1979	Shishmaref, City of	8/23/2001
Juneau, City and Borough of	2/4/1981	Sitka, City and Borough of	6/1/1982
Kenai Peninsula Borough	11/20/1986	Skagway, City of	3/1/1977
Ketchikan Gateway Borough	4/16/1990	Togiak, City of	5/21/2009
Ketchikan, City of	4/16/1990	Valdez, City of	9/3/1980

* Data provided by the State of Alaska

Additional Information:

Statistical information contained in this report and accompanying tables were provided by FEMA Region 10. For additional information or questions, please contact:

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