

CFEC Permit Holdings and Estimates of Gross Earnings in the Arctic, Yukon, and Kuskokwim Commercial Salmon Fisheries, 1976-2017



CFEC Report Number 18-8N,
December, 2018

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Abstract

Limited entry permit holdings in the Arctic, Yukon, and Kuskokwim salmon fisheries are examined: the Upper Yukon salmon fish wheel fishery (S08P) is first, followed by a separate examination of the salmon gillnet fisheries located in the Upper Yukon (S04P), Lower Yukon (S04Y), Kuskokwim (S04W), Norton Sound (S04Z), and finally Kotzebue (S04X). This report provides summary statistics on the number of permit holdings, permanent and emergency transfers of permits, permit value, permit latency, new entrants in the fisheries, permit holder mean age, and estimated gross earnings. Some summary statistics are also presented by resident type. A description of the computer files and methods used to generate the statistics are provided.

The figure on the cover displays ADF&G statistical areas with documented landings according to ADF&G fish tickets. All landings from 1976 to 2017 are aggregated to produce the heat map that was created using ArcGIS.

Prepared by Marcus Gho

Acknowledgements

Special thanks to Craig Farrington and Daniel Strong for their insights and contributions to this document.

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Introduction

This report was prepared by the Commercial Fisheries Entry Commission to provide an overview of limited entry permit holdings and estimated gross earnings in the Arctic, Yukon, and Kuskokwim commercial salmon fisheries.

In 1972, Alaskan voters amended the state constitution to allow limited entry in the state’s commercial fisheries. The following year, the Alaska State Legislature enacted the Limited Entry Act (AS 16.43), giving the Commercial Fisheries Entry Commission (CFEC) the authority to administer the program. Permit fisheries are defined by CFEC as a specific gear type for a fishery resource within a defined administrative area.

The Arctic, Yukon, and Kuskokwim salmon permit fisheries were the second group of salmon fisheries that were limited. Limited permits in these fisheries were issued starting in 1976.

Limited entry permits were allocated based upon an individual’s past participation and economic dependence on the fishery. To allocate permits among qualified applicants, CFEC developed point systems to measure each individual’s relative position in the fishery. The Limited Entry Act also required CFEC to determine levels within the point system where individuals would experience only minor economic hardship if excluded from an initial permit allocation. Persons who were ranked at or below the minor economic hardship level received non-transferable permits, while persons who were ranked above the minor economic hardship level received transferable permits. Among Arctic, Yukon, and Kuskokwim salmon permit fisheries, only one non-transferable permit was issued in the upper Yukon gillnet fishery.

Information regarding season length, openings and closings, size, alternate gear and methods, and other such data can be found in the Alaska Department of Fish and Game’s Area Management Reports. This report focuses on the economics of these commercial fisheries. This report provides an overview of limited entry permit holdings and estimated gross earnings in the Arctic, Yukon, and Kuskokwim commercial salmon fisheries.

ADF&G fish tickets identify, among other things, the species harvested. Salmon species on fish tickets are well documented for each of these fisheries. Variations do exist in the financial composition for each of the five major Pacific salmon species commercially harvested in the commercial salmon fisheries from year to year and across each fishery.

Table 0-1. Percent of Total Ex-vessel Value of Arctic, Yukon, and Kuskokwim Salmon Fisheries by Species, 1976-2017

Species	Upper Yukon Fish Wheel	Upper Yukon Gillnet	Lower Yukon Gillnet	Kuskokwim Gillnet	Norton Sound	Kotzebue Gillnet	All AYK Combined
<i>Chinook</i>	11.0%	32.0%	63.3%	17.6%	14.1%	0.1%	37.8%
<i>sockeye</i>	0.0%	0.0%	0.0%	15.6%	0.2%	0.0%	5.2%
<i>coho</i>	2.8%	0.1%	3.4%	46.3%	39.6%	0.0%	19.7%
<i>pink</i>	0.0%	0.0%	0.02%	0.3%	8.2%	0.03%	0.7%
<i>chum</i>	86.2%	67.9%	33.3%	20.2%	37.9%	99.8%	36.6%

- Upper Yukon salmon fish wheel and gillnet includes data since 1991. Prior to 1991, the majority of landings were recorded as unspecified salmon roe.
- Note that no commercial Chinook harvest has occurred since 2007 in the Upper Yukon fisheries, since 2011 in the Kuskokwim fishery, and 2005 in the Kotzebue fishery.

Description of the Data Files Used to Generate This Report

Several CFEC data files were used to generate the statistics in this report: the permit file, the census file, and the gross earnings file. The most recently updated data is included in this report. The following is a brief description of each file. Please contact CFEC for more detail about these files if you are interested.

CFEC Permit File

The CFEC permit file contains data on persons who hold or have held CFEC permits. It originates from CFEC permit renewal and permit transfer forms. The permit file contains a data field indicating the declared residency of permit holders as well as their addresses.

In this report, resident status is categorized into three resident types:

- **Local** – permits held by persons residing locally to the ADF&G management area
- **Nonlocal** – permits held by persons who reside in Alaska outside of the ADF&G management area
- **Nonresidents** – permits held by persons who are not residents of Alaska

CFEC Census File

CFEC maintains a computer file of places within Alaska where permit holders reside. Each community is annotated with information on its local or nonlocal status by permit fishery. Tables 0-2 through 0-6 list the communities that are currently designated as local to salmon commercial fisheries in the Census file.

Table 0-2. Communities Local to the Upper Yukon Salmon Fisheries, as Indicated in the CFEC Census File

Anvik	Circle City	Fort Wainwright	Koyukuk	Richardson
Badger	Circle Hot Springs	Fort Yukon	Long	Ruby
Beaver	Cleary Summit	Four Mile Road	Manley Hot Springs	Salcha
Big Horn	College	Fox	Minto	Shageluk
Birch Creek	Eagle	Galena	Moose Creek	South Van Horn
Birch Lake	Eagle River	Goldstream	Murphy Dome	Steele Creek
Birches	Eagle Village	Grant Creek	Nenana	Stevens Village
Campion Station	Edna Bay	Grayling	North Pole	Sulatna Crossing
Central	Eielson Afb	Harding Lake	Nulato	Tanana
Chatanika	Ester	Harding-Birch Lks	Pedro Dome	Tofty
Chena Hot Springs	Eureka	Kallands	Pleasant Valley	Two Rivers
Chena Ridge	Fairbanks	Kaltag	Poorman	Venetie
Circle	Farmers Loop	Kokrines	Rampart	Venetie Landing

Table 0-3. Communities Local to the Lower Yukon Salmon Fishery, as Indicated in the CFEC Census File

Alakanuk	Chulloonawik	Igiak	Lamont	Pikmiktalik
Andreafsky	Emmonak	Ingrihak	Marshall	Pilot Station
Bill Moores	Fish Village	Kako Landing	Mountain Village	Pitkas Point
Black	Fortuna Ledge	Kanapak	New Hamilton	Russian Mission
Cape Romanzof	Hamilton	Kotlik	Nunam Iqua	Scammon Bay
Chevak	Holy Cross	Kravaksarak	Ohogamiut	Sheldon Point
Chulloonawick	Hooper Bay	Kwikpak	Paimiut	St. Mary's

Table 0-4. Communities Local to the Kuskokwim Salmon Gillnet Fishery, as Indicated in the CFEC Census File

Aguikchuk	Chefornak	Kinegnak	Napaimiut	Platinum
Akiachak	Chuathbaluk	Kipnuk	Napakiak	Quinhagak
Akiak	Crooked Creek	Kongiganak	Napaskiak	Toksook Bay
Akolmiut	Eek	Kuskovak	Nash Harbor	Tuluksak
Akulurak	Georgetown	Kwethluk	Nelson Island	Tuntutuliak
Aniak	Goodnews Bay	Kwigillingok	Newtok	Tununak
Anogok	Inger	Lower Kalskag	Nightmute	Upper Kalskag
Atmautluak	Itulilik	Marvel Creek	Nunapitchuk	
Bethel	Kalskag	Mekoryuk	Nyac	
Cape Newenham	Kasigluk	Metarvik	Oscarville	

Table 0-5. Communities Local to the Norton Sound Salmon Gillnet Fishery, as Indicated in the CFEC Census File

Brevig Mission	Granite Mountain	Nome	Sinuk	Tin City
Cape York	Haycock	Perkinsville	Solomon	Unalakleet
Council	Iron Creek	Pilgrim Springs	St. Michael	Wales
Dahl	Koyuk	Port Clarence	Stebbins	White Mountain
Egavik	Lost River	Saint Michael	Sullivan Camp	York
Elim	Marys Igloo	Serpentine Hot Spr	Taylor	
Golovin	Moses Point	Shaktoolik	Teller	

Table 0-6. Communities Local to the Kotzebue Salmon Gillnet Fishery, as Indicated in the CFEC Census File

Ambler	Chicago Creek	Kiana	Kotzebue	Selawik
Bornite	Deering	Kivalina	Noatak	Shishmaref
Buckland	Fink Creek-Utica	Klery Creek	Noorvik	Shungnak
Candle	Kalla	Kobuk	Red Dog Mine	

CFEC Gross Earnings File

The CFEC gross earnings file is based on ADF&G fish tickets and is augmented with CFEC permit holder and other data. The ex-vessel value for salmon in the CFEC gross earnings file largely come from the Commercial Operators Annual Report and ADF&G fish tickets with some additional information provided by processors. ADF&G salmon districts were mapped out from statistical areas using information provided by ADF&G. Several processes to validate and enhance fields such as vessel number and statistical area were undertaken to increase accuracy of this report.

Data Display

Percentages are rounded to the nearest tenth of a percent where displayed. Dollars are rounded to whole dollars. As such, rounded aggregates may appear to not total due to rounding. If you would like more precise figures then please contact the CFEC research unit. Some counts will vary from previous research projects insofar as the data has been corrected and updated.

Chapter 1 Upper Yukon Salmon Fish Wheel Fishery

S08P Permit Holdings

Limited entry permits for the upper Yukon salmon fish wheel fishery (S08P permits) were issued starting in 1976. CFEC has issued 165 S08P permits. Table 1-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 95.8% (158/165) of the permits, Nonlocal Alaskans received 3.6% (6/165) of the permits, and Nonresidents received 0.6% (1/165). Every permit issued in this fishery was a transferable permit.

Table 1-1. Initial Issuance and Year-end 2017 Totals of Upper Yukon Salmon Fish Wheel Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS		MIGRATIONS		CANCELLED		2017 YEAR-END	
<i>Residency</i>	<i>Total</i>	<i>Percent</i>	<i>Change</i>	<i>Percent Change from Initial</i>	<i>Change</i>	<i>Percent Change from Initial</i>	<i>Change</i>	<i>Percent Change from Initial</i>	<i>Total</i>	<i>Percent</i>
Local	158	95.8%	9	5.7%	-22	-13.9%	-59	-37.3%	86	90.5%
Nonlocal	6	3.6%	-7	-116.7%	15	250.0%	-7	-116.7%	7	7.4%
Nonresident	1	0.6%	-2	-200.0%	7	700.0%	-4	-400.0%	2	2.1%
Total	165	100.0%	0	0.0%	0	0.0%	-70	-42.4%	95	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled (such as when a permit holder does not pay the renewal fee for two consecutive). This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S08P Permits

Under the Limited Entry Act's terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.¹ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 1-2. Transfer Acquisition Methods for Upper Yukon Salmon Fish Wheel Permits, 1980-2017

Acquisition Method	Upper Yukon Salmon Fish Wheel		Combined Upper Yukon Salmon		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	137	50.7%	192	50.8%	13,825	36.5%
<i>Sale</i>	118	43.7%	164	43.4%	22,262	58.8%
<i>Trade</i>	7	2.6%	11	2.9%	520	1.4%
<i>Other</i>	8	3.0%	11	2.9%	1,225	3.2%
Total	270		378		37,832	

Table 1-2 compares and contrasts transfer acquisition methods for the S08P permits, the combined upper Yukon salmon permit types, and all limited entry permits between 1980 and 2017. Just over half of all S08P permit transfers were gifts (50.7% or 137/270), just under half of all transfers were sales (43.7%, or 118/270), and a smaller percentage were trades (2.6% or 7/270) or other (3.0% or 8/270). The annual acquisition methods for S08P permits can be viewed in a different publication.²

Table 1-3. Relationships of Transferor to Transfer Recipients for Upper Yukon Salmon Fish Wheel Permits, 1980-2017

Relationship	Upper Yukon Salmon Fish Wheel		Combined Upper Yukon Salmon		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	61	22.6%	81	21.4%	6,992	18.5%
<i>Member of Immediate Family</i>	139	51.5%	196	51.9%	12,802	33.8%
<i>Other Relative</i>	12	4.4%	16	4.2%	1,743	4.6%
<i>Other</i>	58	21.5%	85	22.5%	16,295	43.1%
Total	270		378		37,832	

Table 1-3 shows the relationships between transferors and transfer recipients for S08P permits, and compares S08P permit transfers with the combined upper Yukon salmon permit types, and all limited entry permits from 1980 to 2017. Transfers within the family, both immediate family members and other relatives, total 55.9% (151/270) of all transfers. This compares to 56.1% (212/378) for all upper Yukon salmon permit types combined, and 38.4% (14,545/37,832) for all limited entry permits statewide.

¹ CFEC implemented the transfer survey in 1980.

² See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S08P Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

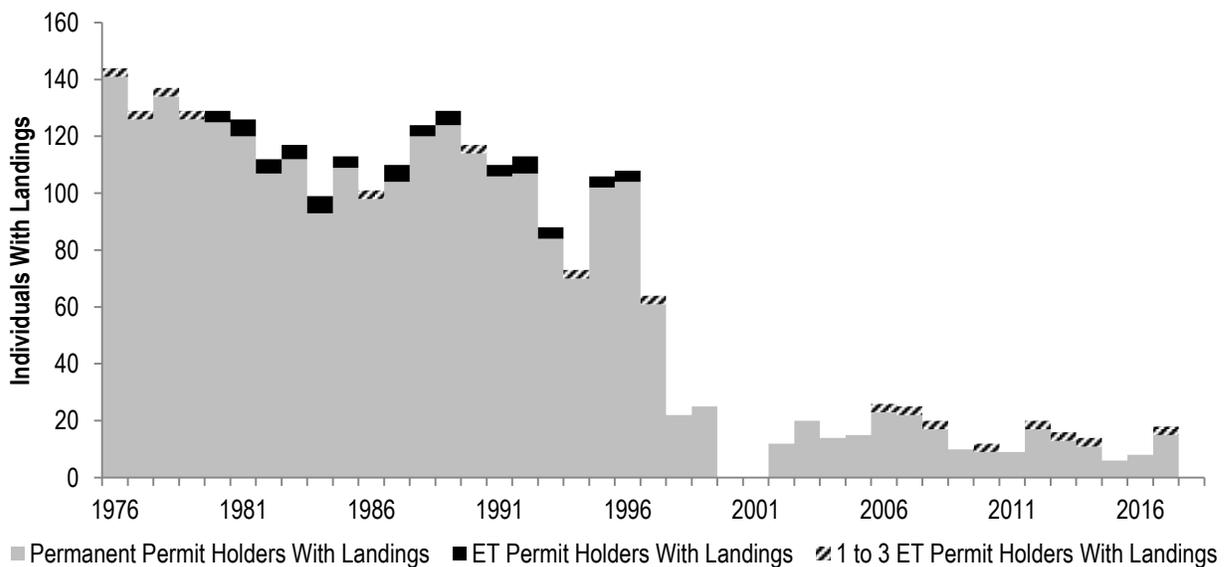
Table 1-4 and Figure 1-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 1-4. Use of Emergency Transfer Permits in the Upper Yukon Salmon Fish Wheel Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	144	1 to 3	-	1990	117	1 to 3	-	2004	14	0	0.0%
1977	129	1 to 3	-	1991	110	4	3.6%	2005	15	0	0.0%
1978	137	1 to 3	-	1992	113	6	5.3%	2006	26	1 to 3	-
1979	129	1 to 3	-	1993	88	4	4.5%	2007	25	1 to 3	-
1980	129	4	3.1%	1994	73	1 to 3	-	2008	20	1 to 3	-
1981	126	6	4.8%	1995	106	4	3.8%	2009	10	0	0.0%
1982	112	5	4.5%	1996	108	4	3.7%	2010	12	1 to 3	-
1983	117	5	4.3%	1997	64	1 to 3	-	2011	9	0	0.0%
1984	99	6	6.1%	1998	22	0	0.0%	2012	20	1 to 3	-
1985	113	4	3.5%	1999	25	0	0.0%	2013	16	1 to 3	-
1986	101	1 to 3	-	2000	0	0	-	2014	14	1 to 3	-
1987	110	6	5.5%	2001	0	0	-	2015	6	0	0.0%
1988	124	4	3.2%	2002	12	0	0.0%	2016	8	0	0.0%
1989	129	5	3.9%	2003	20	0	0.0%	2017	18	1 to 3	-

• When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 1-1. Use of Emergency Transfer Permits in the Upper Yukon Salmon Fish Wheel Fishery, 1975-2017



Latent S08P Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 1-5 indicates the total number of issued S08P permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 1-2.

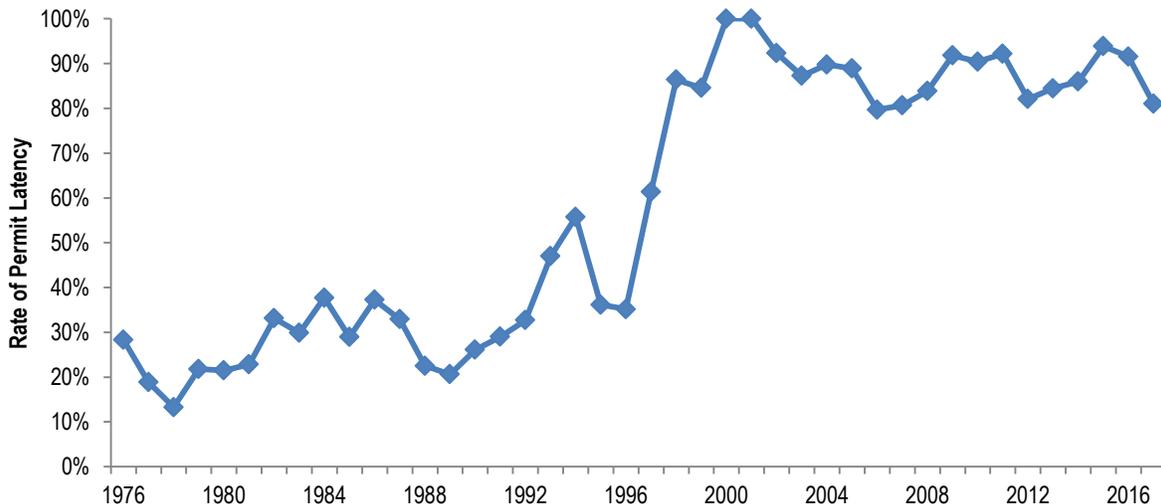
There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 1-5. Upper Yukon Salmon Fish Wheel Permit Latency, 1976-2017

Year	Permits		Latency Rate	Year	Permits		Latency Rate	Year	Permits		Latency Rate
	Issued	Fished			Issued	Fished			Issued	Fished	
1976	201	144	28.4%	1990	157	116	26.1%	2004	137	14	89.8%
1977	159	129	18.9%	1991	155	110	29.0%	2005	135	15	88.9%
1978	158	137	13.3%	1992	165	111	32.7%	2006	128	26	79.7%
1979	165	129	21.8%	1993	166	88	47.0%	2007	124	24	80.6%
1980	163	128	21.5%	1994	165	73	55.8%	2008	124	20	83.9%
1981	162	125	22.8%	1995	166	106	36.1%	2009	122	10	91.8%
1982	166	111	33.1%	1996	165	107	35.2%	2010	115	11	90.4%
1983	164	115	29.9%	1997	163	63	61.3%	2011	115	9	92.2%
1984	159	99	37.7%	1998	162	22	86.4%	2012	106	19	82.1%
1985	159	113	28.9%	1999	162	25	84.6%	2013	103	16	84.5%
1986	161	101	37.3%	2000	161	0	100.0%	2014	100	14	86.0%
1987	161	108	32.9%	2001	157	0	100.0%	2015	98	6	93.9%
1988	160	124	22.5%	2002	156	12	92.3%	2016	95	8	91.6%
1989	160	127	20.6%	2003	157	20	87.3%	2017	95	18	81.1%

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.

Figure 1-2. Upper Yukon Salmon Fish Wheel Permit Latency Rate, 1976-2017



New Entrants into the Upper Yukon Salmon Fish Wheel Fishery

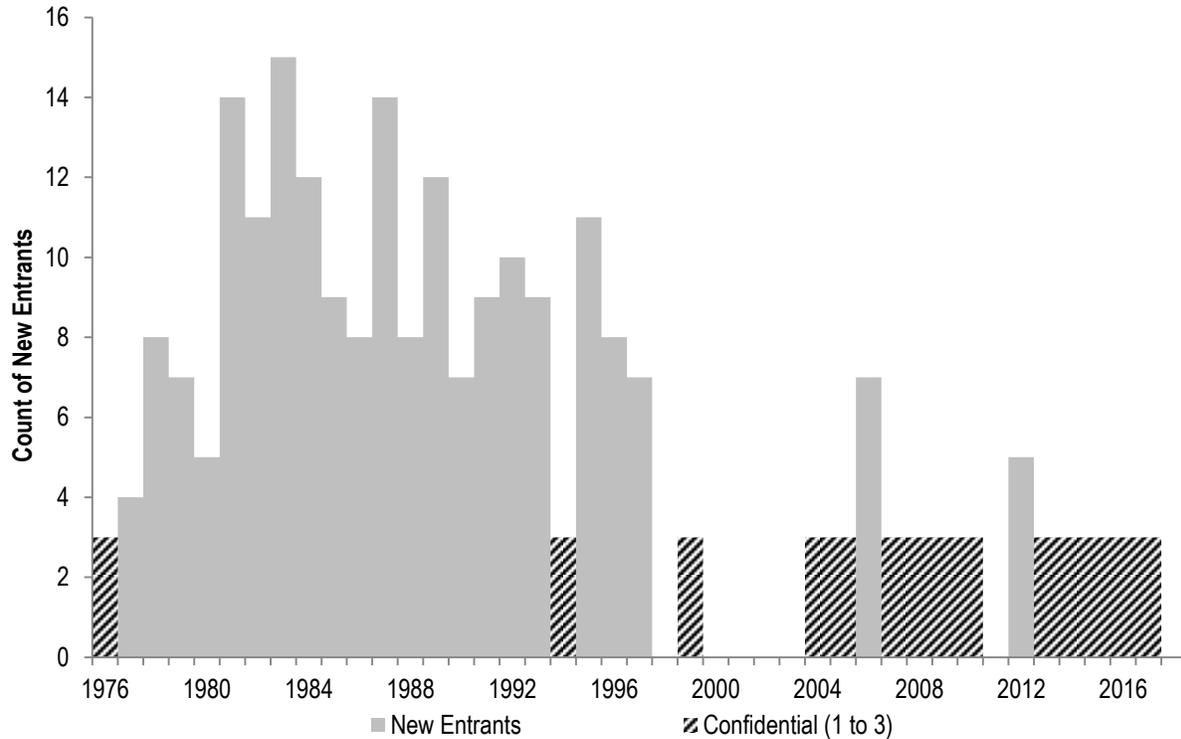
New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S08P permit and are displayed both in Table 1-6 and Figure 1-3. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

Table 1-6. New Entrants into the Upper Yukon Salmon Fish Wheel Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent
1976	28	1 to 3	-	1987	88	14	15.9%	1998	22	0	0.0%	2009	10	1 to 3	-
1977	87	4	4.6%	1988	100	8	8.0%	1999	25	1 to 3	-	2010	12	1 to 3	-
1978	93	8	8.6%	1989	105	12	11.4%	2000	0	0	-	2011	9	0	0.0%
1979	92	7	7.6%	1990	98	7	7.1%	2001	0	0	-	2012	20	5	25.0%
1980	92	5	5.4%	1991	92	9	9.8%	2002	12	0	0.0%	2013	16	1 to 3	-
1981	99	14	14.1%	1992	101	10	9.9%	2003	20	0	0.0%	2014	14	1 to 3	-
1982	89	11	12.4%	1993	86	9	10.5%	2004	14	1 to 3	-	2015	6	1 to 3	-
1983	93	15	16.1%	1994	72	1 to 3	-	2005	15	1 to 3	-	2016	8	1 to 3	-
1984	84	12	14.3%	1995	104	11	10.6%	2006	26	7	26.9%	2017	18	1 to 3	-
1985	94	9	9.6%	1996	106	8	7.5%	2007	25	1 to 3	-				
1986	82	8	9.8%	1997	62	7	11.3%	2008	20	1 to 3	-				

• This table excludes individuals with interim-entry and emergency transfer permits.

Figure 1-3. New Entrants into the Upper Yukon Salmon Fish Wheel Fishery, 1976-2017



Age of S08P Permit Holders

Table 1-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	Combined			Mean AK Worker Age
	S08P	Upper Yukon Salmon	Statewide All Permits	
1980	41.6	42.2	38.9	33.4
1981	42.2	42.9	39.9	33.5
1982	43.7	43.6	40.0	33.6
1983	42.8	43.1	40.2	33.7
1984	42.7	43.1	40.4	33.8
1985	42.6	43.3	40.8	34.0
1986	43.0	43.9	41.0	34.2
1987	42.9	43.5	40.9	34.5
1988	43.4	44.1	41.2	34.9
1989	44.6	45.2	41.5	35.3
1990	44.5	45.4	42.0	35.5
1991	45.9	46.8	42.5	35.9
1992	47.5	48.0	42.9	36.2
1993	48.0	48.6	43.5	36.5
1994	48.1	49.1	44.0	36.7
1995	48.1	49.4	44.4	37.0
1996	47.4	49.1	44.8	37.2
1997	48.0	49.6	45.1	37.4
1998	48.1	50.1	45.6	37.6
1999	48.8	50.5	46.0	37.8
2000	50.0	51.6	46.4	37.9
2001	51.3	52.8	46.9	38.1
2002	51.9	53.6	47.4	38.3
2003	52.5	54.4	47.9	38.4
2004	53.0	54.8	48.2	38.6
2005	53.8	55.6	48.4	38.7
2006	53.8	55.8	48.7	38.8
2007	54.4	56.4	48.9	38.9
2008	55.6	56.8	49.0	39.0
2009	56.1	57.4	49.3	39.1
2010	56.8	57.9	49.5	39.2
2011	57.1	58.0	49.6	39.4
2012	58.5	59.2	49.8	39.4
2013	58.1	59.1	50.0	39.5
2014	58.7	59.6	50.2	39.5
2015	59.6	60.5	50.6	39.5
2016	60.7	61.6	50.9	39.6
2017	61.5	62.5	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 1-7 shows the annual mean age of four different cohorts of people: 1) Upper Yukon salmon fish wheel (S08P) permit holders; 2) combined upper Yukon salmon permit holders; 3) all CFEC limited entry permit holders; and 4) the Alaskan working age population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits; however, there were no non-transferable S08P permits issued. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), and 47.9% (20.2 years) for the combined upper Yukon salmon permit holders.

For S08P permit holders, the mean age increased 47.7% (19.9 years).

S08P Permit Value

Many permit transfers are non-monetary transactions (see Table 1-2). Table 1-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 1-8. CFEC Estimated Value of Upper Yukon Salmon Fish Wheel Permits

Year	S08P Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	8	\$10,500	-	\$26,671	-
1984	6	\$12,333	-	\$29,096	-
1985	3	\$11,667	-	\$26,578	-
1986	2	\$13,500	-	\$30,193	-
1987	9	\$9,089	-	\$19,612	-
1988	5	\$8,700	-	\$18,027	-
1989	3	\$12,667	-	\$25,040	-
1990	6	\$11,667	-	\$21,881	-
1991	7	\$10,800	\$1,300	\$19,437	\$2,340
1992	5	\$10,900	\$2,600	\$19,044	\$4,542
1993	2	\$11,900	\$2,150	\$20,186	\$3,647
1994	3	\$7,300	\$3,050	\$12,074	\$5,045
1995	1	\$6,900	\$2,400	\$11,098	\$3,860
1996	4	\$8,900	\$1,100	\$13,904	\$1,718
1997	2	\$8,900	\$500	\$13,592	\$764
1998	2	\$8,700	\$750	\$13,083	\$1,128
1999	2	\$7,700	\$1,950	\$11,329	\$2,869
2000	0	\$7,700	\$1,950	\$10,961	\$2,776
2001	0	\$7,700	\$1,950	\$10,657	\$2,699
2002	1	\$6,900	\$2,300	\$9,401	\$3,134
2003	1	\$6,400	\$2,200	\$8,526	\$2,931
2004	0	\$6,400	\$2,200	\$8,305	\$2,855
2005	0	\$6,400	\$2,200	\$8,033	\$2,761
2006	1	\$5,900	\$2,200	\$7,174	\$2,675
2007	0	\$5,900	\$2,200	\$6,975	\$2,601
2008	2	\$5,000	\$800	\$5,692	\$911
2009	1	\$4,800	\$500	\$5,484	\$571
2010	0	\$4,800	\$500	\$5,396	\$562
2011	0	\$4,800	\$500	\$5,231	\$545
2012	1	\$4,800	\$500	\$5,125	\$534
2013	2	\$4,000	\$1,400	\$4,209	\$1,473
2014	1	\$3,900	\$1,300	\$4,038	\$1,346
2015	1	\$4,100	\$1,450	\$4,240	\$1,500
2016	0	\$4,100	\$1,450	\$4,187	\$1,481
2017	0	\$4,100	\$1,450	\$4,100	\$1,450

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

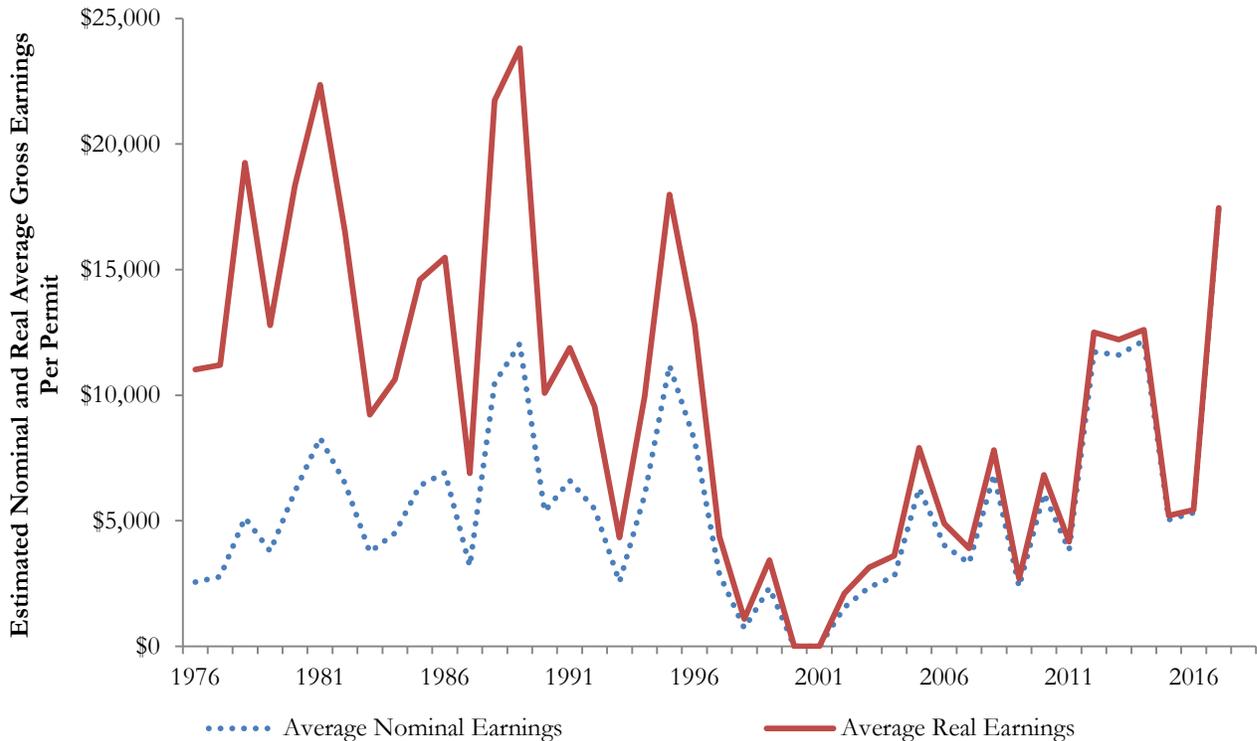
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, largely stem from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 1-4 are for both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held for the upper Yukon salmon fish wheel fishery was in 2001. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 1-9 reports the number of permits issued, permits with landings, and estimated gross earnings in the upper Yukon salmon fish wheel fishery from 1975 to 2017. Note that the figures by permit in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 1-10 reports the number of permit holders (people) and estimated real (inflation-adjusted) gross earnings by each resident type.

Figure 1-4. Estimated Nominal and Real Average Gross Earnings Per Upper Yukon Salmon Fish Wheel Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 1-9. Estimated Total Gross Earnings (Real and Nominal) for the Upper Yukon Salmon Fish Wheel Fishery, With Average Earnings (Real) by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	201	\$368,275	\$1,586,494	144	\$11,017
1977	159	\$357,336	\$1,445,383	129	\$11,205
1978	158	\$701,727	\$2,638,149	137	\$19,257
1979	165	\$488,234	\$1,648,430	129	\$12,779
1980	163	\$789,593	\$2,348,848	128	\$18,350
1981	162	\$1,036,582	\$2,795,236	125	\$22,362
1982	166	\$721,146	\$1,831,785	111	\$16,503
1983	164	\$430,851	\$1,060,342	115	\$9,220
1984	159	\$445,964	\$1,052,115	99	\$10,627
1985	159	\$723,644	\$1,648,509	113	\$14,589
1986	161	\$699,031	\$1,563,379	101	\$15,479
1987	161	\$344,922	\$744,255	108	\$6,891
1988	160	\$1,300,707	\$2,695,091	124	\$21,735
1989	160	\$1,529,804	\$3,024,077	127	\$23,812
1990	157	\$623,482	\$1,169,303	116	\$10,080
1991	155	\$725,933	\$1,306,466	110	\$11,877
1992	165	\$607,133	\$1,060,730	111	\$9,556
1993	166	\$224,981	\$381,643	88	\$4,337
1994	165	\$439,106	\$726,273	73	\$9,949
1995	166	\$1,185,749	\$1,907,158	106	\$17,992
1996	165	\$877,606	\$1,371,057	107	\$12,814
1997	163	\$180,337	\$275,415	63	\$4,372
1998	162	\$15,947	\$23,981	22	\$1,090
1999	162	\$58,240	\$85,689	25	\$3,428
2000	161	\$0	\$0	0	\$0
2001	157	\$0	\$0	0	\$0
2002	156	\$18,495	\$25,200	12	\$2,100
2003	157	\$47,179	\$62,851	20	\$3,143
2004	137	\$38,941	\$50,531	14	\$3,609
2005	135	\$94,533	\$118,648	15	\$7,910
2006	128	\$104,645	\$127,235	26	\$4,894
2007	124	\$79,365	\$93,825	24	\$3,909
2008	124	\$137,210	\$156,212	20	\$7,811
2009	122	\$23,666	\$27,040	10	\$2,704
2010	115	\$66,876	\$75,176	11	\$6,834
2011	115	\$34,453	\$37,545	9	\$4,172
2012	106	\$222,543	\$237,592	19	\$12,505
2013	103	\$185,731	\$195,429	16	\$12,214
2014	100	\$170,402	\$176,436	14	\$12,603
2015	98	\$30,231	\$31,264	6	\$5,211
2016	95	\$42,594	\$43,502	8	\$5,438
2017	95	\$314,317	\$314,317	18	\$17,462

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.

Table 1-10. Estimated Real Gross Earnings for Permit Holders in the Upper Yukon Salmon Fish Wheel Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	139	\$11,321	\$1,573,562	5	\$2,586	\$12,932	0			144	\$11,017	\$1,586,494
1977	124	\$10,564	\$1,309,981	5	\$27,080	\$135,402	0			129	\$11,205	\$1,445,383
1978	132	\$18,628	\$2,458,916	confidential	confidential	confidential	1 to 3	confidential	confidential	137	\$19,257	\$2,638,149
1979	confidential	confidential	confidential	1 to 3	confidential	confidential	0			129	\$12,779	\$1,648,430
1980	129	\$18,208	\$2,348,848	0			0			129	\$18,208	\$2,348,848
1981	123	\$22,360	\$2,750,338	1 to 3	confidential	confidential	1 to 3	confidential	confidential	126	\$22,184	\$2,795,236
1982	confidential	confidential	confidential	1 to 3	confidential	confidential	0			112	\$16,355	\$1,831,785
1983	115	\$8,993	\$1,034,165	1 to 3	confidential	confidential	1 to 3	confidential	confidential	117	\$9,063	\$1,060,342
1984	96	\$10,333	\$991,926	1 to 3	confidential	confidential	1 to 3	confidential	confidential	99	\$10,627	\$1,052,115
1985	110	\$14,598	\$1,605,755	1 to 3	confidential	confidential	1 to 3	confidential	confidential	113	\$14,589	\$1,648,509
1986	confidential	confidential	confidential	1 to 3	confidential	confidential	0			101	\$15,479	\$1,563,379
1987	105	\$6,583	\$691,265	5	\$10,598	\$52,991	0			110	\$6,766	\$744,255
1988	118	\$21,645	\$2,554,165	6	\$23,488	\$140,926	0			124	\$21,735	\$2,695,091
1989	confidential	confidential	confidential	1 to 3	confidential	confidential	0			129	\$23,442	\$3,024,077
1990	113	\$9,782	\$1,105,317	4	\$15,996	\$63,986	0			117	\$9,994	\$1,169,303
1991	105	\$11,850	\$1,244,212	5	\$12,451	\$62,254	0			110	\$11,877	\$1,306,466
1992	107	\$9,160	\$980,151	confidential	confidential	confidential	1 to 3	confidential	confidential	113	\$9,387	\$1,060,730
1993	confidential	confidential	confidential	1 to 3	confidential	confidential	0			88	\$4,337	\$381,643
1994	69	\$9,873	\$681,244	4	\$11,257	\$45,029	0			73	\$9,949	\$726,273
1995	100	\$18,054	\$1,805,445	6	\$16,952	\$101,712	0			106	\$17,992	\$1,907,158
1996	104	\$12,475	\$1,297,378	4	\$18,420	\$73,678	0			108	\$12,695	\$1,371,057
1997	confidential	confidential	confidential	1 to 3	confidential	confidential	0			64	\$4,303	\$275,415
1998	22	\$1,090	\$23,981	0			0			22	\$1,090	\$23,981
1999	25	\$3,428	\$85,689	0			0			25	\$3,428	\$85,689
2000	0			0			0			0	\$0	\$0
2001	0			0			0			0	\$0	\$0
2002	12	\$2,100	\$25,200	0			0			12	\$2,100	\$25,200
2003	20	\$3,143	\$62,851	0			0			20	\$3,143	\$62,851
2004	14	\$3,609	\$50,531	0			0			14	\$3,609	\$50,531
2005	15	\$7,910	\$118,648	0			0			15	\$7,910	\$118,648
2006	confidential	confidential	confidential	1 to 3	confidential	confidential	0			26	\$4,894	\$127,235
2007	confidential	confidential	confidential	1 to 3	confidential	confidential	0			25	\$3,753	\$93,825
2008	20	\$7,811	\$156,212	0			0			20	\$7,811	\$156,212
2009	confidential	confidential	confidential	1 to 3	confidential	confidential	0			10	\$2,704	\$27,040
2010	confidential	confidential	confidential	0			1 to 3	confidential	confidential	12	\$6,265	\$75,176
2011	9	\$4,172	\$37,545	0			0			9	\$4,172	\$37,545
2012	20	\$11,880	\$237,592	0			0			20	\$11,880	\$237,592
2013	confidential	confidential	confidential	1 to 3	confidential	confidential	0			16	\$12,214	\$195,429
2014	confidential	confidential	confidential	1 to 3	confidential	confidential	0			14	\$12,603	\$176,436
2015	confidential	confidential	confidential	1 to 3	confidential	confidential	0			6	\$5,211	\$31,264
2016	8	\$5,438	\$43,502	0			0			8	\$5,438	\$43,502
2017	confidential	confidential	confidential	1 to 3	confidential	confidential	0			18	\$17,462	\$314,317

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year. Note that these counts are for individuals, not permits.

Chapter 2 Upper Yukon Salmon Gillnet Fishery

S04P Permit Holdings

Limited entry permits for the upper Yukon salmon gillnet fishery (S04P permits) were issued starting in 1976. CFEC has issued 75 S04P permits. Table 2-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 93.3% (70/75) of the permits, Nonlocal Alaskans received 5.3% (4/75) of the permits, and Nonresidents received 1.3% (1/75). 74 of the S04P permits were issued as transferable permits, and 1 permit was issued as a non-transferable permits.

Table 2-1. Initial Issuance and Year-end 2017 Totals of Upper Yukon Salmon Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS		MIGRATIONS		CANCELLED		2017 YEAR-END	
Residency	Total	Percent	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	Total	Percent
Local	70	93.3%	1	1.4%	-13	-18.6%	-17	-24.3%	41	89.1%
Nonlocal	4	5.3%	0	0.0%	9	225.0%	-9	-225.0%	4	8.7%
Nonresident	1	1.3%	-1	-100.0%	4	400.0%	-3	-300.0%	1	2.2%
Total	75	100.0%	0	0.0%	0	0.0%	-29	-38.7%	46	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled, such as when a permit holder does not pay the renewal fee for two consecutive years. This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S04P Permits

Under the Limited Entry Act's terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.³ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 2-2. Transfer Acquisition Methods for Upper Yukon Salmon Gillnet Permits, 1980-2017

Acquisition Method	Upper Yukon Salmon Gillnet		Combined Upper Yukon Salmon		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	55	50.9%	192	50.8%	6,861	56.4%	13,825	36.5%
<i>Sale</i>	46	42.6%	164	43.4%	4,743	39.0%	22,262	58.8%
<i>Trade</i>	4	3.7%	11	2.9%	97	0.8%	520	1.4%
<i>Other</i>	3	2.8%	11	2.9%	467	3.8%	1,225	3.2%
Total	108		378		12,168		37,832	

Table 2-2 compares and contrasts the transfer acquisition methods for the S04P permits, combined upper Yukon salmon permit types, all statewide salmon set gillnet permits, and all limited entry permits between 1980 and 2017. About half of all S04P transfers were gifts (50.9% or 55/108), almost half were sales (42.6% or 46/108), and a smaller percentage were trades (3.7% or 4/108) or other (2.8% 3/108). The annual acquisition methods for S04P permits can be viewed in a different publication.⁴

Table 2-3. Relationships of Transferor to Transfer Recipients for Upper Yukon Salmon Gillnet Permits, 1980-2017

Relationship	Upper Yukon Salmon Gillnet		Combined Upper Yukon Salmon		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	20	18.5%	81	21.4%	2,329	19.1%	6,992	18.5%
<i>Member of Immediate Family</i>	57	52.8%	196	51.9%	5,906	48.5%	12,802	33.8%
<i>Other Relative</i>	4	3.7%	16	4.2%	869	7.1%	1,743	4.6%
<i>Other</i>	27	25.0%	85	22.5%	3,064	25.2%	16,295	43.1%
Total	108		378		12,168		37,832	

Table 2-3 shows the relationships between the transferors and transfer recipients for S04P permits, and compares S04P permit transfers with the combined upper Yukon salmon permit types, all statewide salmon set gillnet permits, and all limited entry permits from 1980 to 2017. Transfers within the family, both between immediate family members and other relatives, total 56.5% (61/108) of all permit transfers for S04P permits compared to 56.1% (212/378) combined upper Yukon salmon permit types, 55.7% (6,775/12,168) for all salmon set gillnet permits statewide, and 38.4% (14,545/37,832) for all limited entry permits statewide.

³ CFEC implemented the transfer survey in 1980.

⁴ See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S04P Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

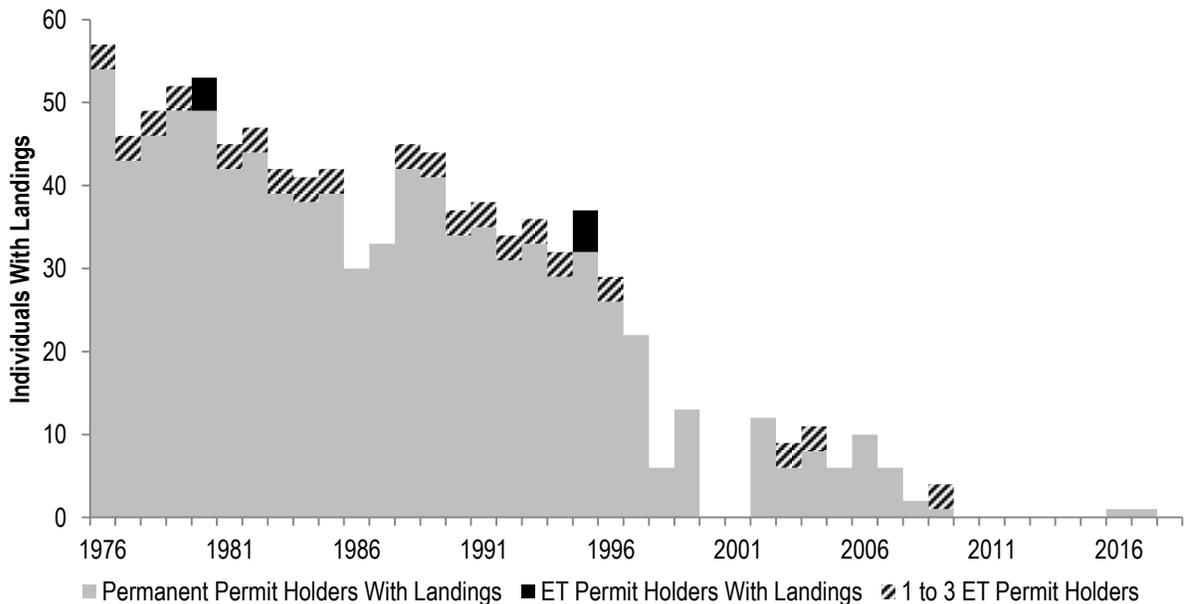
Table 2-4 and Figure 2-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 2-4. Use of Emergency Transfer Permits in the Upper Yukon Salmon Gillnet Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	55	1 to 3	-	1990	35	1 to 3	-	2004	9	1 to 3	-
1977	44	1 to 3	-	1991	36	1 to 3	-	2005	6	0	0.0%
1978	47	1 to 3	-	1992	32	1 to 3	-	2006	10	0	0.0%
1979	50	1 to 3	-	1993	35	1 to 3	-	2007	6	0	0.0%
1980	53	4	7.5%	1994	31	1 to 3	-	2008	1 to 3	0	-
1981	45	1 to 3	-	1995	37	5	13.5%	2009	1 to 3	1 to 3	-
1982	45	1 to 3	-	1996	28	1 to 3	-	2010	0	0	-
1983	40	1 to 3	-	1997	22	0	0.0%	2011	0	0	-
1984	39	1 to 3	-	1998	6	0	0.0%	2012	0	0	-
1985	41	1 to 3	-	1999	13	0	0.0%	2013	0	0	-
1986	30	0	0.0%	2000	0	0	-	2014	0	0	-
1987	33	0	0.0%	2001	0	0	-	2015	0	0	-
1988	43	1 to 3	-	2002	12	0	0.0%	2016	1 to 3	0	-
1989	42	1 to 3	-	2003	7	1 to 3	-	2017	1 to 3	0	-

• When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 2-1. Use of Emergency Transfer Permits in the Upper Yukon Salmon Set Gillnet Fishery, 1976-2017



Latent S04P Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 2-5 indicates the total number of issued S04P permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 2-2.

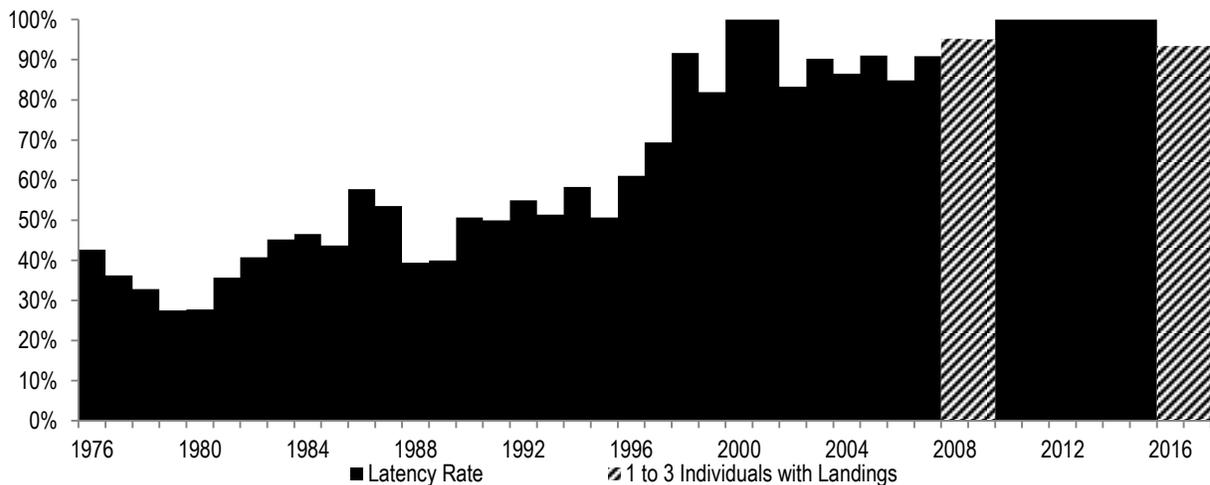
There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 2-5. Upper Yukon Salmon Gillnet Permit Latency, 1976-2017

Year	Permits Issued	Permits Fished	Latency Rate
1976	96	55	42.7%
1977	69	44	36.2%
1978	70	47	32.9%
1979	69	50	27.5%
1980	72	52	27.8%
1981	70	45	35.7%
1982	76	45	40.8%
1983	73	40	45.2%
1984	73	39	46.6%
1985	71	40	43.7%
1986	71	30	57.7%
1987	71	33	53.5%
1988	71	43	39.4%
1989	70	42	40.0%
1990	71	35	50.7%
1991	72	36	50.0%
1992	71	32	54.9%
1993	72	35	51.4%
1994	72	30	58.3%
1995	73	36	50.7%
1996	72	28	61.1%
1997	72	22	69.4%
1998	72	6	91.7%
1999	72	13	81.9%
2000	72	0	100.0%
2001	72	0	100.0%
2002	72	12	83.3%
2003	72	7	90.3%
2004	67	9	86.6%
2005	67	6	91.0%
2006	66	10	84.8%
2007	66	6	90.9%
2008	64	1 to 3	-
2009	61	1 to 3	-
2010	58	0	100.0%
2011	55	0	100.0%
2012	52	0	100.0%
2013	51	0	100.0%
2014	47	0	100.0%
2015	46	0	100.0%
2016	46	1 to 3	-
2017	46	1 to 3	-

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.

Figure 2-2. Upper Yukon Salmon Gillnet Permit Latency Rate, 1976-2017



New Entrants into the Upper Yukon Salmon Gillnet Fishery

New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S04P permit. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder of a limited entry permit. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

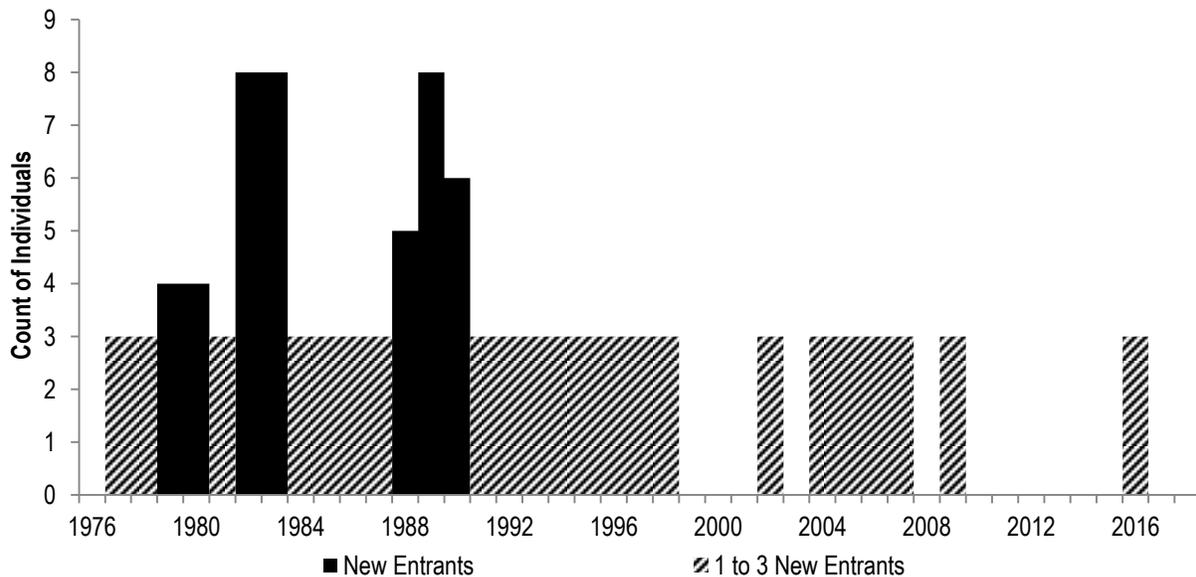
Table 2-6 and Figure 2-3 describe individuals rather than permits. An individual may hold up to two permits in this fishery, but can only fish one of them. An individual may hold one S04P permit one year, and then in subsequent years hold a different S04P permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once as a new entrant and only in the year in which they made their first documented landing.

Table 2-6. New Entrants into the Upper Yukon Salmon Gillnet Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent
1976	10	0	0.0%	1987	33	1 to 3	-	1998	6	1 to 3	-	2009	1 to 3	1 to 3	-
1977	28	1 to 3	-	1988	42	5	11.9%	1999	13	0	0.0%	2010	0	0	-
1978	29	1 to 3	-	1989	41	8	19.5%	2000	0	0	-	2011	0	0	-
1979	37	4	10.8%	1990	34	6	17.6%	2001	0	0	-	2012	0	0	-
1980	40	4	10.0%	1991	36	1 to 3	-	2002	12	1 to 3	-	2013	0	0	-
1981	38	1 to 3	-	1992	32	1 to 3	-	2003	7	0	0.0%	2014	0	0	-
1982	45	8	17.8%	1993	35	1 to 3	-	2004	9	1 to 3	-	2015	0	0	-
1983	40	8	20.0%	1994	31	1 to 3	-	2005	6	1 to 3	-	2016	1 to 3	1 to 3	-
1984	38	1 to 3	-	1995	37	1 to 3	-	2006	10	1 to 3	-	2017	1 to 3	0	-
1985	41	1 to 3	-	1996	28	1 to 3	-	2007	6	1 to 3	-				
1986	30	1 to 3	-	1997	22	1 to 3	-	2008	1 to 3	0	-				

• This table excludes individuals with interim-entry and emergency transfer permits.

Figure 2-3. New Entrants into the Upper Yukon Salmon Gillnet Fishery, 1976-2017



Age of S04P Permit Holders

Table 2-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	S04P	Combined Upper Yukon Salmon	Statewide Salmon Set Gillnet	Statewide All Permits	Mean Alaska Worker Age
1980	45.5	42.2	37.9	38.9	33.4
1981	45.3	42.9	38.0	39.9	33.5
1982	44.2	43.6	38.2	40.0	33.6
1983	44.7	43.1	38.0	40.2	33.7
1984	44.9	43.1	38.2	40.4	33.8
1985	45.7	43.3	38.5	40.8	34.0
1986	46.6	43.9	38.8	41.0	34.2
1987	45.9	43.5	39.0	40.9	34.5
1988	46.4	44.1	39.3	41.2	34.9
1989	47.1	45.2	39.9	41.5	35.3
1990	47.8	45.4	40.0	42.0	35.5
1991	49.1	46.8	40.5	42.5	35.9
1992	50.0	48.0	40.8	42.9	36.2
1993	50.8	48.6	41.2	43.5	36.5
1994	52.0	49.1	41.5	44.0	36.7
1995	52.7	49.4	41.9	44.4	37.0
1996	53.4	49.1	42.3	44.8	37.2
1997	53.8	49.6	42.6	45.1	37.4
1998	55.0	50.1	43.1	45.6	37.6
1999	54.7	50.5	43.4	46.0	37.8
2000	55.7	51.6	43.7	46.4	37.9
2001	56.7	52.8	44.1	46.9	38.1
2002	57.7	53.6	44.8	47.4	38.3
2003	58.9	54.4	45.2	47.9	38.4
2004	59.3	54.8	45.4	48.2	38.6
2005	59.8	55.6	45.4	48.4	38.7
2006	60.3	55.8	45.6	48.7	38.8
2007	61.0	56.4	45.9	48.9	38.9
2008	60.0	56.8	45.9	49.0	39.0
2009	60.9	57.4	46.1	49.3	39.1
2010	61.2	57.9	46.3	49.5	39.2
2011	60.8	58.0	46.6	49.6	39.4
2012	61.8	59.2	47.0	49.8	39.4
2013	62.4	59.1	47.0	50.0	39.5
2014	62.2	59.6	47.2	50.2	39.5
2015	63.1	60.5	47.6	50.6	39.5
2016	64.1	61.6	48.0	50.9	39.6
2017	65.1	62.5	48.2	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 2-7 shows the annual mean age of five different cohorts of people: 1) upper Yukon salmon gillnet (S04P) permit holders; 2) combined upper Yukon salmon permit holders; 3) all salmon set gillnet permit holders statewide; 4) all CFEC limited entry permit holders; and 5) the Alaskan working population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), 27.4% (10.4 years) for the statewide set gillnet permit holders, and 47.9% (20.2 years) for the combined upper Yukon salmon permit holders.

For S04P permit holders, the mean age increased 43.1% (19.6 years).

S04P Permit Value

Many permit transfers are non-monetary transactions (see Table 2-2). Table 2-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 2-8. CFEC Estimated Value of Upper Yukon Salmon Gillnet Permits

Year	S04P Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1986	3	\$7,667	-	\$17,147	-
1987	2	\$9,167	-	\$19,780	-
1988	3	\$8,733	-	\$18,095	-
1989	4	\$9,875	-	\$19,521	-
1990	4	\$11,250	-	\$21,099	-
1991	1	\$11,300	\$950	\$20,337	\$1,710
1992	0	\$11,300	\$950	\$19,742	\$1,660
1993	1	\$10,000	\$2,150	\$16,963	\$3,647
1994	0	\$10,000	\$2,150	\$16,540	\$3,556
1995	0	\$10,000	\$2,150	\$16,084	\$3,458
1996	1	\$9,300	\$2,200	\$14,529	\$3,437
1997	0	\$9,300	\$2,200	\$14,203	\$3,360
1998	0	\$9,300	\$2,200	\$13,985	\$3,308
1999	1	\$7,500	\$2,100	\$11,035	\$3,090
2000	0	\$7,500	\$2,100	\$10,676	\$2,989
2001	0	\$7,500	\$2,100	\$10,381	\$2,907
2002	0	\$7,500	\$2,100	\$10,219	\$2,861
2003	0	\$7,500	\$2,100	\$9,991	\$2,798
2004	1	\$6,300	\$1,500	\$8,175	\$1,946
2005	1	\$5,900	\$1,450	\$7,405	\$1,820
2006	1	\$4,600	\$1,100	\$5,593	\$1,337
2007	1	\$3,600	\$2,050	\$4,256	\$2,424
2008	0	\$3,600	\$2,050	\$4,099	\$2,334
2009	0	\$3,600	\$2,050	\$4,113	\$2,342
2010	0	\$3,600	\$2,050	\$4,047	\$2,304
2011	1	\$3,300	\$1,850	\$3,596	\$2,016
2012	0	\$3,300	\$1,850	\$3,523	\$1,975
2013	0	\$3,300	\$1,850	\$3,472	\$1,947
2014	0	\$3,300	\$1,850	\$3,417	\$1,916
2015	0	\$3,300	\$1,850	\$3,413	\$1,913
2016	0	\$3,300	\$1,850	\$3,370	\$1,889
2017	0	\$3,300	\$1,850	\$3,300	\$1,850

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

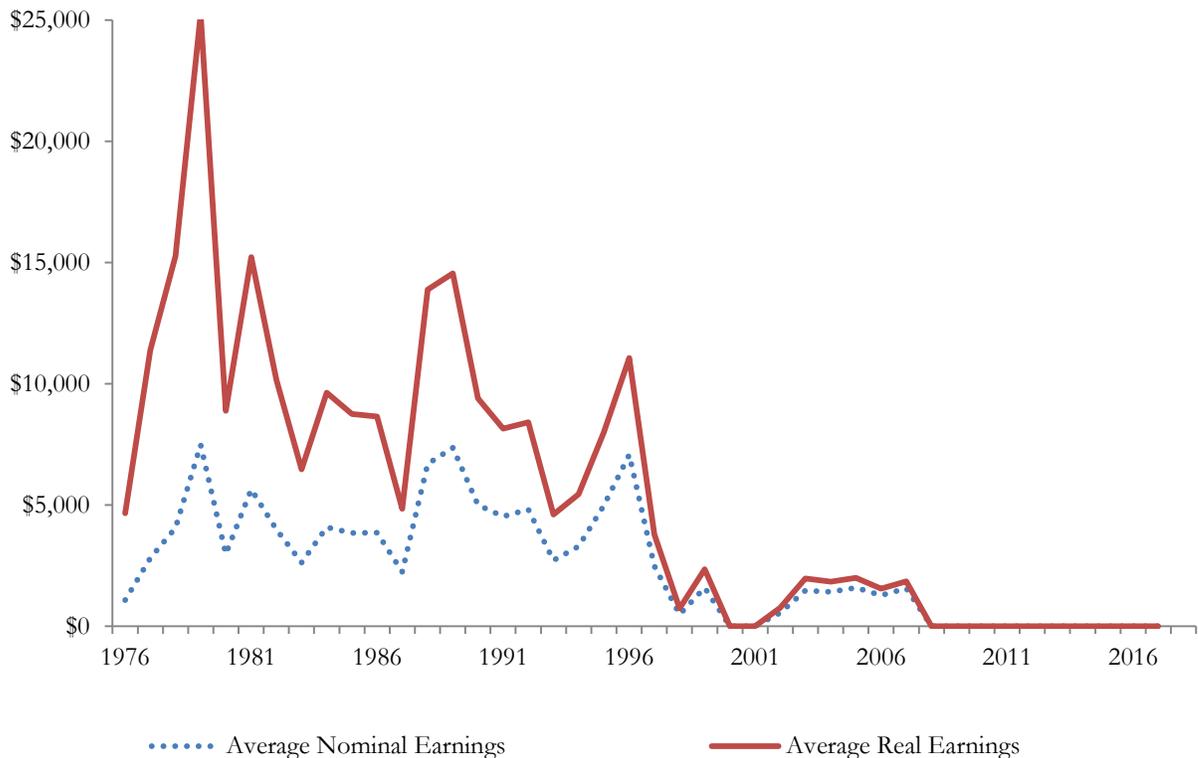
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, come primarily from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 2-4 reflect both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held in the upper Yukon salmon gillnet fishery was in 1991. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 2-9 reports the number of permit issued, and estimated gross earnings in the upper Yukon salmon gillnet fishery from 1976 to 2017. Note that the figures by permit or vessel in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 2-10 reports the number of permit holders (people) and estimated real (inflation adjusted) gross earnings by each resident type.

Figure 2-4. Estimated Nominal and Real Average Gross Earnings Per Upper Yukon Salmon Set Gillnet Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 2-9. Estimated Total Gross Earnings (Real and Nominal) for the Upper Yukon Salmon Gillnet Fishery, With Average Gross (Real) Earnings by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	96	\$59,611	\$256,800	55	\$4,669
1977	69	\$123,937	\$501,312	44	\$11,393
1978	70	\$190,804	\$717,330	47	\$15,262
1979	69	\$373,994	\$1,262,719	50	\$25,254
1980	72	\$155,418	\$462,329	52	\$8,891
1981	70	\$254,068	\$685,116	45	\$15,225
1982	76	\$179,957	\$457,109	45	\$10,158
1983	73	\$105,239	\$258,997	40	\$6,475
1984	73	\$159,245	\$375,689	39	\$9,633
1985	71	\$153,888	\$350,568	40	\$8,764
1986	71	\$116,007	\$259,450	30	\$8,648
1987	71	\$74,068	\$159,820	33	\$4,843
1988	71	\$288,133	\$597,018	43	\$13,884
1989	70	\$309,421	\$611,655	42	\$14,563
1990	71	\$175,419	\$328,988	35	\$9,400
1991	72	\$163,113	\$293,556	36	\$8,154
1992	71	\$154,115	\$269,256	32	\$8,414
1993	72	\$95,252	\$161,580	35	\$4,617
1994	72	\$98,815	\$163,438	30	\$5,448
1995	73	\$179,084	\$288,038	36	\$8,001
1996	72	\$198,292	\$309,786	28	\$11,064
1997	72	\$54,628	\$83,429	22	\$3,792
1998	72	\$2,968	\$4,463	6	\$744
1999	72	\$20,755	\$30,537	13	\$2,349
2000	72	\$0	\$0	0	\$0
2001	72	\$0	\$0	0	\$0
2002	72	\$6,737	\$9,179	12	\$765
2003	72	\$10,354	\$13,793	7	\$1,970
2004	67	\$12,768	\$16,568	9	\$1,841
2005	67	\$9,582	\$12,026	6	\$2,004
2006	66	\$12,805	\$15,570	10	\$1,557
2007	66	\$9,403	\$11,116	6	\$1,853
2008	64	**	**	1 to 3	**
2009	61	**	**	1 to 3	**
2010	58	\$0	\$0	0	\$0
2011	55	\$0	\$0	0	\$0
2012	52	\$0	\$0	0	\$0
2013	51	\$0	\$0	0	\$0
2014	47	\$0	\$0	0	\$0
2015	46	\$0	\$0	0	\$0
2016	46	**	**	1 to 3	**
2017	46	**	**	1 to 3	**

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- When fewer than four permits make landings, earnings are masked (**) due to reasons of confidentiality.

Table 2-10. Estimated Real Gross Earnings for Permit Holders in the Upper Yukon Salmon Gillnet Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	51	\$4,259	\$217,213	4	\$9,897	\$39,587	0	--	--	55	\$4,669	\$256,800
1977	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	44	\$11,393	\$501,312
1978	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	47	\$15,262	\$717,330
1979	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	50	\$25,254	\$1,262,719
1980	48	\$9,058	\$434,761	5	\$5,514	\$27,569	0	--	--	53	\$8,723	\$462,329
1981	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	45	\$15,225	\$685,116
1982	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	45	\$10,158	\$457,109
1983	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	40	\$6,475	\$258,997
1984	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	39	\$9,633	\$375,689
1985	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	41	\$8,550	\$350,568
1986	26	\$9,187	\$238,855	4	\$5,149	\$20,595	0	--	--	30	\$8,648	\$259,450
1987	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	33	\$4,843	\$159,820
1988	38	\$13,686	\$520,053	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	43	\$13,884	\$597,018
1989	36	\$11,207	\$403,468	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	42	\$14,563	\$611,655
1990	30	\$8,519	\$255,584	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	35	\$9,400	\$328,988
1991	32	\$6,957	\$222,617	1 to 3	Confidential	Confidential	1 to 3	Confidential	Confidential	36	\$8,154	\$293,556
1992	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	32	\$8,414	\$269,256
1993	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	35	\$4,617	\$161,580
1994	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	31	\$5,272	\$163,438
1995	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	37	\$7,785	\$288,038
1996	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	28	\$11,064	\$309,786
1997	Confidential	Confidential	Confidential	1 to 3	Confidential	Confidential	0	--	--	22	\$3,792	\$83,429
1998	6	\$744	\$4,463	0	--	--	0	--	--	6	\$744	\$4,463
1999	13	\$2,349	\$30,537	0	--	--	0	--	--	13	\$2,349	\$30,537
2000	0	--	--	0	--	--	0	--	--	0	--	--
2001	0	--	--	0	--	--	0	--	--	0	--	--
2002	12	\$765	\$9,179	0	--	--	0	--	--	12	\$765	\$9,179
2003	7	\$1,970	\$13,793	0	--	--	0	--	--	7	\$1,970	\$13,793
2004	9	\$1,841	\$16,568	0	--	--	0	--	--	9	\$1,841	\$16,568
2005	6	\$2,004	\$12,026	0	--	--	0	--	--	6	\$2,004	\$12,026
2006	10	\$1,557	\$15,570	0	--	--	0	--	--	10	\$1,557	\$15,570
2007	6	\$1,853	\$11,116	0	--	--	0	--	--	6	\$1,853	\$11,116
2008	1 to 3	Confidential	Confidential	0	--	--	0	--	--	1 to 3	Confidential	Confidential
2009	1 to 3	Confidential	Confidential	0	--	--	0	--	--	1 to 3	Confidential	Confidential
2010	0	--	--	0	--	--	0	--	--	0	--	--
2011	0	--	--	0	--	--	0	--	--	0	--	--
2012	0	--	--	0	--	--	0	--	--	0	--	--
2013	0	--	--	0	--	--	0	--	--	0	--	--
2014	0	--	--	0	--	--	0	--	--	0	--	--
2015	0	--	--	0	--	--	0	--	--	0	--	--
2016	1 to 3	Confidential	Confidential	0	--	--	0	--	--	1 to 3	Confidential	Confidential
2017	1 to 3	Confidential	Confidential	0	--	--	0	--	--	1 to 3	Confidential	Confidential

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- Note that these counts are for individuals, not permits.

Chapter 3 Lower Yukon Salmon Gillnet Fishery

S04Y Permit Holdings

Limited entry permits for the lower Yukon salmon gillnet fishery (S04Y permits) were issued starting in 1976. CFEC has issued 712 S04Y permits. Table 3-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 94.4% (672/712) of the permits, Nonlocal Alaskans received 5.5% (39/712) of the permits, and Nonresidents received 0.1% (1/712). Every S04Y permits was issued as transferable permits.

Table 3-1. Initial Issuance and Year-end 2017 Totals of Lower Yukon Salmon Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS		MIGRATIONS		CANCELLED		2017 YEAR-END	
Residency	Total	Percent	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	Total	Percent
Local	672	94.4%	69	10.3%	-139	-20.7%	-38	-5.7%	564	87.0%
Nonlocal	39	5.5%	-59	-151.3%	124	317.9%	-23	-59.0%	81	12.5%
Nonresident	1	0.1%	-10	-1000.0%	15	1500.0%	-3	-300.0%	3	0.5%
Total	712	100.0%	0	0.0%	0	0.0%	-64	-9.0%	648	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled, such as when a permit holder does not pay the renewal fee for two consecutive years. This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S04Y Permits

Under the Limited Entry Act's terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.⁵ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 3-2. Transfer Acquisition Methods for Lower Yukon Salmon Gillnet Permits, 1980-2017

Acquisition Method	Lower Yukon Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	940	67.0%	6,861	56.4%	13,825	36.5%
<i>Sale</i>	397	28.3%	4,743	39.0%	22,262	58.8%
<i>Trade</i>	8	0.6%	97	0.8%	520	1.4%
<i>Other</i>	59	4.2%	467	3.8%	1,225	3.2%
Total	1,404		12,168		37,832	

Table 3-2 compares and contrasts the transfer acquisition methods for the S04Y permits, all statewide salmon set gillnet permits, and all limited entry permits between 1980 and 2017. More than two thirds of all S04Y transfers were gifts (67.0% or 940/1,404), more than a quarter were sales (28.3% or 397/1,404), and a smaller percentage were trades (0.6% or 8/1,404) or other (4.2% 59/1,404). The annual acquisition methods for S04Y permits can be viewed in a different publication.⁶

Table 3-3. Relationships of Transferor to Transfer Recipients for Lower Yukon Salmon Gillnet Permits, 1980-2017

Relationship	Lower Yukon Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	117	8.3%	2,329	19.1%	6,992	18.5%
<i>Member of Immediate Family</i>	951	67.7%	5,906	48.5%	12,802	33.8%
<i>Other Relative</i>	70	5.0%	869	7.1%	1,743	4.6%
<i>Other</i>	266	18.9%	3,064	25.2%	16,295	43.1%
Total	1,404		12,168		37,832	

Table 3-3 shows the relationships between the transferors and transfer recipients for S04Y permits, and compares S04Y permit transfers with all statewide salmon set gillnet permits, and all limited entry permits from 1980 to 2017. Transfers within the family, both between immediate family members and other relatives, total 72.7% (1,021/1404) of all permit transfers for S04Y permits compared 55.7% (6,775/12,168) for all salmon set gillnet permits statewide, and 38.4% (14,545/37,832) for all limited entry permits statewide.

⁵ CFEC implemented the transfer survey in 1980.

⁶ See *Changes in the Distribution of Alaska's Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S04Y Permits

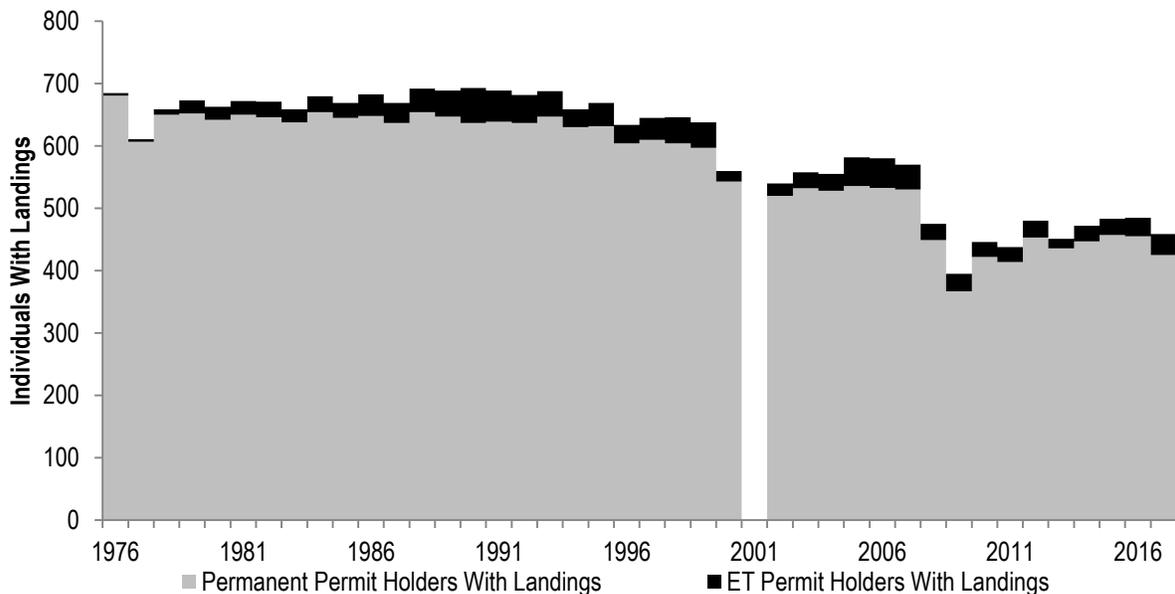
Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted on permanent permits if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

Table 3-4 and Figure 3-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 3-4. Use of Emergency Transfer Permits in the Lower Yukon Salmon Gillnet Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	685	4	0.6%	1990	693	56	8.1%	2004	555	27	4.9%
1977	611	4	0.7%	1991	689	50	7.3%	2005	582	46	7.9%
1978	659	9	1.4%	1992	682	45	6.6%	2006	580	47	8.1%
1979	673	21	3.1%	1993	688	41	6.0%	2007	570	40	7.0%
1980	663	21	3.2%	1994	659	29	4.4%	2008	475	26	5.5%
1981	672	22	3.3%	1995	669	37	5.5%	2009	395	28	7.1%
1982	671	25	3.7%	1996	634	30	4.7%	2010	446	24	5.4%
1983	659	21	3.2%	1997	645	35	5.4%	2011	438	24	5.5%
1984	680	26	3.8%	1998	646	42	6.5%	2012	480	27	5.6%
1985	669	24	3.6%	1999	638	41	6.4%	2013	451	15	3.3%
1986	683	35	5.1%	2000	560	17	3.0%	2014	472	25	5.3%
1987	669	32	4.8%	2001	0	0	-	2015	483	26	5.4%
1988	692	38	5.5%	2002	540	20	3.7%	2016	485	30	6.2%
1989	689	42	6.1%	2003	558	26	4.7%	2017	459	34	7.4%

Figure 3-1. Use of Emergency Transfer Permits in the Lower Yukon Salmon Set Gillnet Fishery, 1976-2017



Latent S04Y Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 3-5 indicates the total number of issued S04Y permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 3-2.

There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 3-5. Lower Yukon Salmon Gillnet Permit Latency, 1976-2017

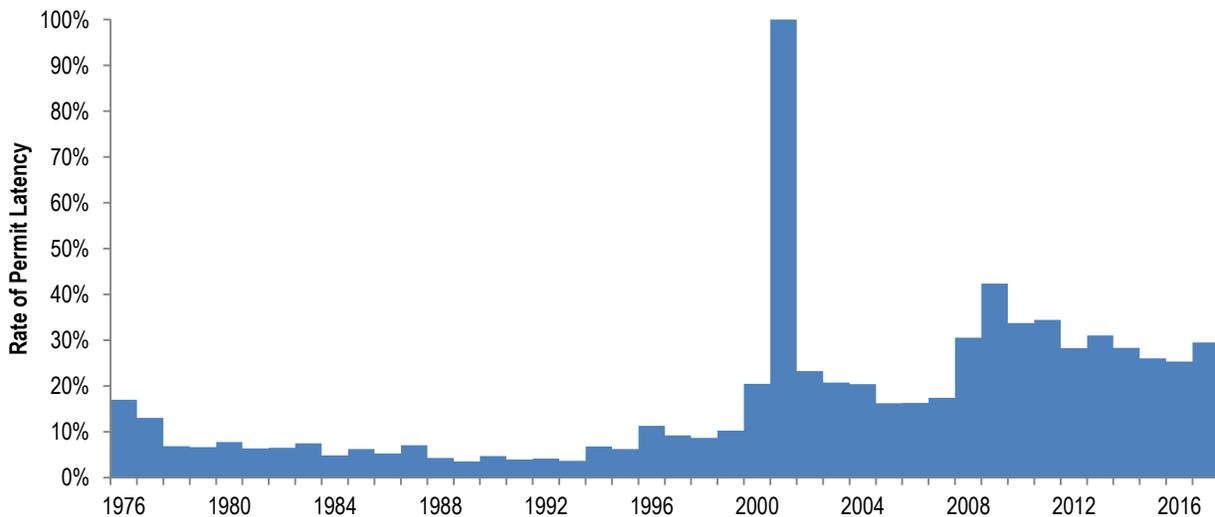
Year	Permits		Latency
	Issued	Fished	Rate
1976	824	684	17.0%
1977	700	609	13.0%
1978	698	650	6.9%
1979	708	661	6.6%
1980	709	654	7.8%
1981	711	666	6.3%
1982	710	664	6.5%
1983	708	655	7.5%
1984	708	674	4.8%
1985	708	664	6.2%
1986	707	670	5.2%
1987	706	656	7.1%
1988	707	677	4.2%
1989	707	682	3.5%

Year	Permits		Latency
	Issued	Fished	Rate
1990	708	675	4.7%
1991	708	680	4.0%
1992	707	678	4.1%
1993	708	682	3.7%
1994	707	659	6.8%
1995	707	663	6.2%
1996	707	627	11.3%
1997	705	640	9.2%
1998	704	643	8.7%
1999	704	632	10.2%
2000	704	560	20.5%
2001	701	0	100.0%
2002	702	539	23.2%
2003	703	557	20.8%

Year	Permits		Latency
	Issued	Fished	Rate
2004	692	551	20.4%
2005	691	579	16.2%
2006	686	574	16.3%
2007	684	565	17.4%
2008	681	473	30.5%
2009	678	391	42.3%
2010	670	444	33.7%
2011	665	436	34.4%
2012	662	475	28.2%
2013	654	451	31.0%
2014	653	468	28.3%
2015	649	480	26.0%
2016	647	483	25.3%
2017	648	457	29.5%

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.

Figure 3-2. Lower Yukon Salmon Gillnet Permit Latency Rate, 1976-2017



New Entrants into the Lower Yukon Salmon Gillnet Fishery

New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S04Y permit. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder of a limited entry permit. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

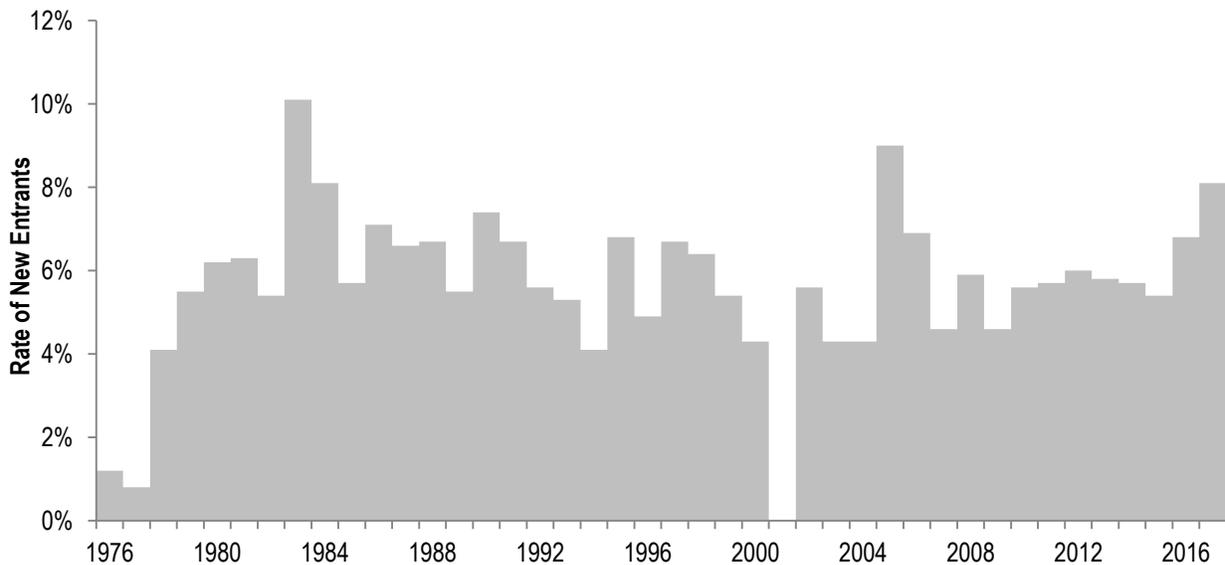
Table 3-6 and Figure 3-3 describe individuals rather than permits. An individual may hold up to two permits in this fishery, but can only fish one of them. An individual may hold one S04Y permit one year, and then in subsequent years hold a different S04Y permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once as a new entrant and only in the year in which they made their first documented landing.

Table 3-6. New Entrants into the Lower Yukon Salmon Gillnet Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent
1976	519	6	1.2%	1987	666	44	6.6%	1998	643	41	6.4%	2009	395	18	4.6%
1977	603	5	0.8%	1988	689	46	6.7%	1999	634	34	5.4%	2010	446	25	5.6%
1978	655	27	4.1%	1989	686	38	5.5%	2000	557	24	4.3%	2011	438	25	5.7%
1979	667	37	5.5%	1990	689	51	7.4%	2001	0	0	-	2012	480	29	6.0%
1980	660	41	6.2%	1991	685	46	6.7%	2002	538	30	5.6%	2013	451	26	5.8%
1981	667	42	6.3%	1992	679	38	5.6%	2003	554	24	4.3%	2014	472	27	5.7%
1982	668	36	5.4%	1993	684	36	5.3%	2004	552	24	4.3%	2015	483	26	5.4%
1983	654	66	10.1%	1994	655	27	4.1%	2005	581	52	9.0%	2016	485	33	6.8%
1984	676	55	8.1%	1995	665	45	6.8%	2006	579	40	6.9%	2017	459	37	8.1%
1985	666	38	5.7%	1996	631	31	4.9%	2007	569	26	4.6%				
1986	680	48	7.1%	1997	642	43	6.7%	2008	474	28	5.9%				

• This table excludes individuals with interim-entry and emergency transfer permits.

Figure 3-3. New Entrants into the Lower Yukon Salmon Gillnet Fishery, 1976-2017



Age of S04Y Permit Holders

Table 3-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	S04Y	Statewide Salmon Set Gillnet	Statewide All Permits	Mean AK Worker Age
1980	38.7	37.9	38.9	33.4
1981	38.9	38.0	39.9	33.5
1982	38.8	38.2	40.0	33.6
1983	37.8	38.0	40.2	33.7
1984	37.9	38.2	40.4	33.8
1985	38.3	38.5	40.8	34.0
1986	38.4	38.8	41.0	34.2
1987	38.4	39.0	40.9	34.5
1988	38.8	39.3	41.2	34.9
1989	38.9	39.9	41.5	35.3
1990	39.4	40.0	42.0	35.5
1991	39.6	40.5	42.5	35.9
1992	40.0	40.8	42.9	36.2
1993	40.1	41.2	43.5	36.5
1994	40.4	41.5	44.0	36.7
1995	40.7	41.9	44.4	37.0
1996	41.2	42.3	44.8	37.2
1997	41.5	42.6	45.1	37.4
1998	41.7	43.1	45.6	37.6
1999	42.1	43.4	46.0	37.8
2000	42.0	43.7	46.4	37.9
2001	42.8	44.1	46.9	38.1
2002	43.4	44.8	47.4	38.3
2003	43.9	45.2	47.9	38.4
2004	44.5	45.4	48.2	38.6
2005	44.8	45.4	48.4	38.7
2006	45.2	45.6	48.7	38.8
2007	45.4	45.9	48.9	38.9
2008	45.3	45.9	49.0	39.0
2009	45.7	46.1	49.3	39.1
2010	46.3	46.3	49.5	39.2
2011	46.2	46.6	49.6	39.4
2012	46.0	47.0	49.8	39.4
2013	46.2	47.0	50.0	39.5
2014	46.4	47.2	50.2	39.5
2015	46.8	47.6	50.6	39.5
2016	46.6	48.0	50.9	39.6
2017	46.2	48.2	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 3-7 shows the annual mean age of four different cohorts of people: 1) lower Yukon salmon gillnet (S04Y) permit holders; 2) all salmon set gillnet permit holders statewide; 3) all CFEC limited entry permit holders; and 4) the Alaskan working population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), and 27.4% (10.4 years) for the statewide set gillnet permit holders.

For S04Y permit holders, the mean age increased 19.5% (7.5 years).

S04Y Permit Value

Many permit transfers are non-monetary transactions (see Table 3-2). Table 3-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 3-8. CFEC Estimated Value of Lower Yukon Salmon Gillnet Permits

Year	S04Y Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	12	\$18,250	-	\$46,357	-
1984	17	\$28,441	-	\$67,098	-
1985	12	\$22,917	-	\$52,206	-
1986	11	\$22,455	-	\$50,221	-
1987	12	\$22,295	-	\$48,107	-
1988	13	\$20,669	-	\$42,827	-
1989	11	\$25,527	-	\$50,461	-
1990	8	\$26,625	-	\$49,934	-
1991	11	\$24,900	\$4,600	\$44,813	\$8,279
1992	9	\$29,300	\$3,200	\$51,190	\$5,591
1993	8	\$31,400	\$2,600	\$53,265	\$4,410
1994	7	\$24,500	\$5,550	\$40,523	\$9,180
1995	10	\$23,000	\$4,850	\$36,993	\$7,801
1996	10	\$20,500	\$3,650	\$32,027	\$5,702
1997	9	\$17,500	\$1,950	\$26,726	\$2,978
1998	12	\$16,000	\$1,350	\$24,061	\$2,030
1999	12	\$12,200	\$1,750	\$17,950	\$2,575
2000	12	\$12,100	\$1,650	\$17,224	\$2,349
2001	2	\$11,500	\$950	\$15,917	\$1,315
2002	2	\$12,700	\$3,000	\$17,304	\$4,088
2003	3	\$11,000	\$4,300	\$14,654	\$5,728
2004	15	\$8,400	\$3,450	\$10,900	\$4,477
2005	9	\$8,400	\$600	\$10,543	\$753
2006	14	\$9,100	\$1,350	\$11,064	\$1,641
2007	8	\$9,900	\$200	\$11,704	\$236
2008	9	\$8,800	\$800	\$10,019	\$911
2009	4	\$9,100	\$850	\$10,397	\$971
2010	1	\$9,100	\$850	\$10,229	\$955
2011	7	\$9,000	\$1,100	\$9,807	\$1,199
2012	12	\$9,400	\$1,100	\$10,036	\$1,174
2013	8	\$11,200	\$1,850	\$11,785	\$1,947
2014	8	\$8,600	\$2,500	\$8,905	\$2,589
2015	6	\$9,900	\$200	\$10,238	\$207
2016	9	\$9,800	\$800	\$10,009	\$817
2017	14	\$9,700	\$650	\$9,700	\$650
2017	76	\$133,300	\$6,050	\$133,300	\$6,050

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

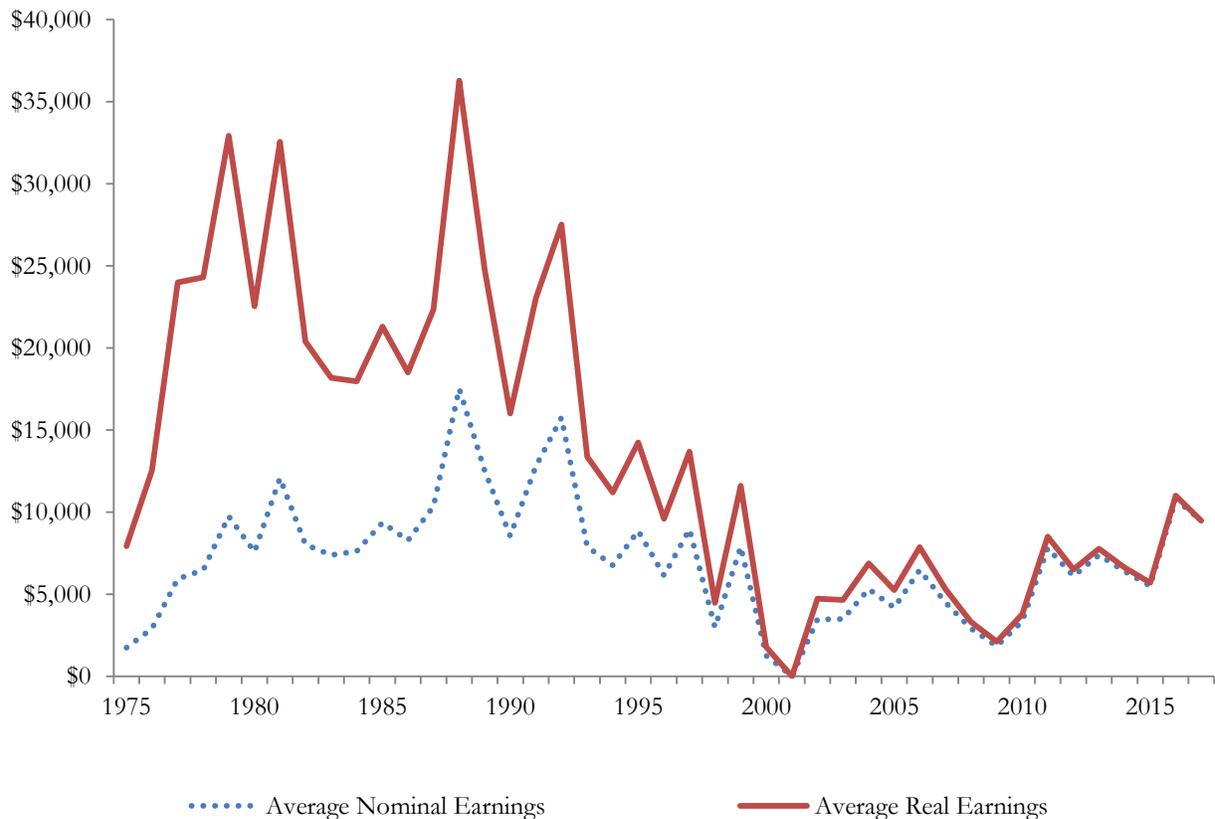
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, come primarily from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 3-4 reflect both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held in the lower Yukon salmon gillnet fishery was in 2008. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 3-9 reports the number of permit issued, and estimated gross earnings in the lower Yukon salmon gillnet fishery from 1976 to 2017. Note that the figures by permit or vessel in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 3-10 reports the number of permit holders (people) and estimated real (inflation adjusted) gross earnings by each resident type.

Figure 3-4. Estimated Nominal and Real Average Gross Earnings Per Lower Yukon Salmon Set Gillnet Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 3-9. Estimated Total Gross Earnings (Real and Nominal) for the Lower Yukon Salmon Gillnet Fishery, With Average Gross (Real) Earnings by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	824	\$1,991,437	\$8,578,928	684	\$12,542
1977	700	\$3,612,875	\$14,613,664	609	\$23,996
1978	698	\$4,203,021	\$15,801,295	650	\$24,310
1979	708	\$6,446,085	\$21,763,973	661	\$32,926
1980	709	\$4,954,172	\$14,737,459	654	\$22,534
1981	711	\$8,041,931	\$21,685,789	666	\$32,561
1982	710	\$5,328,701	\$13,535,454	664	\$20,385
1983	708	\$4,840,317	\$11,912,235	655	\$18,187
1984	708	\$5,133,349	\$12,110,553	674	\$17,968
1985	708	\$6,209,106	\$14,144,759	664	\$21,302
1986	707	\$5,547,100	\$12,406,070	670	\$18,517
1987	706	\$6,793,947	\$14,659,615	656	\$22,347
1988	707	\$11,857,416	\$24,568,807	677	\$36,291
1989	707	\$8,536,722	\$16,875,171	682	\$24,744
1990	708	\$5,762,308	\$10,806,862	675	\$16,010
1991	708	\$8,707,838	\$15,671,551	680	\$23,046
1992	707	\$10,682,685	\$18,663,861	678	\$27,528
1993	708	\$5,378,271	\$9,123,334	682	\$13,377
1994	707	\$4,459,562	\$7,376,032	659	\$11,193
1995	707	\$5,874,194	\$9,448,048	663	\$14,250
1996	707	\$3,850,635	\$6,015,728	627	\$9,594
1997	705	\$5,734,919	\$8,758,525	640	\$13,685
1998	704	\$1,914,999	\$2,879,783	643	\$4,479
1999	704	\$4,987,350	\$7,337,931	632	\$11,611
2000	704	\$701,356	\$998,354	560	\$1,783
2001	701	\$0	\$0	0	\$0
2002	702	\$1,869,622	\$2,547,424	539	\$4,726
2003	703	\$1,940,035	\$2,584,464	557	\$4,640
2004	692	\$2,919,381	\$3,788,241	551	\$6,875
2005	691	\$2,425,264	\$3,043,936	579	\$5,257
2006	686	\$3,712,163	\$4,513,519	574	\$7,863
2007	684	\$2,534,236	\$2,995,977	565	\$5,303
2008	681	\$1,372,385	\$1,562,444	473	\$3,303
2009	678	\$719,618	\$822,202	391	\$2,103
2010	670	\$1,489,327	\$1,674,174	444	\$3,771
2011	665	\$3,405,689	\$3,711,239	436	\$8,512
2012	662	\$2,900,023	\$3,096,133	475	\$6,518
2013	654	\$3,326,832	\$3,500,530	451	\$7,762
2014	653	\$2,991,498	\$3,097,442	468	\$6,618
2015	649	\$2,642,616	\$2,732,960	480	\$5,694
2016	647	\$5,203,493	\$5,314,346	483	\$11,003
2017	648	\$4,333,113	\$4,333,113	457	\$9,482

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.

Table 3-10. Estimated Real Gross Earnings for Permit Holders in the Lower Yukon Salmon Gillnet Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	655	\$12,089	\$7,918,586	confidential	confidential	confidential	1 to 3	confidential	confidential	685	\$12,524	\$8,578,928
1977	589	\$23,622	\$13,913,182	22	\$31,840	\$700,482	0	confidential	confidential	611	\$23,918	\$14,613,664
1978	622	\$24,072	\$14,972,671	confidential	confidential	confidential	1 to 3	confidential	confidential	659	\$23,978	\$15,801,295
1979	630	\$32,423	\$20,426,483	confidential	confidential	confidential	1 to 3	confidential	confidential	673	\$32,339	\$21,763,973
1980	613	\$22,222	\$13,622,219	confidential	confidential	confidential	1 to 3	confidential	confidential	663	\$22,228	\$14,737,459
1981	623	\$31,929	\$19,891,686	confidential	confidential	confidential	1 to 3	confidential	confidential	672	\$32,271	\$21,685,789
1982	609	\$19,996	\$12,177,650	confidential	confidential	confidential	1 to 3	confidential	confidential	671	\$20,172	\$13,535,454
1983	590	\$17,904	\$10,563,546	65	\$19,308	\$1,255,018	4	\$23,418	\$93,671	659	\$18,076	\$11,912,235
1984	603	\$17,767	\$10,713,766	confidential	confidential	confidential	1 to 3	confidential	confidential	680	\$17,810	\$12,110,553
1985	592	\$20,362	\$12,054,580	73	\$26,482	\$1,933,179	4	\$39,250	\$157,000	669	\$21,143	\$14,144,759
1986	601	\$17,894	\$10,754,483	77	\$19,482	\$1,500,103	5	\$30,297	\$151,483	683	\$18,164	\$12,406,070
1987	590	\$21,172	\$12,491,451	75	\$27,385	\$2,053,879	4	\$28,571	\$114,285	669	\$21,913	\$14,659,615
1988	607	\$35,414	\$21,496,307	81	\$36,635	\$2,967,448	4	\$26,263	\$105,053	692	\$35,504	\$24,568,807
1989	589	\$24,104	\$14,197,241	96	\$26,786	\$2,571,414	4	\$26,629	\$106,515	689	\$24,492	\$16,875,171
1990	594	\$15,177	\$9,015,271	94	\$18,027	\$1,694,555	5	\$19,407	\$97,036	693	\$15,594	\$10,806,862
1991	591	\$22,702	\$13,416,646	91	\$22,758	\$2,070,937	7	\$26,281	\$183,968	689	\$22,745	\$15,671,551
1992	584	\$27,010	\$15,773,780	91	\$29,399	\$2,675,349	7	\$30,676	\$214,732	682	\$27,366	\$18,663,861
1993	583	\$13,353	\$7,784,869	95	\$12,978	\$1,232,880	10	\$10,559	\$105,585	688	\$13,261	\$9,123,334
1994	568	\$11,113	\$6,312,068	85	\$11,886	\$1,010,298	6	\$8,944	\$53,666	659	\$11,193	\$7,376,032
1995	571	\$14,238	\$8,129,669	92	\$13,615	\$1,252,584	6	\$10,966	\$65,795	669	\$14,123	\$9,448,048
1996	556	\$9,523	\$5,295,061	72	\$9,319	\$670,996	6	\$8,278	\$49,671	634	\$9,489	\$6,015,728
1997	568	\$13,481	\$7,657,453	73	\$14,517	\$1,059,713	4	\$10,340	\$41,359	645	\$13,579	\$8,758,525
1998	558	\$4,463	\$2,490,502	84	\$4,495	\$377,555	4	\$2,932	\$11,726	646	\$4,458	\$2,879,783
1999	560	\$11,541	\$6,463,021	74	\$11,520	\$852,490	4	\$5,605	\$22,419	638	\$11,501	\$7,337,931
2000	495	\$1,750	\$866,128	confidential	confidential	confidential	1 to 3	confidential	confidential	560	\$1,783	\$998,354
2001	0			0			0			0		
2002	499	\$4,811	\$2,400,572	confidential	confidential	confidential	1 to 3	confidential	confidential	540	\$4,717	\$2,547,424
2003	511	\$4,661	\$2,381,837	confidential	confidential	confidential	1 to 3	confidential	confidential	558	\$4,632	\$2,584,464
2004	505	\$6,977	\$3,523,343	confidential	confidential	confidential	1 to 3	confidential	confidential	555	\$6,826	\$3,788,241
2005	522	\$5,410	\$2,824,165	60	\$3,663	\$219,771	0			582	\$5,230	\$3,043,936
2006	524	\$7,975	\$4,178,982	56	\$5,974	\$334,537	0			580	\$7,782	\$4,513,519
2007	514	\$5,439	\$2,795,738	confidential	confidential	confidential	1 to 3	confidential	confidential	570	\$5,256	\$2,995,977
2008	449	\$3,382	\$1,518,610	26	\$1,686	\$43,835	0			475	\$3,289	\$1,562,444
2009	379	\$2,131	\$807,593	16	\$913	\$14,610	0			395	\$2,082	\$822,202
2010	420	\$3,761	\$1,579,782	26	\$3,630	\$94,393	0			446	\$3,754	\$1,674,174
2011	416	\$8,698	\$3,618,316	22	\$4,224	\$92,923	0			438	\$8,473	\$3,711,239
2012	447	\$6,599	\$2,949,722	33	\$4,437	\$146,412	0			480	\$6,450	\$3,096,133
2013	427	\$7,870	\$3,360,375	24	\$5,840	\$140,155	0			451	\$7,762	\$3,500,530
2014	442	\$6,745	\$2,981,269	30	\$3,872	\$116,173	0			472	\$6,562	\$3,097,442
2015	456	\$5,648	\$2,575,651	27	\$5,826	\$157,309	0			483	\$5,658	\$2,732,960
2016	452	\$11,115	\$5,024,011	33	\$8,798	\$290,335	0			485	\$10,957	\$5,314,346
2017	426	\$9,464	\$4,031,837	33	\$9,130	\$301,276	0			459	\$9,440	\$4,333,113

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- Note that these counts are for individuals, not permits.

Chapter 4 Kuskokwim Salmon Gillnet Fishery

S04W Permit Holdings

Limited entry permits for the Kuskokwim salmon gillnet fishery (S04W permits) were issued starting in 1976. CFEC has issued 839 S04W permits. Table 4-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 99.4% (834/839) of the permits, and the remaining 0.6% (5/839) permits went to Nonlocal Alaskans. Every S04W permits were issued as transferable permits.

Table 4-1. Initial Issuance and Year-end 2017 Totals of Kuskokwim Salmon Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS		MIGRATIONS		CANCELLED		2017 YEAR-END	
Residency	Total	Percent	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	Total	Percent
Local	834	99.4%	36	4.3%	-74	-8.9%	-124	-14.9%	672	96.1%
Nonlocal	5	0.6%	-33	-660.0%	61	1220.0%	-13	-260.0%	20	2.9%
Nonresident	0	0.0%	-3	.	13	.	-3	.	7	1.0%
Total	839	100.0%	0	0.0%	0	0.0%	-140	-16.7%	699	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled, such as when a permit holder does not pay the renewal fee for two consecutive years. This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S04W Permits

Under the Limited Entry Act’s terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.⁷ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 4-2. Transfer Acquisition Methods for Kuskokwim Salmon Gillnet Permits, 1980-2017

Acquisition Method	Kuskokwim Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	1,071	73.7%	6,861	56.4%	13,825	36.5%
<i>Sale</i>	318	21.9%	4,743	39.0%	22,262	58.8%
<i>Trade</i>	9	0.6%	97	0.8%	520	1.4%
<i>Other</i>	55	3.8%	467	3.8%	1,225	3.2%
Total	1,453		12,168		37,832	

Table 4-2 compares and contrasts the transfer acquisition methods for the S04W permits, all statewide salmon set gillnet permits, and all limited entry permits between 1980 and 2017. Almost three fourths of all S04W transfers were gifts (73.7% or 1,071/1,453), more than a fifth were sales (21.9% or 318/1,453), and a smaller percentage were trades (0.6% or 9/1,453) or other (3.8% 55/1,453). The annual acquisition methods for S04W permits can be viewed in a different publication.⁸

Table 4-3. Relationships of Transferor to Transfer Recipients for Kuskokwim Salmon Gillnet Permits, 1980-2017

Relationship	Kuskokwim Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	102	7.0%	2,329	19.1%	6,992	18.5%
<i>Member of Immediate Family</i>	1,049	72.2%	5,906	48.5%	12,802	33.8%
<i>Other Relative</i>	103	7.1%	869	7.1%	1,743	4.6%
<i>Other</i>	199	13.7%	3,064	25.2%	16,295	43.1%
Total	1,453		12,168		37,832	

Table 4-3 shows the relationships between the transferors and transfer recipients for S04W permits, and compares S04W permit transfers with all statewide salmon set gillnet permits, and all limited entry permits from 1980 to 2017. Transfers within the family, both between immediate family members and other relatives, total 79.3% (1,152/1,453) of all permit transfers for S04W permits compared 55.7% (6,775/12,168) for all salmon set gillnet permits statewide, and 38.4% (14,545/37,832) for all limited entry permits statewide.

⁷ CFEC implemented the transfer survey in 1980.

⁸ See *Changes in the Distribution of Alaska’s Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S04W Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted on permanent permits if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

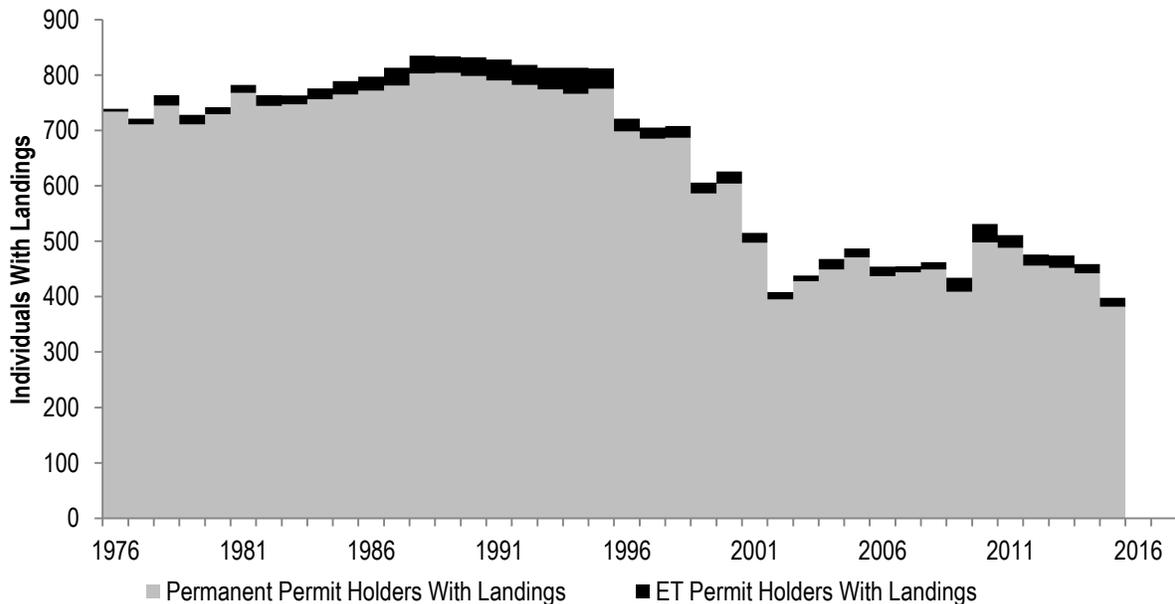
Table 4-4 and Figure 4-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 4-4. Use of Emergency Transfer Permits in the Kuskokwim Salmon Gillnet Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	739	5	0.7%	1990	832	34	4.1%	2004	468	19	4.1%
1977	721	10	1.4%	1991	828	38	4.6%	2005	487	16	3.3%
1978	764	19	2.5%	1992	818	36	4.4%	2006	454	17	3.7%
1979	728	17	2.3%	1993	813	39	4.8%	2007	455	11	2.4%
1980	742	13	1.8%	1994	813	47	5.8%	2008	462	13	2.8%
1981	782	14	1.8%	1995	812	37	4.6%	2009	434	25	5.8%
1982	764	20	2.6%	1996	721	23	3.2%	2010	531	33	6.2%
1983	763	16	2.1%	1997	705	20	2.8%	2011	511	23	4.5%
1984	776	20	2.6%	1998	708	21	3.0%	2012	476	20	4.2%
1985	789	24	3.0%	1999	606	20	3.3%	2013	474	22	4.6%
1986	797	25	3.1%	2000	626	22	3.5%	2014	459	17	3.7%
1987	813	32	3.9%	2001	515	18	3.5%	2015	398	16	4.0%
1988	835	32	3.8%	2002	408	13	3.2%	2016	1 to 3	0	0.0%
1989	834	30	3.6%	2003	438	10	2.3%	2017	1 to 3	0	0.0%

- When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 4-1. Use of Emergency Transfer Permits in the Kuskokwim Salmon Set Gillnet Fishery, 1976-2017



Latent S04W Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 4-5 indicates the total number of issued S04W permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 4-2.

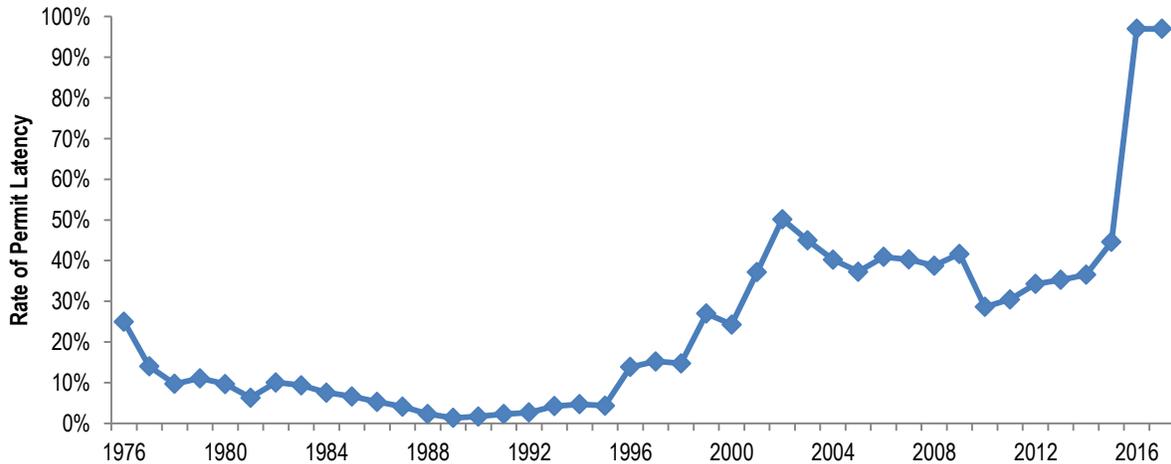
There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 4-5. Kuskokwim Salmon Gillnet Permit Latency, 1976-2017

Year	Permits Issued	Permits Fished	Latency Rate
1976	985	739	25.0%
1977	836	719	14.0%
1978	837	756	9.7%
1979	814	724	11.1%
1980	817	738	9.7%
1981	829	777	6.3%
1982	836	752	10.0%
1983	835	757	9.3%
1984	835	772	7.5%
1985	834	779	6.6%
1986	833	789	5.3%
1987	832	798	4.1%
1988	831	812	2.3%
1989	831	820	1.3%
1990	833	819	1.7%
1991	833	814	2.3%
1992	833	811	2.6%
1993	832	797	4.2%
1994	832	793	4.7%
1995	832	796	4.3%
1996	830	715	13.9%
1997	828	702	15.2%
1998	828	706	14.7%
1999	827	604	27.0%
2000	823	623	24.3%
2001	818	514	37.2%
2002	817	407	50.2%
2003	796	438	45.0%
2004	780	466	40.3%
2005	770	483	37.3%
2006	765	452	40.9%
2007	762	455	40.3%
2008	753	461	38.8%
2009	742	433	41.6%
2010	741	529	28.6%
2011	732	509	30.5%
2012	724	476	34.3%
2013	723	468	35.3%
2014	720	457	36.5%
2015	713	395	44.6%
2016	699	1 to 3	confidential
2017	699	1 to 3	confidential

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.
- When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 4-2. Kuskokwim Salmon Gillnet Permit Latency Rate, 1976-2017



New Entrants into the Kuskokwim Salmon Gillnet Fishery

New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S04W permit. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder of a limited entry permit. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

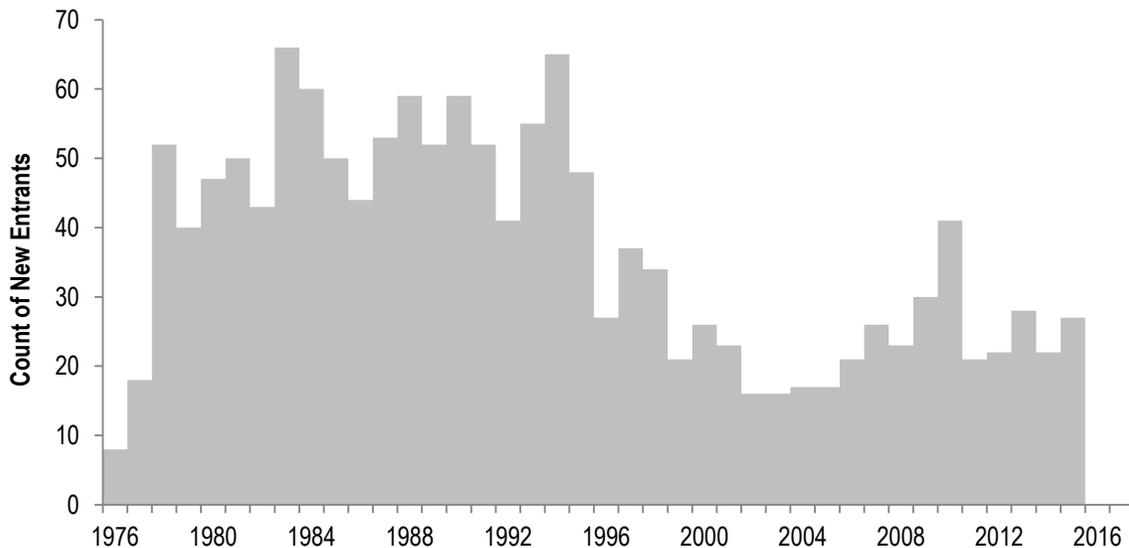
Table 4-6 and Figure 4-3 describe individuals rather than permits. An individual may hold up to two permits in this fishery, but can only fish one of them. An individual may hold one S04W permit one year, and then in subsequent years hold a different S04W permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once as a new entrant and only in the year in which they made their first documented landing.

Table 4-6. New Entrants into the Kuskokwim Salmon Gillnet Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent
1976	456	8	1.8%	1987	810	53	6.5%	1998	706	34	4.8%	2009	434	30	6.9%
1977	662	18	2.7%	1988	832	59	7.1%	1999	604	21	3.5%	2010	531	41	7.7%
1978	701	52	7.4%	1989	831	52	6.3%	2000	624	26	4.2%	2011	511	21	4.1%
1979	699	40	5.7%	1990	828	59	7.1%	2001	513	23	4.5%	2012	476	22	4.6%
1980	710	47	6.6%	1991	825	52	6.3%	2002	407	16	3.9%	2013	474	28	5.9%
1981	741	50	6.7%	1992	815	41	5.0%	2003	437	16	3.7%	2014	459	22	4.8%
1982	759	43	5.7%	1993	810	55	6.8%	2004	467	17	3.6%	2015	398	27	6.8%
1983	759	66	8.7%	1994	811	65	8.0%	2005	487	17	3.5%	2016	1 to 3	0	0.0%
1984	772	60	7.8%	1995	810	48	5.9%	2006	454	21	4.6%	2017	1 to 3	0	0.0%
1985	786	50	6.4%	1996	719	27	3.8%	2007	455	26	5.7%				
1986	793	44	5.5%	1997	704	37	5.3%	2008	462	23	5.0%				

• This table excludes individuals with interim-entry and emergency transfer permits.

Figure 4-3. New Entrants into the Kuskokwim Salmon Gillnet Fishery, 1976-2017



Age of S04W Permit Holders

Table 4-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	Statewide			Mean AK Worker Age
	S04W	Salmon Set Gillnet	Statewide All Permits	
1980	37.7	37.9	38.9	33.4
1981	37.7	38.0	39.9	33.5
1982	37.7	38.2	40.0	33.6
1983	37.2	38.0	40.2	33.7
1984	37.2	38.2	40.4	33.8
1985	37.0	38.5	40.8	34.0
1986	37.6	38.8	41.0	34.2
1987	37.8	39.0	40.9	34.5
1988	38.2	39.3	41.2	34.9
1989	38.5	39.9	41.5	35.3
1990	38.1	40.0	42.0	35.5
1991	38.9	40.5	42.5	35.9
1992	39.3	40.8	42.9	36.2
1993	39.2	41.2	43.5	36.5
1994	39.3	41.5	44.0	36.7
1995	39.3	41.9	44.4	37.0
1996	39.8	42.3	44.8	37.2
1997	40.2	42.6	45.1	37.4
1998	40.4	43.1	45.6	37.6
1999	41.0	43.4	46.0	37.8
2000	41.4	43.7	46.4	37.9
2001	41.8	44.1	46.9	38.1
2002	42.3	44.8	47.4	38.3
2003	42.6	45.2	47.9	38.4
2004	42.9	45.4	48.2	38.6
2005	43.4	45.4	48.4	38.7
2006	43.6	45.6	48.7	38.8
2007	43.9	45.9	48.9	38.9
2008	44.2	45.9	49.0	39.0
2009	44.4	46.1	49.3	39.1
2010	44.5	46.3	49.5	39.2
2011	45.1	46.6	49.6	39.4
2012	45.6	47.0	49.8	39.4
2013	45.7	47.0	50.0	39.5
2014	46.1	47.2	50.2	39.5
2015	46.8	47.6	50.6	39.5
2016	47.3	48.0	50.9	39.6
2017	48.1	48.2	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 4-7 shows the annual mean age of four different cohorts of people: 1) Kuskokwim salmon gillnet (S04W) permit holders; 2) all salmon set gillnet permit holders statewide; 3) all CFEC limited entry permit holders; and 4) the Alaskan working population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), and 27.4% (10.4 years) for the statewide set gillnet permit holders.

For S04W permit holders, the mean age increased 27.7% (10.4 years).

S04W Permit Value

Many permit transfers are non-monetary transactions (see Table 4-2). Table 4-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 4-8. CFEC Estimated Value of Kuskokwim Salmon Gillnet Permits

Year	S04W Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	9	\$9,722	-	\$24,695	-
1983	10	\$10,222	-	\$25,157	-
1984	15	\$9,894	-	\$23,342	-
1985	6	\$10,043	-	\$22,879	-
1986	15	\$10,133	-	\$22,662	-
1987	8	\$9,889	-	\$21,338	-
1988	19	\$9,669	-	\$20,034	-
1989	20	\$12,050	-	\$23,820	-
1990	19	\$12,474	-	\$23,394	-
1991	12	\$13,400	\$1,900	\$24,116	\$3,419
1992	15	\$12,300	\$2,150	\$21,489	\$3,756
1993	16	\$13,100	\$1,800	\$22,222	\$3,053
1994	5	\$12,500	\$350	\$20,675	\$579
1995	15	\$12,000	\$1,900	\$19,301	\$3,056
1996	2	\$13,900	\$2,250	\$21,716	\$3,515
1997	5	\$10,000	\$700	\$15,272	\$1,069
1998	4	\$9,000	\$1,150	\$13,534	\$1,729
1999	3	\$6,500	\$4,050	\$9,564	\$5,959
2000	2	\$6,500	\$3,100	\$9,252	\$4,413
2001	2	\$7,000	\$1,400	\$9,689	\$1,938
2002	0	\$7,000	\$1,400	\$9,538	\$1,908
2003	1	\$5,500	\$2,650	\$7,327	\$3,530
2004	1	\$5,900	\$2,650	\$7,656	\$3,439
2005	4	\$5,800	\$2,350	\$7,280	\$2,949
2006	4	\$7,000	\$2,450	\$8,511	\$2,979
2007	2	\$7,500	\$2,100	\$8,867	\$2,483
2008	9	\$5,900	\$1,000	\$6,717	\$1,138
2009	4	\$5,800	\$500	\$6,627	\$571
2010	14	\$6,300	\$1,050	\$7,082	\$1,180
2011	7	\$6,900	\$1,150	\$7,519	\$1,253
2012	5	\$7,100	\$1,000	\$7,580	\$1,068
2013	4	\$8,700	\$1,550	\$9,154	\$1,631
2014	9	\$8,300	\$1,150	\$8,594	\$1,191
2015	1	\$7,300	\$300	\$7,550	\$310
2016	0	\$7,300	\$300	\$7,456	\$306
2017	0	\$7,300	\$300	\$7,300	\$300

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

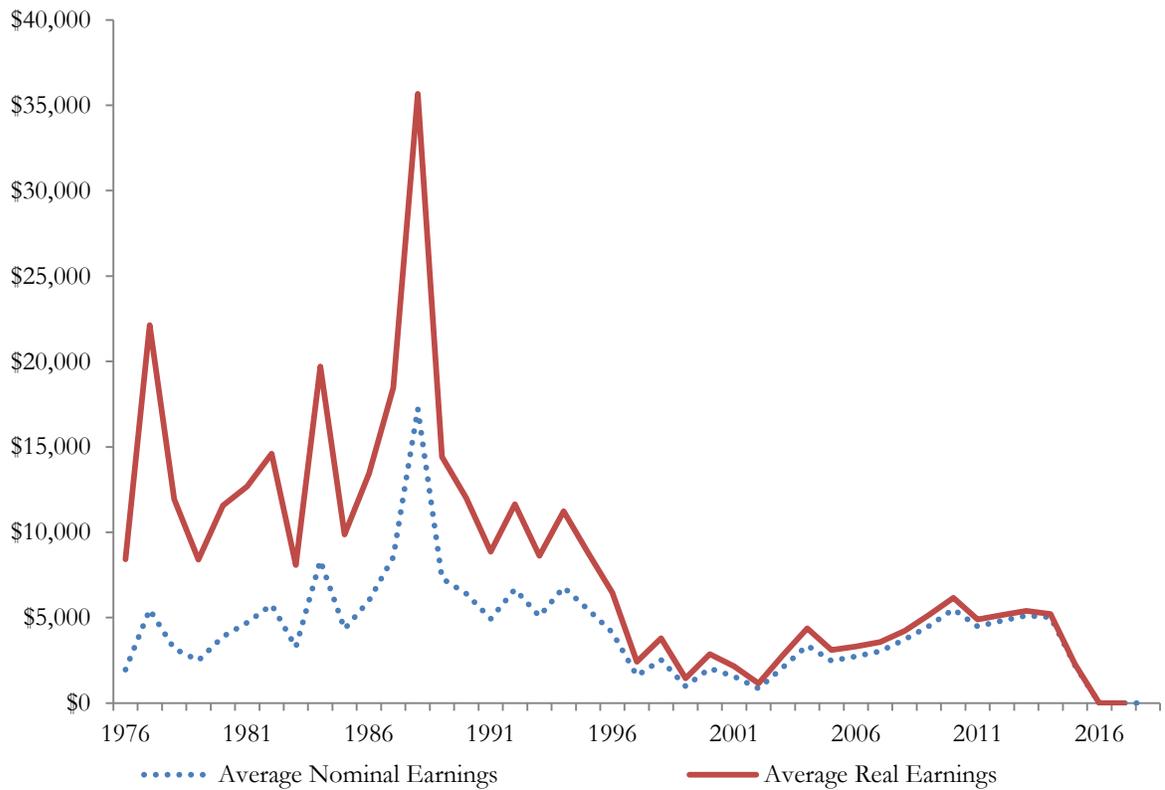
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, come primarily from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 4-4 reflect both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held in the Kuskokwim salmon gillnet fishery was in 2004. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 4-9 reports the number of permit issued, and estimated gross earnings in the Kuskokwim salmon gillnet fishery from 1976 to 2017. Note that the figures by permit or vessel in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 4-10 reports the number of permit holders (people) and estimated real (inflation adjusted) gross earnings by each resident type.

Figure 4-4. Estimated Nominal and Real Average Gross Earnings Per Kuskokwim Salmon Set Gillnet Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 4-9. Estimated Total Gross Earnings (Real and Nominal) for the Kuskokwim Salmon Gillnet Fishery, With Average Gross (Real) Earnings by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	985	\$1,442,834	\$6,215,596	739	\$8,411
1977	836	\$3,934,002	\$15,912,583	719	\$22,132
1978	837	\$2,399,850	\$9,022,258	756	\$11,934
1979	814	\$1,801,487	\$6,082,376	724	\$8,401
1980	817	\$2,870,122	\$8,537,915	738	\$11,569
1981	829	\$3,651,410	\$9,846,354	777	\$12,672
1982	836	\$4,324,599	\$10,984,931	752	\$14,608
1983	835	\$2,483,517	\$6,112,046	757	\$8,074
1984	835	\$6,445,438	\$15,206,023	772	\$19,697
1985	834	\$3,377,547	\$7,694,277	779	\$9,877
1986	833	\$4,742,631	\$10,606,877	789	\$13,443
1987	832	\$6,825,918	\$14,728,601	798	\$18,457
1988	831	\$13,981,321	\$28,969,580	812	\$35,677
1989	831	\$5,978,036	\$11,817,227	820	\$14,411
1990	833	\$5,248,496	\$9,843,240	819	\$12,019
1991	833	\$4,010,131	\$7,217,058	814	\$8,866
1992	833	\$5,405,156	\$9,443,420	811	\$11,644
1993	832	\$4,046,981	\$6,865,025	797	\$8,614
1994	832	\$5,378,933	\$8,896,653	793	\$11,219
1995	832	\$4,348,321	\$6,993,835	796	\$8,786
1996	830	\$2,952,811	\$4,613,085	715	\$6,452
1997	828	\$1,114,010	\$1,701,346	702	\$2,424
1998	828	\$1,779,047	\$2,675,337	706	\$3,789
1999	827	\$594,630	\$874,885	604	\$1,448
2000	823	\$1,255,652	\$1,787,371	623	\$2,869
2001	818	\$803,432	\$1,112,011	514	\$2,163
2002	817	\$343,637	\$468,217	407	\$1,150
2003	796	\$913,719	\$1,217,233	438	\$2,779
2004	780	\$1,566,933	\$2,033,281	466	\$4,363
2005	770	\$1,192,267	\$1,496,408	483	\$3,098
2006	765	\$1,233,758	\$1,500,093	452	\$3,319
2007	762	\$1,377,484	\$1,628,463	455	\$3,579
2008	753	\$1,711,421	\$1,948,433	461	\$4,227
2009	742	\$1,953,389	\$2,231,852	433	\$5,154
2010	741	\$2,901,852	\$3,262,015	529	\$6,166
2011	732	\$2,285,642	\$2,490,704	509	\$4,893
2012	724	\$2,297,121	\$2,452,461	476	\$5,152
2013	723	\$2,398,376	\$2,523,598	468	\$5,392
2014	720	\$2,296,568	\$2,377,900	457	\$5,203
2015	713	\$868,016	\$897,691	395	\$2,273
2016	699	confidential	confidential	1 to 3	confidential
2017	699	Confidential	Confidential	1 to 3	confidential

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- When fewer than four individuals make landings, values are masked due to confidentiality.

Table 4-10. Estimated Real Gross Earnings for Permit Holders in the Kuskokwim Salmon Gillnet Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	737	\$8,432	\$6,214,533	2	\$532	\$1,063	0			739	\$8,411	\$6,215,596
1977	confidential	confidential	confidential	1 to 3	confidential	confidential	0			721	\$22,070	\$15,912,583
1978	confidential	confidential	confidential	1 to 3	confidential	confidential	0			764	\$11,809	\$9,022,258
1979	720	\$8,409	\$6,054,642	confidential	confidential	confidential	1 to 3	confidential	confidential	728	\$8,355	\$6,082,376
1980	736	\$11,551	\$8,501,566	6	\$6,058	\$36,349	0			742	\$11,507	\$8,537,915
1981	777	\$12,625	\$9,809,944	5	\$7,282	\$36,409	0			782	\$12,591	\$9,846,354
1982	755	\$14,411	\$10,880,036	confidential	confidential	confidential	1 to 3	confidential	confidential	764	\$14,378	\$10,984,931
1983	754	\$8,050	\$6,070,049	confidential	confidential	confidential	1 to 3	confidential	confidential	763	\$8,011	\$6,112,046
1984	767	\$19,617	\$15,046,387	confidential	confidential	confidential	1 to 3	confidential	confidential	776	\$19,595	\$15,206,023
1985	778	\$9,780	\$7,608,462	confidential	confidential	confidential	1 to 3	confidential	confidential	789	\$9,752	\$7,694,277
1986	788	\$13,332	\$10,505,970	confidential	confidential	confidential	1 to 3	confidential	confidential	797	\$13,309	\$10,606,877
1987	808	\$18,145	\$14,661,140	5	\$13,492	\$67,461	0			813	\$18,116	\$14,728,601
1988	825	\$34,797	\$28,707,586	confidential	confidential	confidential	1 to 3	confidential	confidential	835	\$34,694	\$28,969,580
1989	821	\$14,238	\$11,689,683	confidential	confidential	confidential	1 to 3	confidential	confidential	834	\$14,169	\$11,817,227
1990	816	\$11,930	\$9,735,096	confidential	confidential	confidential	1 to 3	confidential	confidential	832	\$11,831	\$9,843,240
1991	808	\$8,785	\$7,098,190	20	\$5,943	\$118,868	0			828	\$8,716	\$7,217,058
1992	803	\$11,612	\$9,324,146	confidential	confidential	confidential	1 to 3	confidential	confidential	818	\$11,545	\$9,443,420
1993	796	\$8,510	\$6,774,222	confidential	confidential	confidential	1 to 3	confidential	confidential	813	\$8,444	\$6,865,025
1994	799	\$11,013	\$8,799,730	confidential	confidential	confidential	1 to 3	confidential	confidential	813	\$10,943	\$8,896,653
1995	794	\$8,669	\$6,883,172	confidential	confidential	confidential	1 to 3	confidential	confidential	812	\$8,613	\$6,993,835
1996	713	\$6,409	\$4,569,376	confidential	confidential	confidential	1 to 3	confidential	confidential	721	\$6,398	\$4,613,085
1997	701	\$2,420	\$1,696,324	1 to 3	confidential	confidential	1 to 3	confidential	confidential	705	\$2,413	\$1,701,346
1998	704	\$3,787	\$2,665,838	4	\$2,375	\$9,499	0			708	\$3,779	\$2,675,337
1999	602	\$1,443	\$868,610	4	\$1,569	\$6,275	0			606	\$1,444	\$874,885
2000	confidential	confidential	confidential	1 to 3	confidential	confidential	0			626	\$2,855	\$1,787,371
2001	508	\$2,156	\$1,095,218	7	\$2,399	\$16,793	0			515	\$2,159	\$1,112,011
2002	403	\$1,149	\$463,106	5	\$1,022	\$5,111	0			408	\$1,148	\$468,217
2003	434	\$2,782	\$1,207,328	4	\$2,476	\$9,904	0			438	\$2,779	\$1,217,233
2004	464	\$4,360	\$2,023,144	4	\$2,534	\$10,137	0			468	\$4,345	\$2,033,281
2005	481	\$3,067	\$1,475,305	confidential	confidential	confidential	1 to 3	confidential	confidential	487	\$3,073	\$1,496,408
2006	449	\$3,309	\$1,485,819	5	\$2,855	\$14,274	0			454	\$3,304	\$1,500,093
2007	449	\$3,569	\$1,602,386	6	\$4,346	\$26,077	0			455	\$3,579	\$1,628,463
2008	453	\$4,230	\$1,916,378	confidential	confidential	confidential	1 to 3	confidential	confidential	462	\$4,217	\$1,948,433
2009	426	\$5,157	\$2,196,967	confidential	confidential	confidential	1 to 3	confidential	confidential	434	\$5,143	\$2,231,852
2010	524	\$6,097	\$3,194,988	confidential	confidential	confidential	1 to 3	confidential	confidential	531	\$6,143	\$3,262,015
2011	502	\$4,887	\$2,453,091	confidential	confidential	confidential	1 to 3	confidential	confidential	511	\$4,874	\$2,490,704
2012	466	\$5,186	\$2,416,463	confidential	confidential	confidential	1 to 3	confidential	confidential	476	\$5,152	\$2,452,461
2013	469	\$5,330	\$2,499,935	confidential	confidential	confidential	1 to 3	confidential	confidential	474	\$5,324	\$2,523,598
2014	455	\$5,191	\$2,361,685	1 to 3	confidential	confidential	1 to 3	confidential	confidential	459	\$5,181	\$2,377,900
2015	394	\$2,269	\$894,117	1 to 3	confidential	confidential	1 to 3	confidential	confidential	398	\$2,256	\$897,691
2016	1 to 3	\$2,098	\$2,098	0			0			1 to 3	\$2,098	\$2,098
2017	1 to 3	\$1,080	\$1,080	0			0			1 to 3	\$1,080	\$1,080

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- Note that these counts are for individuals, not permits.

Chapter 5 Norton Sound Salmon Gillnet Fishery

S04Z Permit Holdings

Limited entry permits for the Norton Sound salmon gillnet fishery (S04Z permits) were issued starting in 1976. CFEC has issued 204 S04Z permits. Table 5-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 98.5% (201/204) of the permits, and Nonlocal Alaskans received the remaining 1.5% (3/204) permits. Every S04Z permit was issued as a transferable permit.

Table 5-1. Initial Issuance and Year-end 2017 Totals of Norton Sound Salmon Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS <i>Percent Change</i>		MIGRATIONS <i>Percent Change</i>		CANCELLED <i>Percent Change</i>		2017 YEAR-END	
<i>Residency</i>	<i>Total</i>	<i>Percent</i>	<i>Change</i>	<i>from Initial</i>	<i>Change</i>	<i>from Initial</i>	<i>Change</i>	<i>from Initial</i>	<i>Total</i>	<i>Percent</i>
Local	201	98.5%	19	9.5%	-33	-16.4%	-17	-8.5%	170	93.9%
Nonlocal	3	1.5%	-21	-700.0%	34	1133.3%	-5	-166.7%	11	6.1%
Nonresident	0	0.0%	2	-	-1	-	-1	-	0	0.0%
Total	204	100.0%	0	0.0%	0	0.0%	-23	-11.3%	181	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled, such as when a permit holder does not pay the renewal fee for two consecutive years. This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S04Z Permits

Under the Limited Entry Act’s terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.⁹ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 5-2. Transfer Acquisition Methods for Norton Sound Salmon Gillnet Permits, 1980-2017

Acquisition Method	Norton Sound Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	262	55.3%	6,861	56.4%	13,825	36.5%
<i>Sale</i>	193	40.7%	4,743	39.0%	22,262	58.8%
<i>Trade</i>	3	0.6%	97	0.8%	520	1.4%
<i>Other</i>	16	3.4%	467	3.8%	1,225	3.2%
Total	474		12,168		37,832	

Table 5-2 compares and contrasts the transfer acquisition methods for the S04Z permits, all statewide salmon set gillnet permits, and all limited entry permits between 1980 and 2017. More than half of all S04Z transfers were gifts (55.3% or 262/474), just over two fifths were sales (40.7% or 193/474), and a smaller percentage were trades (0.6% or 3/474) or other (3.4% 16/474). The annual acquisition methods for S04Z permits can be viewed in a different publication.¹⁰

Table 5-3. Relationships of Transferor to Transfer Recipients for Norton Sound Salmon Gillnet Permits, 1980-2017

Relationship	Norton Sound Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	66	13.9%	2,329	19.1%	6,992	18.5%
<i>Member of Immediate Family</i>	283	59.7%	5,906	48.5%	12,802	33.8%
<i>Other Relative</i>	33	7.0%	869	7.1%	1,743	4.6%
<i>Other</i>	92	19.4%	3,064	25.2%	16,295	43.1%
Total	474		12,168		37,832	

Table 5-3 shows the relationships between the transferors and transfer recipients for S04Z permits, and compares S04Z permit transfers with all statewide salmon set gillnet permits, and all limited entry permits from 1980 to 2017. Transfers within the family, both between immediate family members and other relatives, total 66.7% (316/474) of all permit transfers for S04Z permits compared 55.7% (6,775/12,168) for all salmon set gillnet permits statewide, and 38.4% (14,545/37,832) for all limited entry permits statewide.

⁹ CFEC implemented the transfer survey in 1980.

¹⁰ See *Changes in the Distribution of Alaska’s Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S04Z Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted on permanent permits if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

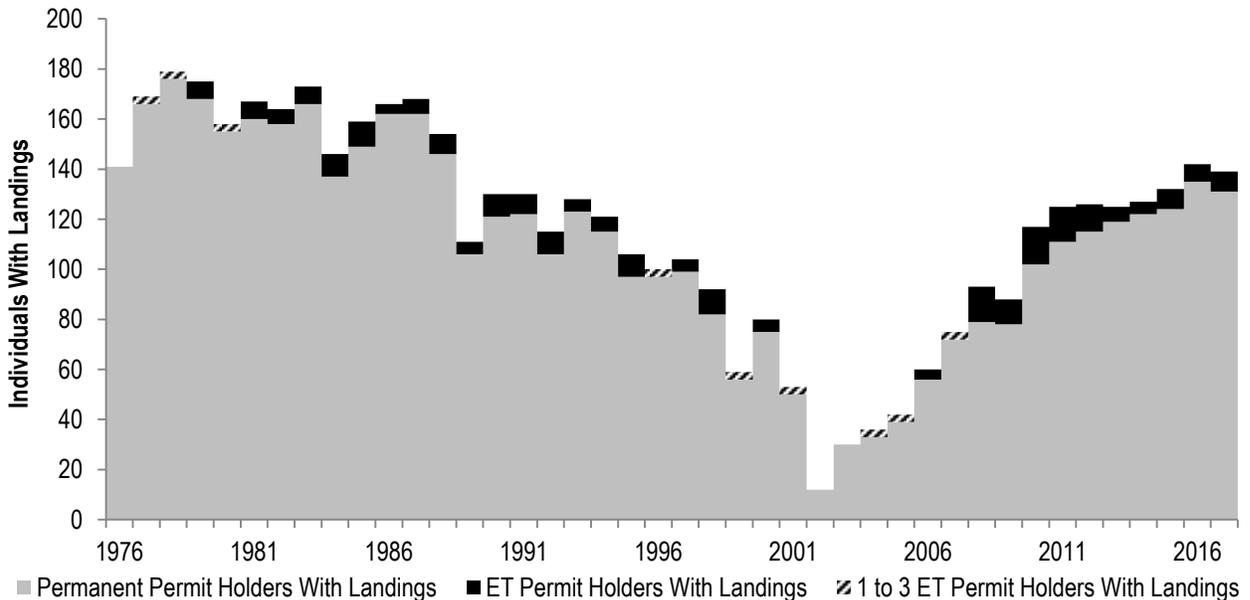
Table 5-4 and Figure 5-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 5-4. Use of Emergency Transfer Permits in the Norton Sound Salmon Gillnet Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	141	0	0.0%	1990	130	9	6.9%	2004	36	1 to 3	-
1977	167	1 to 3	-	1991	130	8	6.2%	2005	40	1 to 3	-
1978	177	1 to 3	-	1992	115	9	7.8%	2006	60	4	6.7%
1979	175	7	4.0%	1993	128	5	3.9%	2007	75	1 to 3	-
1980	157	1 to 3	-	1994	121	6	5.0%	2008	93	14	15.1%
1981	167	7	4.2%	1995	106	9	8.5%	2009	88	10	11.4%
1982	164	6	3.7%	1996	100	1 to 3	-	2010	117	15	12.8%
1983	173	7	4.0%	1997	104	5	4.8%	2011	125	14	11.2%
1984	146	9	6.2%	1998	92	10	10.9%	2012	126	11	8.7%
1985	159	10	6.3%	1999	58	1 to 3	-	2013	125	6	4.8%
1986	166	4	2.4%	2000	80	5	6.3%	2014	127	5	3.9%
1987	168	6	3.6%	2001	51	1 to 3	-	2015	132	8	6.1%
1988	154	8	5.2%	2002	12	0	0.0%	2016	142	7	4.9%
1989	111	5	4.5%	2003	30	0	0.0%	2017	139	8	5.8%

• When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 5-1. Use of Emergency Transfer Permits in the Norton Sound Salmon Set Gillnet Fishery, 1976-2017



Latent S04Z Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 5-5 indicates the total number of issued S04Z permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 5-2.

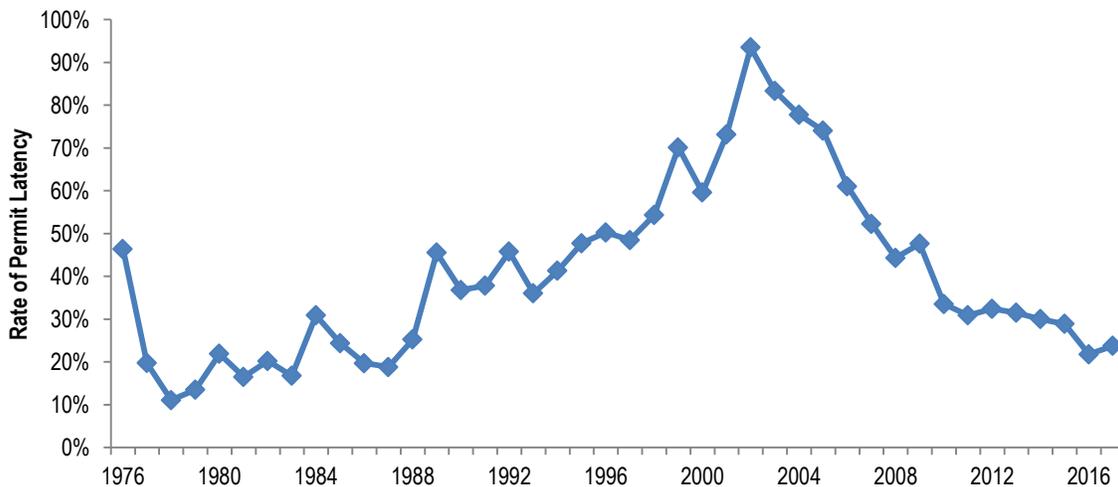
There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 5-5. Norton Sound Salmon Gillnet Permit Latency, 1976-2017

Year	Permits		Latency	Year	Permits		Latency	Year	Permits		Latency
	Issued	Fished	Rate		Issued	Fished	Rate		Issued	Fished	Rate
1976	263	141	46.4%	1990	201	127	36.8%	2004	162	36	77.8%
1977	208	167	19.7%	1991	201	125	37.8%	2005	154	40	74.0%
1978	199	177	11.1%	1992	201	109	45.8%	2006	154	60	61.0%
1979	200	173	13.5%	1993	200	128	36.0%	2007	155	74	52.3%
1980	201	157	21.9%	1994	201	118	41.3%	2008	167	93	44.3%
1981	200	167	16.5%	1995	199	104	47.7%	2009	168	88	47.6%
1982	203	162	20.2%	1996	199	99	50.3%	2010	173	115	33.5%
1983	203	169	16.7%	1997	198	102	48.5%	2011	178	123	30.9%
1984	204	141	30.9%	1998	197	90	54.3%	2012	182	123	32.4%
1985	205	155	24.4%	1999	194	58	70.1%	2013	181	124	31.5%
1986	203	163	19.7%	2000	193	78	59.6%	2014	180	126	30.0%
1987	202	164	18.8%	2001	190	51	73.2%	2015	180	128	28.9%
1988	202	151	25.2%	2002	185	12	93.5%	2016	179	140	21.8%
1989	202	110	45.5%	2003	180	30	83.3%	2017	181	138	23.8%

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.

Figure 5-2. Norton Sound Salmon Gillnet Permit Latency Rate, 1976-2017



New Entrants into the Norton Sound Salmon Gillnet Fishery

New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S04Z permit. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder of a limited entry permit. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

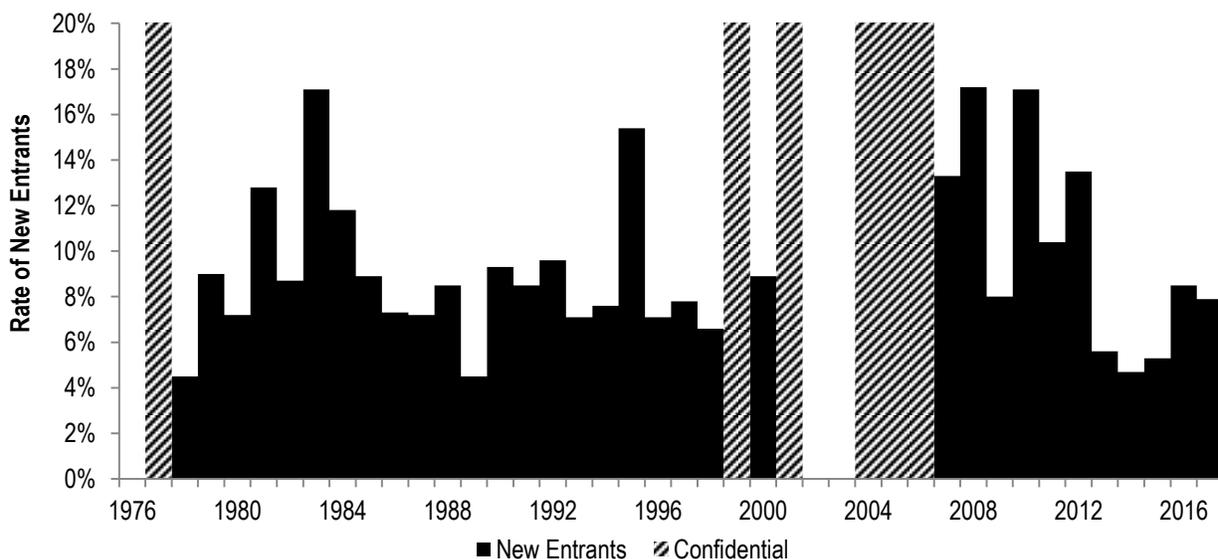
Table 5-6 and Figure 5-3 describe individuals rather than permits. An individual may hold up to two permits in this fishery, but can only fish one of them. An individual may hold one S04Z permit one year, and then in subsequent years hold a different S04Z permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once as a new entrant and only in the year in which they made their first documented landing.

Table 5-6. New Entrants into the Norton Sound Salmon Gillnet Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent	Year	Individuals w/Landings	New Entrants Count	New Entrants Percent
1976	78	0	0.0%	1987	167	12	7.2%	1998	91	6	6.6%	2009	88	7	8.0%
1977	140	1 to 3	-	1988	153	13	8.5%	1999	57	1 to 3	-	2010	117	20	17.1%
1978	155	7	4.5%	1989	110	5	4.5%	2000	79	7	8.9%	2011	125	13	10.4%
1979	155	14	9.0%	1990	129	12	9.3%	2001	51	1 to 3	-	2012	126	17	13.5%
1980	138	10	7.2%	1991	129	11	8.5%	2002	11	0	0.0%	2013	125	7	5.6%
1981	148	19	12.8%	1992	114	11	9.6%	2003	29	0	0.0%	2014	127	6	4.7%
1982	161	14	8.7%	1993	127	9	7.1%	2004	35	1 to 3	-	2015	132	7	5.3%
1983	170	29	17.1%	1994	119	9	7.6%	2005	40	1 to 3	-	2016	142	12	8.5%
1984	144	17	11.8%	1995	104	16	15.4%	2006	60	1 to 3	-	2017	139	11	7.9%
1985	157	14	8.9%	1996	98	7	7.1%	2007	75	10	13.3%				
1986	164	12	7.3%	1997	103	8	7.8%	2008	93	16	17.2%				

- This table excludes individuals with interim-entry and emergency transfer permits.
- When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 5-3. New Entrants into the Norton Sound Salmon Gillnet Fishery, 1976-2017



Age of S04Z Permit Holders

Table 5-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	S04Z	Statewide Salmon Set Gillnet	Statewide All Permits	Mean AK Worker Age
1980	42.8	37.9	38.9	33.4
1981	42.9	38.0	39.9	33.5
1982	42.7	38.2	40.0	33.6
1983	42.1	38.0	40.2	33.7
1984	42.0	38.2	40.4	33.8
1985	42.9	38.5	40.8	34.0
1986	41.6	38.8	41.0	34.2
1987	42.2	39.0	40.9	34.5
1988	42.8	39.3	41.2	34.9
1989	43.5	39.9	41.5	35.3
1990	44.0	40.0	42.0	35.5
1991	43.9	40.5	42.5	35.9
1992	44.1	40.8	42.9	36.2
1993	43.3	41.2	43.5	36.5
1994	43.4	41.5	44.0	36.7
1995	42.4	41.9	44.4	37.0
1996	42.2	42.3	44.8	37.2
1997	43.0	42.6	45.1	37.4
1998	43.2	43.1	45.6	37.6
1999	44.1	43.4	46.0	37.8
2000	44.7	43.7	46.4	37.9
2001	45.7	44.1	46.9	38.1
2002	46.5	44.8	47.4	38.3
2003	47.1	45.2	47.9	38.4
2004	47.8	45.4	48.2	38.6
2005	48.4	45.4	48.4	38.7
2006	48.7	45.6	48.7	38.8
2007	48.6	45.9	48.9	38.9
2008	48.2	45.9	49.0	39.0
2009	47.4	46.1	49.3	39.1
2010	46.9	46.3	49.5	39.2
2011	47.7	46.6	49.6	39.4
2012	46.2	47.0	49.8	39.4
2013	46.1	47.0	50.0	39.5
2014	47.1	47.2	50.2	39.5
2015	47.3	47.6	50.6	39.5
2016	46.8	48.0	50.9	39.6
2017	46.4	48.2	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 5-7 shows the annual mean age of four different cohorts of people: 1) Norton Sound salmon gillnet (S04Z) permit holders; 2) all salmon set gillnet permit holders statewide; 3) all CFEC limited entry permit holders; and 4) the Alaskan working population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), and 27.4% (10.4 years) for the statewide set gillnet permit holders.

For S04Z permit holders, the mean age increased 8.6% (3.7 years).

S04Z Permit Value

Many permit transfers are non-monetary transactions (see Table 5-2). Table 5-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 5-8. CFEC Estimated Value of Norton Sound Salmon Gillnet Permits

Year	S04Z Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	10	\$10,100	-	\$25,655	-
1984	5	\$13,150	-	\$31,023	-
1985	6	\$12,167	-	\$27,717	-
1986	6	\$10,167	-	\$22,738	-
1987	4	\$9,750	-	\$21,038	-
1988	4	\$10,167	-	\$21,066	-
1989	6	\$10,083	-	\$19,932	-
1990	1	\$11,000	-	\$20,630	-
1991	5	\$9,200	\$1,650	\$16,557	\$2,970
1992	1	\$8,800	\$2,150	\$15,375	\$3,756
1993	2	\$7,000	\$1,150	\$11,874	\$1,951
1994	4	\$7,800	\$850	\$12,901	\$1,406
1995	4	\$7,200	\$450	\$11,580	\$724
1996	2	\$6,800	\$1,200	\$10,623	\$1,875
1997	4	\$5,200	\$750	\$7,942	\$1,145
1998	3	\$4,900	\$750	\$7,369	\$1,128
1999	1	\$4,600	\$650	\$6,768	\$956
2000	2	\$4,500	\$50	\$6,406	\$71
2001	0	\$4,500	\$50	\$6,228	\$69
2002	0	\$4,500	\$50	\$6,131	\$68
2003	1	\$4,400	\$250	\$5,862	\$333
2004	0	\$4,400	\$250	\$5,710	\$324
2005	0	\$4,400	\$250	\$5,522	\$314
2006	2	\$4,300	\$250	\$5,228	\$304
2007	8	\$4,100	\$1,400	\$4,847	\$1,655
2008	8	\$4,600	\$800	\$5,237	\$911
2009	9	\$5,300	\$900	\$6,056	\$1,028
2010	8	\$5,600	\$600	\$6,295	\$674
2011	8	\$8,100	\$1,450	\$8,827	\$1,580
2012	9	\$9,400	\$1,200	\$10,036	\$1,281
2013	1	\$10,400	\$1,100	\$10,943	\$1,157
2014	4	\$10,900	\$850	\$11,286	\$880
2015	2	\$11,100	\$1,050	\$11,479	\$1,086
2016	6	\$12,300	\$1,250	\$12,562	\$1,277
2017	0	\$12,100	\$1,550	\$12,100	\$1,550

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

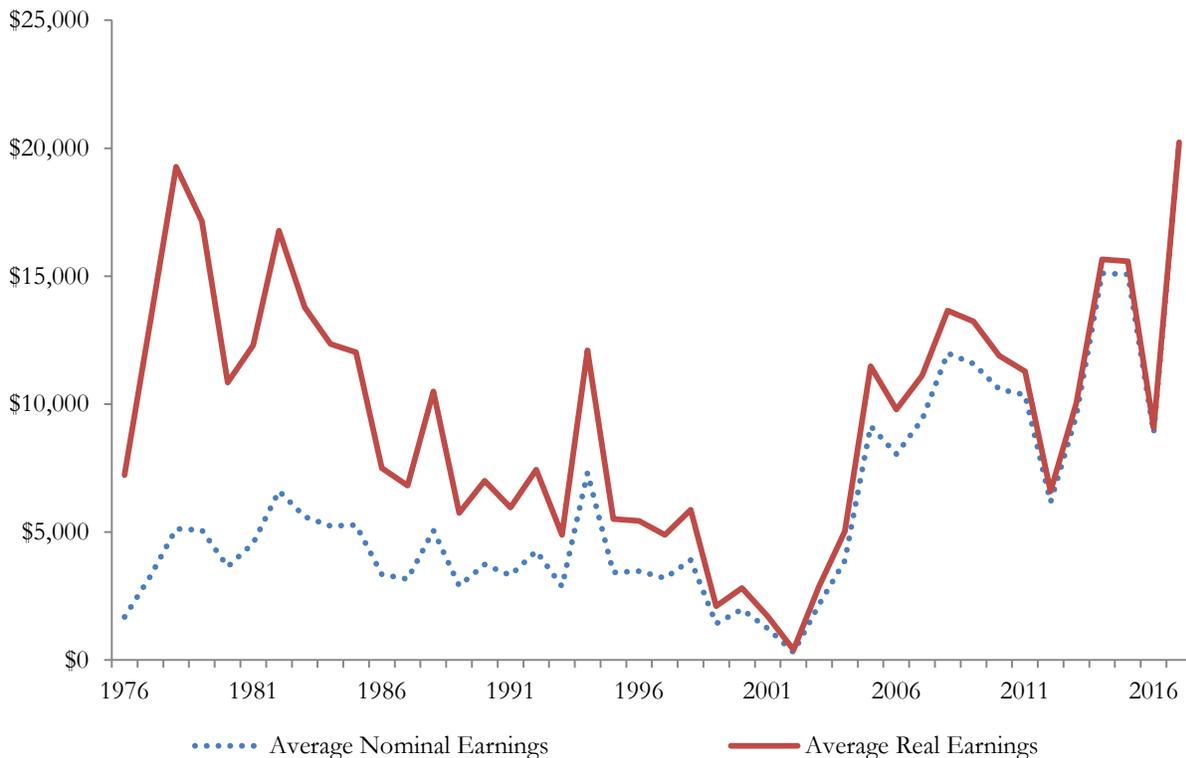
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, come primarily from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 5-4 reflect both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held in the Norton Sound salmon gillnet fishery was in 2004. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 5-9 reports the number of permit issued, and estimated gross earnings in the Norton Sound salmon gillnet fishery from 1976 to 2017. Note that the figures by permit or vessel in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 5-10 reports the number of permit holders (people) and estimated real (inflation adjusted) gross earnings by each resident type.

Figure 5-4. Estimated Nominal and Real Average Gross Earnings Per Kotzebue Salmon Set Gillnet Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 5-9. Estimated Total Gross Earnings (Real and Nominal) for the Norton Sound Salmon Gillnet Fishery, With Average Gross (Real) Earnings by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	263	\$236,404	\$1,018,405	141	\$7,223
1977	208	\$546,010	\$2,208,547	167	\$13,225
1978	199	\$907,330	\$3,411,114	177	\$19,272
1979	200	\$878,792	\$2,967,072	173	\$17,151
1980	201	\$572,125	\$1,701,932	157	\$10,840
1981	200	\$761,658	\$2,053,879	167	\$12,299
1982	203	\$1,069,723	\$2,717,207	162	\$16,773
1983	203	\$946,232	\$2,328,719	169	\$13,779
1984	204	\$738,064	\$1,741,234	141	\$12,349
1985	205	\$818,477	\$1,864,546	155	\$12,029
1986	203	\$546,452	\$1,222,139	163	\$7,498
1987	202	\$517,894	\$1,117,485	164	\$6,814
1988	202	\$764,972	\$1,585,038	151	\$10,497
1989	202	\$319,622	\$631,821	110	\$5,744
1990	201	\$474,064	\$889,079	127	\$7,001
1991	201	\$413,479	\$744,141	125	\$5,953
1992	201	\$464,430	\$811,412	109	\$7,444
1993	200	\$368,741	\$625,507	128	\$4,887
1994	201	\$863,060	\$1,427,485	118	\$12,097
1995	199	\$356,164	\$572,854	104	\$5,508
1996	199	\$344,162	\$537,674	99	\$5,431
1997	198	\$326,618	\$498,821	102	\$4,890
1998	197	\$351,410	\$528,452	90	\$5,872
1999	194	\$82,773	\$121,785	58	\$2,100
2000	193	\$154,459	\$219,866	78	\$2,819
2001	190	\$62,881	\$87,032	51	\$1,707
2002	185	\$3,559	\$4,850	12	\$404
2003	180	\$64,859	\$86,404	30	\$2,880
2004	162	\$139,616	\$181,169	36	\$5,032
2005	154	\$365,820	\$459,139	40	\$11,478
2006	154	\$483,163	\$587,465	60	\$9,791
2007	155	\$696,133	\$822,970	74	\$11,121
2008	167	\$1,115,423	\$1,269,896	93	\$13,655
2009	168	\$1,019,157	\$1,164,441	88	\$13,232
2010	173	\$1,216,646	\$1,367,650	115	\$11,893
2011	178	\$1,273,640	\$1,387,908	123	\$11,284
2012	182	\$759,400	\$810,754	123	\$6,591
2013	181	\$1,182,895	\$1,244,656	124	\$10,038
2014	180	\$1,904,426	\$1,971,871	126	\$15,650
2015	180	\$1,928,542	\$1,994,474	128	\$15,582
2016	179	\$1,243,605	\$1,270,098	140	\$9,072
2017	181	\$2,792,232	\$2,792,232	138	\$20,234

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.

Table 5-10. Estimated Real Gross Earnings for Permit Holders in the Norton Sound Salmon Gillnet Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	confidential	confidential	confidential	1 to 3	confidential	confidential	0			141	\$7,223	\$1,018,405
1977	164	\$12,986	\$2,129,666	1 to 3	confidential	confidential	1 to 3	confidential	confidential	167	\$13,225	\$2,208,547
1978	confidential	confidential	confidential	1 to 3	confidential	confidential	0			177	\$19,272	\$3,411,114
1979	169	\$16,865	\$2,850,141	confidential	confidential	confidential	1 to 3	confidential	confidential	175	\$16,955	\$2,967,072
1980	152	\$10,712	\$1,628,156	confidential	confidential	confidential	1 to 3	confidential	confidential	157	\$10,840	\$1,701,932
1981	160	\$12,077	\$1,932,334	confidential	confidential	confidential	1 to 3	confidential	confidential	167	\$12,299	\$2,053,879
1982	155	\$16,219	\$2,513,901	confidential	confidential	confidential	1 to 3	confidential	confidential	164	\$16,568	\$2,717,207
1983	158	\$13,368	\$2,112,066	confidential	confidential	confidential	1 to 3	confidential	confidential	173	\$13,461	\$2,328,719
1984	139	\$12,057	\$1,675,965	confidential	confidential	confidential	1 to 3	confidential	confidential	146	\$11,926	\$1,741,234
1985	150	\$11,780	\$1,766,946	9	\$10,844	\$97,600	0			159	\$11,727	\$1,864,546
1986	154	\$7,414	\$1,141,716	confidential	confidential	confidential	1 to 3	confidential	confidential	166	\$7,362	\$1,222,139
1987	161	\$6,589	\$1,060,824	7	\$8,094	\$56,661	0			168	\$6,652	\$1,117,485
1988	150	\$10,397	\$1,559,579	4	\$6,365	\$25,459	0			154	\$10,292	\$1,585,038
1989	106	\$5,816	\$616,514	confidential	confidential	confidential	1 to 3	confidential	confidential	111	\$5,692	\$631,821
1990	128	\$6,928	\$886,841	confidential	confidential	confidential	1 to 3	confidential	confidential	130	\$6,839	\$889,079
1991	confidential	confidential	confidential	1 to 3	confidential	confidential	0			130	\$5,724	\$744,141
1992	confidential	confidential	confidential	1 to 3	confidential	confidential	0			115	\$7,056	\$811,412
1993	confidential	confidential	confidential	1 to 3	confidential	confidential	0			128	\$4,887	\$625,507
1994	117	\$12,043	\$1,408,982	4	\$4,626	\$18,503	0			121	\$11,797	\$1,427,485
1995	confidential	confidential	confidential	1 to 3	confidential	confidential	0			106	\$5,404	\$572,854
1996	confidential	confidential	confidential	1 to 3	confidential	confidential	0			100	\$5,377	\$537,674
1997	99	\$4,962	\$491,213	5	\$1,522	\$7,608	0			104	\$4,796	\$498,821
1998	88	\$5,900	\$519,216	4	\$2,309	\$9,236	0			92	\$5,744	\$528,452
1999	confidential	confidential	confidential	1 to 3	confidential	confidential	0			58	\$2,100	\$121,785
2000	77	\$2,797	\$215,339	1 to 3	confidential	confidential	1 to 3	confidential	confidential	80	\$2,748	\$219,866
2001	confidential	confidential	confidential	1 to 3	confidential	confidential	0			51	\$1,707	\$87,032
2002	confidential	confidential	confidential	1 to 3	confidential	confidential	0			12	\$404	\$4,850
2003	confidential	confidential	confidential	1 to 3	confidential	confidential	0			30	\$2,880	\$86,404
2004	confidential	confidential	confidential	1 to 3	confidential	confidential	0			36	\$5,032	\$181,169
2005	confidential	confidential	confidential	1 to 3	confidential	confidential	0			40	\$11,478	\$459,139
2006	56	\$9,798	\$548,710	4	\$9,689	\$38,754	0			60	\$9,791	\$587,465
2007	72	\$10,780	\$776,182	1 to 3	confidential	confidential	1 to 3	confidential	confidential	75	\$10,973	\$822,970
2008	confidential	confidential	confidential	1 to 3	confidential	confidential	0			93	\$13,655	\$1,269,896
2009	confidential	confidential	confidential	1 to 3	confidential	confidential	0			88	\$13,232	\$1,164,441
2010	113	\$11,548	\$1,304,877	4	\$15,693	\$62,773	0			117	\$11,689	\$1,367,650
2011	confidential	confidential	confidential	1 to 3	confidential	confidential	0			125	\$11,103	\$1,387,908
2012	123	\$6,349	\$780,867	1 to 3	confidential	confidential	1 to 3	confidential	confidential	126	\$6,435	\$810,754
2013	121	\$9,932	\$1,201,811	1 to 3	confidential	confidential	1 to 3	confidential	confidential	125	\$9,957	\$1,244,656
2014	125	\$15,646	\$1,955,761	1 to 3	confidential	confidential	1 to 3	confidential	confidential	127	\$15,527	\$1,971,871
2015	confidential	confidential	confidential	1 to 3	confidential	confidential	0			132	\$15,110	\$1,994,474
2016	138	\$9,071	\$1,251,777	4	\$4,580	\$18,321	0			142	\$8,944	\$1,270,098
2017	confidential	confidential	confidential	1 to 3	confidential	confidential	0			139	\$20,088	\$2,792,232

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- Note that these counts are for individuals, not permits.

Chapter 6 Kotzebue Salmon Gillnet Fishery

S04X Permit Holdings

Limited entry permits for the Kotzebue salmon gillnet fishery (S04X permits) were issued starting in 1976. CFEC has issued 220 S04X permits. Table 6-1 indicates the initial distribution and historical net changes in permit holdings for the fishery. Of this total, Alaska Locals received 95.9% (211/220) of the permits, Nonlocal Alaskans received 3.6% (8/220) of the permits, and Nonresidents received 0.5% (1/220). Every S04X permit was issued as a transferable permit.

Table 6-1. Initial Issuance and Year-end 2017 Totals of Kotzebue Salmon Gillnet Permits, With Net Changes Due to Permit Transfers, Migrations, and Cancellations, by Resident Type

INITIAL ISSUE			TRANSFERS		MIGRATIONS		CANCELLED		2017 YEAR-END	
Residency	Total	Percent	Change	Percent Change from Initial	Change	Percent Change from Initial	Change	Percent Change from Initial	Total	Percent
Local	211	95.9%	23	10.9%	-49	-23.2%	-38	-18.0%	147	91.3%
Nonlocal	8	3.6%	-18	-225.0%	39	487.5%	-15	-187.5%	14	8.7%
Nonresident	1	0.5%	-5	-500.0%	10	1000.0%	-6	-600.0%	0	0.0%
Total	220	100.0%	0	0.0%	0	0.0%	-59	-26.8%	161	100.0%

The number of permits held by each resident type can change for three reasons: permits can be transferred to other resident types (transfer); permit holders can move from one location to another (migration); or permits can be cancelled, such as when a permit holder does not pay the renewal fee for two consecutive years. This table indicates the extent to which these factors have contributed to net changes in permit holdings in this fishery.

Transfers of S04X Permits

Under the Limited Entry Act’s terms of free transferability, permits may be sold, traded, given away, or inherited. CFEC requires the completion of a survey with each transfer.¹¹ The surveys provide information such as transfer acquisition methods, the relationship between individuals in the transaction, and the sale amount for instances when the permit is sold.

Table 6-2. Transfer Acquisition Methods for Kotzebue Salmon Gillnet Permits, 1980-2017

Acquisition Method	Kotzebue Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Gift</i>	280	64.8%	6,861	56.4%	13,825	36.5%
<i>Sale</i>	133	30.8%	4,743	39.0%	22,262	58.8%
<i>Trade</i>	4	0.9%	97	0.8%	520	1.4%
<i>Other</i>	15	3.5%	467	3.8%	1,225	3.2%
Total	432		12,168		37,832	

Table 6-2 compares and contrasts the transfer acquisition methods for the S04X permits, all statewide salmon set gillnet permits, and all limited entry permits between 1980 and 2017. Almost two thirds of all S04X transfers were gifts (64.8% or 280/432), almost a third were sales (30.8% or 133/432), and a smaller percentage were trades (0.9% or 4/432) or other (3.5% 15/432). The annual acquisition methods for S04X permits can be viewed in a different publication.¹²

Table 6-3. Relationships of Transferor to Transfer Recipients for Kotzebue Salmon Gillnet Permits, 1980-2017

Relationship	Kotzebue Salmon Gillnet		Statewide Salmon Set Gillnet		All Fisheries Statewide	
	Count	Percent	Count	Percent	Count	Percent
<i>Business Partner/Friend</i>	66	15.3%	2,329	19.1%	6,992	18.5%
<i>Member of Immediate Family</i>	267	61.8%	5,906	48.5%	12,802	33.8%
<i>Other Relative</i>	27	6.3%	869	7.1%	1,743	4.6%
<i>Other</i>	72	16.7%	3,064	25.2%	16,295	43.1%
Total	432		12,168		37,832	

Table 6-3 shows the relationships between the transferors and transfer recipients for S04X permits, and compares S04X permit transfers with all statewide salmon set gillnet permits, and all limited entry permits from 1980 to 2017. Transfers within the family, both between immediate family members and other relatives, total 68.1% (294/432) of all permit transfers for S04X permits compared 55.7% (6,775/12,168) for all salmon set gillnet permits statewide, and 38.4% (14,545/37,832) for all limited entry permits statewide.

¹¹ CFEC implemented the transfer survey in 1980.

¹² See *Changes in the Distribution of Alaska’s Commercial Fisheries Entry Permits, 1975-2017*, CFEC Report No. 18-2N.

Emergency Transfers of S04X Permits

Commercial landings can be made with either permanently-held permits or with permits held temporarily through emergency transfers. Emergency transfers (ET) of permits are granted on permanent permits if illness, disability, death, required military or government service, or other unavoidable hardship of a temporary, unexpected, and unforeseen nature prevents the permanent permit holder from participating in the fishery. “Hardship” does not include the results of a permit holder’s own economic decisions, or the results of economic, biological or regulatory variables which are normally part of the risk of doing business as a fisherman. At the end of the year, ET permits automatically revert back to the permanent permit holder.

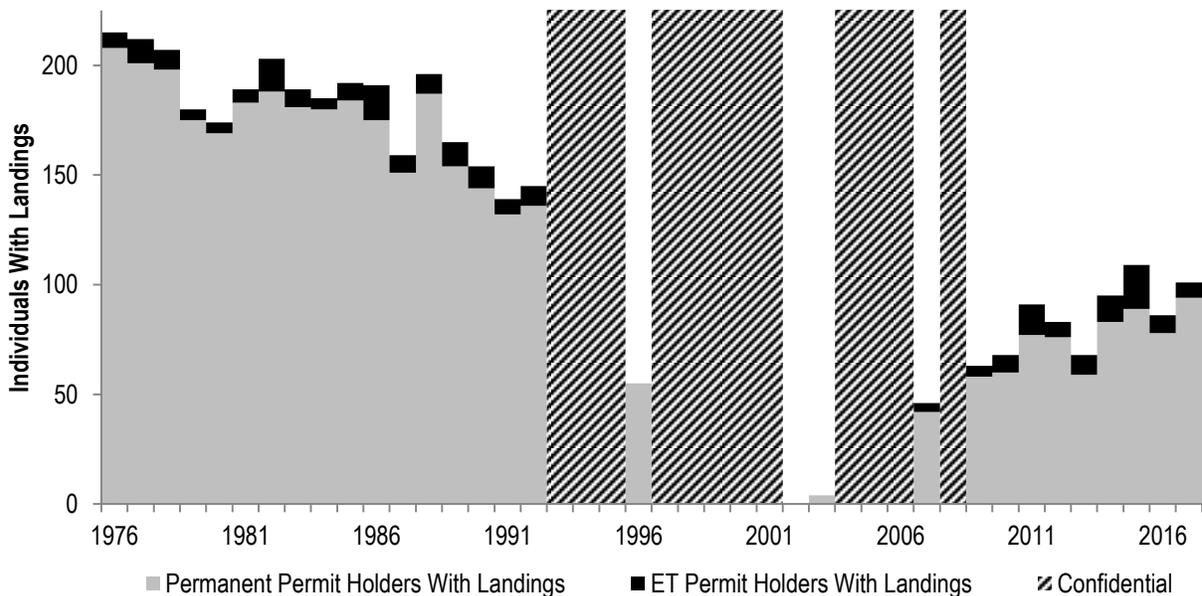
Table 6-4 and Figure 6-1 show the total number of individuals who recorded landings each year, and of that group, the number of individuals who made landings with ET permits. Some individuals who made landings with ET permits also made landings with permanent permits in the same year.

Table 6-4. Use of Emergency Transfer Permits in the Kotzebue Salmon Gillnet Fishery, 1976-2017

Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate	Year	Individuals With Landings	ET Permit Holders With Landings	ET Rate
1976	215	7	3.3%	1990	154	10	6.5%	2004	43	1 to 3	-
1977	212	11	5.2%	1991	139	7	5.0%	2005	41	1 to 3	-
1978	207	9	4.3%	1992	145	9	6.2%	2006	42	1 to 3	-
1979	180	5	2.8%	1993	114	1 to 3	-	2007	46	4	8.7%
1980	174	5	2.9%	1994	110	1 to 3	-	2008	48	1 to 3	-
1981	189	6	3.2%	1995	91	1 to 3	-	2009	63	5	7.9%
1982	203	15	7.4%	1996	55	0	0.0%	2010	68	8	11.8%
1983	189	8	4.2%	1997	68	1 to 3	-	2011	91	14	15.4%
1984	185	5	2.7%	1998	44	1 to 3	-	2012	83	7	8.4%
1985	192	8	4.2%	1999	59	1 to 3	-	2013	68	9	13.2%
1986	191	16	8.4%	2000	64	1 to 3	-	2014	95	12	12.6%
1987	159	8	5.0%	2001	65	1 to 3	-	2015	109	20	18.3%
1988	196	9	4.6%	2002	1 to 3	0	0.0%	2016	86	8	9.3%
1989	165	11	6.7%	2003	4	0	0.0%	2017	101	7	6.9%

• When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 6-1. Use of Emergency Transfer Permits in the Kotzebue Salmon Set Gillnet Fishery, 1976-2017



Latent S04X Permits

CFEC regulations require individuals to renew their limited entry permits annually, regardless of whether they actually fish. Permits that are not used (don't record landings) in a given year are referred to herein as "latent" permits for that year.

Table 6-5 indicates the total number of issued S04X permits issued each year, the number of permits fished (with commercial landings), and the rate of permit latency. Issued permits include both interim entry and permanent permits. Note that for this table, in years when a single individual held an interim-entry permit and was also issued a permanent permit, only the permanent permit is counted. The rate of latency is depicted in Figure 6-2.

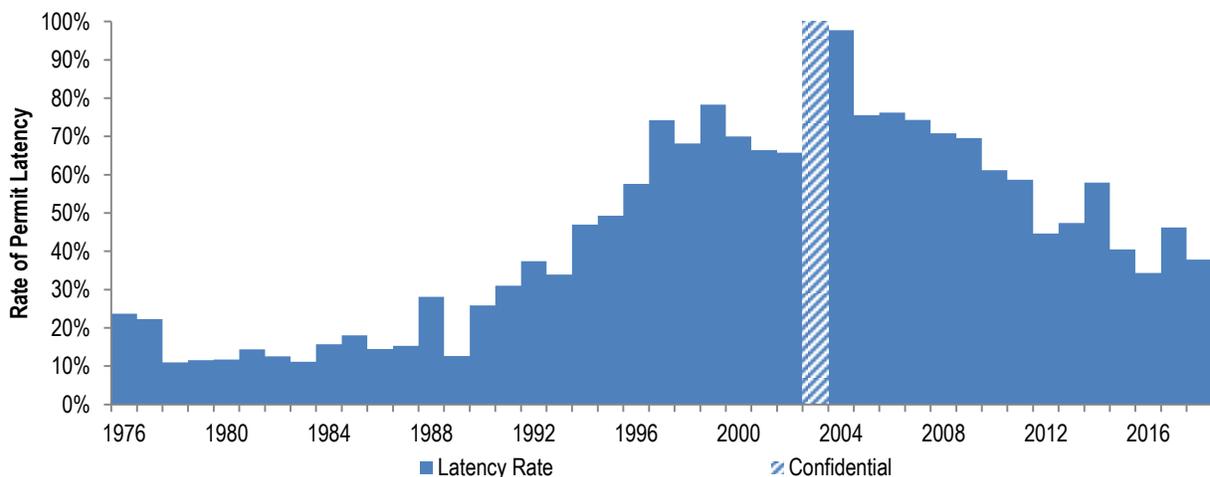
There are many reasons why an individual might not fish in any given year. This table and figure do not explain any of these reasons.

Table 6-5. Kotzebue Salmon Gillnet Permit Latency, 1976-2017

Year	Permits		Latency Rate	Year	Permits		Latency Rate	Year	Permits		Latency Rate
	Issued	Fished			Issued	Fished			Issued	Fished	
1976	273	212	22.3%	1990	219	151	31.1%	2004	176	43	75.6%
1977	235	209	11.1%	1991	219	137	37.4%	2005	173	41	76.3%
1978	233	206	11.6%	1992	218	144	33.9%	2006	164	42	74.4%
1979	204	180	11.8%	1993	215	114	47.0%	2007	158	46	70.9%
1980	201	172	14.4%	1994	215	109	49.3%	2008	158	48	69.6%
1981	214	187	12.6%	1995	215	91	57.7%	2009	160	62	61.3%
1982	223	198	11.2%	1996	214	55	74.3%	2010	160	66	58.8%
1983	222	187	15.8%	1997	211	67	68.2%	2011	161	89	44.7%
1984	221	181	18.1%	1998	203	44	78.3%	2012	158	83	47.5%
1985	221	189	14.5%	1999	197	59	70.1%	2013	157	66	58.0%
1986	221	187	15.4%	2000	191	64	66.5%	2014	158	94	40.5%
1987	220	158	28.2%	2001	190	65	65.8%	2015	160	105	34.4%
1988	220	192	12.7%	2002	186	1 to 3	-	2016	160	86	46.3%
1989	220	163	25.9%	2003	184	4	97.8%	2017	161	100	37.9%

- When an individual with an interim-entry permit is issued a permanent permit in the same year, only the permanent permit is counted in the above table.
- 'Permits Fished' is the number of CFEC permits that were used to record commercial landings in that year.
- When fewer than four individuals make landings, figures are masked due to confidentiality.

Figure 6-2. Kotzebue Salmon Gillnet Permit Latency Rate, 1976-2017



New Entrants into the Kotzebue Salmon Gillnet Fishery

New entrants are defined herein as individuals who, for the first time, record a landing on a permanent S04X permit. It is important to note that initial permit holders are not considered new entrants because they needed a proven fishing history prior to 1976 in order to become an initial permit holder of a limited entry permit. Individuals who only make landings on an emergency transfer or interim-entry permit for any given year are not considered in this table.

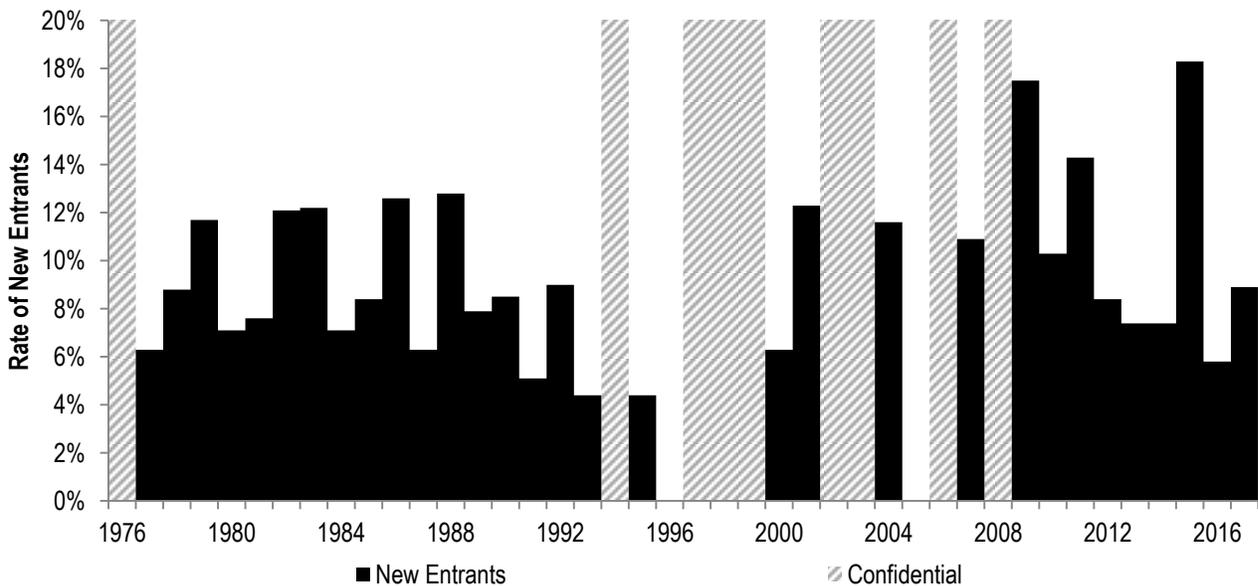
Table 6-6 and Figure 6-3 describe individuals rather than permits. An individual may hold up to two permits in this fishery, but can only fish one of them. An individual may hold one S04X permit one year, and then in subsequent years hold a different S04X permit. Likewise, individuals may enter and exit the fishery multiple times over the years. Individuals are only counted once as a new entrant and only in the year in which they made their first documented landing.

Table 6-6. New Entrants into the Kotzebue Salmon Gillnet Fishery, 1976-2017

Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent	Year	Individuals w/Landings	New Entrants Count	Percent
1976	74	1 to 3	-	1987	158	10	6.3%	1998	44	1 to 3	-	2009	63	11	17.5%
1977	158	10	6.3%	1988	195	25	12.8%	1999	59	1 to 3	-	2010	68	7	10.3%
1978	159	14	8.8%	1989	164	13	7.9%	2000	64	4	6.3%	2011	91	13	14.3%
1979	162	19	11.7%	1990	153	13	8.5%	2001	65	8	12.3%	2012	83	7	8.4%
1980	156	11	7.1%	1991	137	7	5.1%	2002	1 to 3	0	-	2013	68	5	7.4%
1981	184	14	7.6%	1992	144	13	9.0%	2003	4	1 to 3	-	2014	95	7	7.4%
1982	199	24	12.1%	1993	114	5	4.4%	2004	43	5	11.6%	2015	109	20	18.3%
1983	188	23	12.2%	1994	110	1 to 3	-	2005	41	0	0.0%	2016	86	5	5.8%
1984	184	13	7.1%	1995	91	4	4.4%	2006	42	1 to 3	-	2017	101	9	8.9%
1985	191	16	8.4%	1996	55	0	0.0%	2007	46	5	10.9%				
1986	190	24	12.6%	1997	68	1 to 3	-	2008	48	1 to 3	-				

• This table excludes individuals with interim-entry and emergency transfer permits.

Figure 6-3. New Entrants into the Kotzebue Salmon Gillnet Fishery, 1976-2017



Age of S04X Permit Holders

Table 6-7. Mean Age of Select CFEC Permit Holders and the General Alaskan Population

Year	S04X	Statewide Salmon Set Gillnet	Statewide All Permits	Mean AK Worker Age
1980	42.2	37.9	38.9	33.4
1981	42.1	38.0	39.9	33.5
1982	41.2	38.2	40.0	33.6
1983	42.0	38.0	40.2	33.7
1984	41.4	38.2	40.4	33.8
1985	42.1	38.5	40.8	34.0
1986	42.3	38.8	41.0	34.2
1987	42.4	39.0	40.9	34.5
1988	41.8	39.3	41.2	34.9
1989	41.9	39.9	41.5	35.3
1990	42.4	40.0	42.0	35.5
1991	42.9	40.5	42.5	35.9
1992	43.0	40.8	42.9	36.2
1993	43.5	41.2	43.5	36.5
1994	44.0	41.5	44.0	36.7
1995	44.6	41.9	44.4	37.0
1996	45.5	42.3	44.8	37.2
1997	46.0	42.6	45.1	37.4
1998	46.2	43.1	45.6	37.6
1999	47.2	43.4	46.0	37.8
2000	47.7	43.7	46.4	37.9
2001	47.6	44.1	46.9	38.1
2002	48.5	44.8	47.4	38.3
2003	49.4	45.2	47.9	38.4
2004	49.7	45.4	48.2	38.6
2005	50.8	45.4	48.4	38.7
2006	51.0	45.6	48.7	38.8
2007	51.0	45.9	48.9	38.9
2008	51.7	45.9	49.0	39.0
2009	51.3	46.1	49.3	39.1
2010	51.3	46.3	49.5	39.2
2011	51.3	46.6	49.6	39.4
2012	51.5	47.0	49.8	39.4
2013	51.3	47.0	50.0	39.5
2014	51.4	47.2	50.2	39.5
2015	51.2	47.6	50.6	39.5
2016	50.9	48.0	50.9	39.6
2017	50.8	48.2	51.3	39.6

- Mean AK Working Age is the annual average age of all Alaskans age 16-64 as reported by the Alaska Department of Labor and Workforce Development, Research and Analysis Section.
- Age data from the CFEC permit file is as of December 31st of each year.

Table 6-7 shows the annual mean age of four different cohorts of people: 1) Kotzebue salmon gillnet (S04X) permit holders; 2) all salmon set gillnet permit holders statewide; 3) all CFEC limited entry permit holders; and 4) the Alaskan working population.

Note that these figures include ages of permit holders for both transferable and non-transferable permits. Some individuals hold permits in more than one fishery; in these cases, the age of the permit holder is counted once for each permit that he or she holds.

The mean age of the general Alaskan working age population has increased 6.1 years between 1980 and 2017, which represents an 18.4% increase. The percent change in ages over the same period for all CFEC permit holders was 31.7% (12.4 years), and 27.4% (10.4 years) for the statewide set gillnet permit holders.

For S04X permit holders, the mean age increased 20.4% (8.6 years).

S04X Permit Value

Many permit transfers are non-monetary transactions (see Table 6-2). Table 6-8 considers solely arms-length market transactions where permits are sold. CFEC estimated values are expressed in both nominal and real (adjusted for inflation) terms.

Table 6-8. CFEC Estimated Value of Kotzebue Salmon Gillnet Permits

Year	S04X Permit Sales	Nominal		Real	
		Permit Value	Standard Deviation	Permit Value	Standard Deviation
1982	11	\$9,591	-	\$24,362	-
1985	3	\$10,475	-	\$23,863	-
1986	6	\$10,819	-	\$24,197	-
1987	4	\$9,500	-	\$20,499	-
1988	10	\$8,156	-	\$16,899	-
1989	3	\$7,667	-	\$15,156	-
1990	8	\$8,250	-	\$15,472	-
1991	1	\$8,000	\$2,550	\$14,398	\$4,589
1992	4	\$10,500	\$4,800	\$18,345	\$8,386
1993	2	\$11,000	\$5,050	\$18,660	\$8,566
1994	1	\$9,800	\$5,350	\$16,209	\$8,849
1995	3	\$4,400	\$1,900	\$7,077	\$3,056
1996	0	\$4,400	\$1,900	\$6,874	\$2,968
1997	0	\$4,400	\$1,900	\$6,720	\$2,902
1998	2	\$4,300	\$1,950	\$6,466	\$2,932
1999	2	\$3,300	\$850	\$4,855	\$1,251
2000	3	\$2,000	\$1,200	\$2,847	\$1,708
2001	2	\$2,000	\$700	\$2,768	\$969
2002	0	\$2,000	\$700	\$2,725	\$954
2003	0	\$2,000	\$700	\$2,664	\$933
2004	0	\$2,000	\$700	\$2,595	\$908
2005	1	\$2,500	\$350	\$3,138	\$439
2006	0	\$2,500	\$350	\$3,040	\$426
2007	0	\$2,500	\$350	\$2,956	\$414
2008	1	\$2,500	\$350	\$2,846	\$398
2009	4	\$4,300	\$2,200	\$4,913	\$2,514
2010	1	\$2,800	\$1,650	\$3,148	\$1,855
2011	6	\$4,100	\$950	\$4,468	\$1,035
2012	1	\$4,600	\$750	\$4,911	\$801
2013	1	\$4,900	\$650	\$5,156	\$684
2014	4	\$5,100	\$1,050	\$5,281	\$1,087
2015	1	\$5,400	\$750	\$5,585	\$776
2016	3	\$5,500	\$600	\$5,617	\$613
2017	2	\$9,000	\$3,400	\$9,000	\$3,400

- Permit values represent averages of all arms-length sale transactions over the year. Beginning in 1991, additional data from recent months in the preceding year may be included until at least four observations can be averaged.
- The Standard Deviation was not calculated prior to 1991.
- Real permit values were calculated using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Participation and Earnings

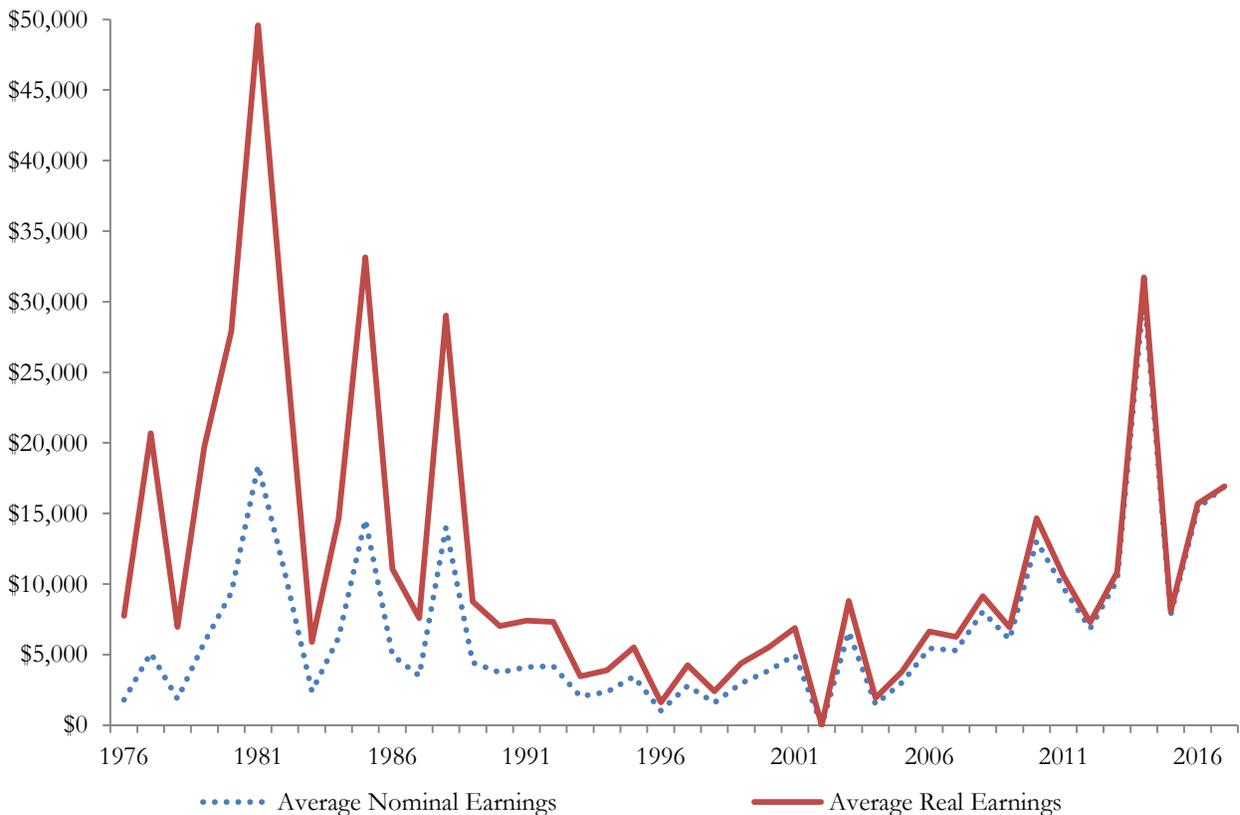
Earnings are estimated from weighted average ex-vessel prices, and as noted earlier, come primarily from the ADF&G Commercial Operators Annual Report and fish ticket values. Earnings shown in Figure 6-4 reflect both nominal and real dollars using the 2017 Consumer Price Index from the U.S. Bureau of Labor Statistics.

Permit counts include interim-entry permits and permanent permits. Interim-entry permits are issued to individuals during the period when their applications for permanent permits are in adjudication. The last year an interim-entry permit was held in the Kotzebue salmon gillnet fishery was in 2001. Some individuals made landings on both an interim-entry permit and subsequently on their newly issued permanent permit in the same year; for these instances, only the permanent permit is counted in this report.

Table 6-9 reports the number of permit issued, and estimated gross earnings in the Kotzebue salmon gillnet fishery from 1976 to 2017. Note that the figures by permit or vessel in this table span the entire year, regardless of who held the permit or however many times the permit was transferred.

Table 6-10 reports the number of permit holders (people) and estimated real (inflation adjusted) gross earnings by each resident type.

Figure 6-4. Estimated Nominal and Real Average Gross Earnings Per Kotzebue Salmon Set Gillnet Permit



- Real earnings are adjusted for inflation using the 2017 U.S. Bureau of Labor Statistics Consumer Price Index.

Table 6-9. Estimated Total Gross Earnings (Real and Nominal) for the Kotzebue Salmon Gillnet Fishery, With Average Gross (Real) Earnings by Permit, 1976-2017

Year	Permits Issued	Total Gross Earnings		Permits With Landings	Average Real Earnings
		Nominal	Real		
1976	273	\$380,778	\$1,640,355	212	\$7,738
1977	235	\$1,068,897	\$4,323,564	209	\$20,687
1978	233	\$381,664	\$1,434,868	206	\$6,965
1979	204	\$1,051,447	\$3,550,010	180	\$19,722
1980	201	\$1,614,610	\$4,803,073	172	\$27,925
1981	214	\$3,439,010	\$9,273,599	187	\$49,591
1982	223	\$2,138,760	\$5,432,672	198	\$27,438
1983	222	\$448,819	\$1,104,562	187	\$5,907
1984	221	\$1,123,492	\$2,650,532	181	\$14,644
1985	221	\$2,750,313	\$6,265,397	189	\$33,150
1986	221	\$924,232	\$2,067,042	187	\$11,054
1987	220	\$555,962	\$1,199,624	158	\$7,593
1988	220	\$2,689,489	\$5,572,677	192	\$29,024
1989	220	\$721,380	\$1,426,006	163	\$8,749
1990	219	\$565,326	\$1,060,235	151	\$7,021
1991	219	\$563,263	\$1,013,708	137	\$7,399
1992	218	\$603,722	\$1,054,771	144	\$7,325
1993	215	\$232,619	\$394,600	114	\$3,461
1994	215	\$256,841	\$424,811	109	\$3,897
1995	215	\$312,609	\$502,800	91	\$5,525
1996	214	\$56,631	\$88,472	55	\$1,609
1997	211	\$186,783	\$285,260	67	\$4,258
1998	203	\$70,429	\$105,911	44	\$2,407
1999	197	\$175,574	\$258,323	59	\$4,378
2000	191	\$246,791	\$351,297	64	\$5,489
2001	190	\$323,221	\$447,362	65	\$6,882
2002	186	confidential	confidential	1 to 3	confidential
2003	184	\$26,469	\$35,261	4	\$8,815
2004	176	\$63,634	\$82,573	43	\$1,920
2005	173	\$124,717	\$156,531	41	\$3,818
2006	164	\$229,027	\$278,468	42	\$6,630
2007	158	\$243,179	\$287,486	46	\$6,250
2008	158	\$385,481	\$438,865	48	\$9,143
2009	160	\$376,434	\$430,095	62	\$6,937
2010	160	\$860,504	\$967,306	66	\$14,656
2011	161	\$865,504	\$943,155	89	\$10,597
2012	158	\$567,476	\$605,851	83	\$7,299
2013	157	\$679,711	\$715,199	66	\$10,836
2014	158	\$2,880,679	\$2,982,698	94	\$31,731
2015	160	\$820,527	\$848,579	105	\$8,082
2016	160	\$1,322,023	\$1,350,187	86	\$15,700
2017	161	\$1,691,656	\$1,691,656	100	\$16,917

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.

Table 6-10. Estimated Real Gross Earnings for Permit Holders in the Kotzebue Salmon Gillnet Fishery by Resident Type, 1976-2017

Year	Local Gross Earnings			Nonlocal Gross Earnings			Nonresident Gross Earnings			Total Gross Earnings		
	People	Average	Total	People	Average	Total	People	Average	Total	People	Average	Total
1976	confidential	confidential	confidential	1 to 3	confidential	confidential	0			215	\$7,630	\$1,640,355
1977	confidential	confidential	confidential	1 to 3	confidential	confidential	0			212	\$20,394	\$4,323,564
1978	confidential	confidential	confidential	1 to 3	confidential	confidential	0			207	\$6,932	\$1,434,868
1979	confidential	confidential	confidential	1 to 3	confidential	confidential	0			180	\$19,722	\$3,550,010
1980	170	\$27,705	\$4,709,823	1 to 3	confidential	confidential	1 to 3	confidential	confidential	174	\$27,604	\$4,803,073
1981	183	\$49,168	\$8,997,831	4	\$50,524	\$202,097	2	\$36,836	\$73,671	189	\$49,067	\$9,273,599
1982	192	\$26,980	\$5,180,142	10	\$22,291	\$222,911	1	\$29,619	\$29,619	203	\$26,762	\$5,432,672
1983	176	\$5,946	\$1,046,509	11	\$4,729	\$52,018	2	\$3,018	\$6,035	189	\$5,844	\$1,104,562
1984	177	\$14,425	\$2,553,200	7	\$11,910	\$83,367	1	\$13,965	\$13,965	185	\$14,327	\$2,650,532
1985	181	\$32,511	\$5,884,413	9	\$28,227	\$254,047	2	\$63,469	\$126,937	192	\$32,632	\$6,265,397
1986	179	\$10,780	\$1,929,704	8	\$12,017	\$96,136	4	\$10,301	\$41,202	191	\$10,822	\$2,067,042
1987	152	\$7,468	\$1,135,086	5	\$8,151	\$40,753	2	\$11,893	\$23,785	159	\$7,545	\$1,199,624
1988	179	\$28,975	\$5,186,438	13	\$21,531	\$279,903	4	\$26,584	\$106,336	196	\$28,432	\$5,572,677
1989	152	\$8,743	\$1,328,945	9	\$6,455	\$58,093	4	\$9,742	\$38,968	165	\$8,642	\$1,426,006
1990	139	\$6,900	\$959,127	11	\$6,842	\$75,266	4	\$6,460	\$25,842	154	\$6,885	\$1,060,235
1991	132	\$7,263	\$958,732	4	\$6,983	\$27,933	3	\$9,014	\$27,042	139	\$7,293	\$1,013,708
1992	134	\$7,337	\$983,188	8	\$6,106	\$48,845	3	\$7,579	\$22,738	145	\$7,274	\$1,054,771
1993	108	\$3,455	\$373,186	5	\$2,385	\$11,927	1	\$9,487	\$9,487	114	\$3,461	\$394,600
1994	103	\$3,883	\$399,947	5	\$2,533	\$12,667	2	\$6,098	\$12,197	110	\$3,862	\$424,811
1995	confidential	confidential	confidential	1 to 3	confidential	confidential	0			91	\$5,525	\$502,800
1996	52	\$1,664	\$86,507	1 to 3	confidential	confidential	1 to 3	confidential	confidential	55	\$1,609	\$88,472
1997	64	\$4,242	\$271,481	4	\$3,445	\$13,780	0			68	\$4,195	\$285,260
1998	44	\$2,407	\$105,911	0			0			44	\$2,407	\$105,911
1999	55	\$4,602	\$253,127	4	\$1,299	\$5,196	0			59	\$4,378	\$258,323
2000	confidential	confidential	confidential	1 to 3	confidential	confidential	0			64	\$5,489	\$351,297
2001	confidential	confidential	confidential	1 to 3	confidential	confidential	0			65	\$6,882	\$447,362
2002	1 to 3	confidential	confidential	0			0			1 to 3	confidential	confidential
2003	4	\$8,815	\$35,261	0			0			4	\$8,815	\$35,261
2004	confidential	confidential	confidential	1 to 3	confidential	confidential	0			43	\$1,920	\$82,573
2005	41	\$3,818	\$156,531	0			0			41	\$3,818	\$156,531
2006	42	\$6,630	\$278,468	0			0			42	\$6,630	\$278,468
2007	46	\$6,250	\$287,486	0			0			46	\$6,250	\$287,486
2008	48	\$9,143	\$438,865	0			0			48	\$9,143	\$438,865
2009	63	\$6,827	\$430,095	0			0			63	\$6,827	\$430,095
2010	confidential	confidential	confidential	1 to 3	confidential	confidential	0			68	\$14,225	\$967,306
2011	confidential	confidential	confidential	1 to 3	confidential	confidential	0			91	\$10,364	\$943,155
2012	confidential	confidential	confidential	1 to 3	confidential	confidential	0			83	\$7,299	\$605,851
2013	68	\$10,518	\$715,199	0			0			68	\$10,518	\$715,199
2014	confidential	confidential	confidential	1 to 3	confidential	confidential	0			95	\$31,397	\$2,982,698
2015	confidential	confidential	confidential	1 to 3	confidential	confidential	0			109	\$7,785	\$848,579
2016	confidential	confidential	confidential	1 to 3	confidential	confidential	0			86	\$15,700	\$1,350,187
2017	confidential	confidential	confidential	1 to 3	confidential	confidential	0			101	\$16,749	\$1,691,656

- Adjusted for inflation to 2017 dollars using U.S. Bureau of Labor Statistics Consumer Price Index.
- When fewer than four individuals in a cohort make landings, counts of participation and earnings are masked for both that cohort and at least one other cohort that year.
- Counts will differ from CFEC on-line Basic Information Tables where the on-line data does not account for the combination of interim-entry permits that were issued as permanent permits in the same year.
- Note that these counts are for individuals, not permits.