

A Look At Today's Economies In Prince William Sound

By Neal Fried and Holly Stinson

In 1989, one of the worst oil spills in history occurred in Prince William Sound. While the world watched, the stricken communities marshalled all of their resources for the cleanup effort. Overnight, the economies in the region transformed in response to the oil spill.

The economic consequences of the spill varied from community to community. Valdez became a boom town over night. Cordova appeared deserted when many of its citizens enlisted in the cleanup effort. As a result of the spill cleanup, employment and income reached record highs and unemployment hit new lows in the area. (See Figure 1.) Most of these economic impacts, however, were temporary.¹

This article looks at whether the economies of the communities on Prince William Sound have returned to "normal". Are the economies of these communities larger or smaller than before the oil spill? Are their economies different in the 1990s?

Prince William Sound communities—mixed economy

The five communities on Prince William Sound have more differences than similarities. The fishery, whether for subsistence, commercial or sport, is about the only thing they have in common. The diverse Valdez economy, with a strong oil industry base, is quite different from Cordova's fishing-based economy. Whittier's economic existence is tied to its role as a gateway to the Sound. The subsistence communities of Chenega and Tatitlek are distinctly different from the rest. Because of these differences, the direction these economies have taken since the oil spill are dissimilar.

Valdez—economy larger now than before the spill

Of all the communities on the Sound, Valdez is the most economically diverse. Its role as the terminus of the trans-Alaska Pipeline dominates its economy. Alyeska Pipeline Service Company, the pipeline operator, is the single largest employer in Valdez, and accounts for 90% of the city's local tax base. Other important economic contributors are thriving visitor and fishing industries, and a sizeable public sector. The deep water port in Valdez also serves as a shipment point for goods into the Interior. Because of the variety of industries in Valdez, its economy is far less seasonal than other communities in the Sound.

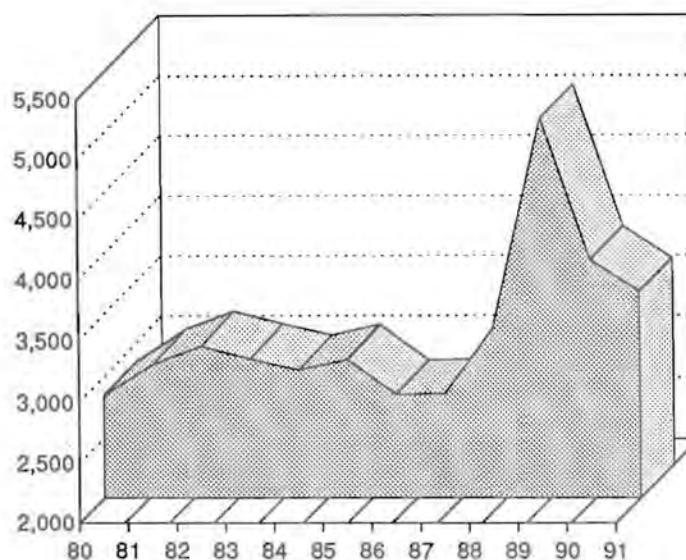
The economy in Valdez today is significantly larger than before the spill. Although the wage and salary work force peaked at 2,887 in 1989, it remains 20% larger

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Note:
¹The period of the spill was well documented, including an article in the July 1989 issue of *Alaska Economic Trends*.

Figure • 1

Prince William Sound Employment Spiked in 1989



Source: Alaska Department of Labor, Research & Analysis Section

Table • 1

Valdez Wage and Salary Employment 1980-1991

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Nonag. Wage & Salary	1,746	1,848	1,884	1,822	1,906	1,850	1,696	1,712	1,789	2,887	2,200	2,146
Mining	*	*	0	0	0	0	0	0	0	0	0	0
Construction	226	196	181	116	153	112	59	39	38	23	26	34
Manufacturing	*	*	70	85	155	171	186	200	206	261	247	288
Trans. Comm. & Utilities	449	488	504	481	456	416	373	374	388	1,129	563	655
Trade	105	135	146	157	161	155	121	144	175	237	265	228
Finance-Insurance & Real Estate	36	28	23	20	22	20	20	18	15	24	30	32
Services & Miscellaneous	242	207	257	218	233	251	253	264	294	462	346	306
Government	680	698	704	745	730	725	686	674	673	751	749	604
Federal	18	17	20	15	17	15	14	16	17	18	17	16
State	404	404	392	403	413	399	386	371	377	448	422	284
Local	259	277	292	327	300	311	286	288	280	285	310	304

* Nondisclosable

Source: Alaska Department of Labor, Research and Analysis Section.

than in 1988. (See Table 1.) Openings at the Alaska Department of Labor's local Employment Service office also remain above pre-spill levels. (See Figure 2.)

A significant amount of growth came from Alyeska Pipeline's expanded work force. Establishing the Ship

Escort Response Vessel System in Valdez created 75 high-paying, year-round jobs. Most of this growth shows up in the transportation, communication and utilities industry in Table 1.

Expansion of the fishing industry has bolstered the

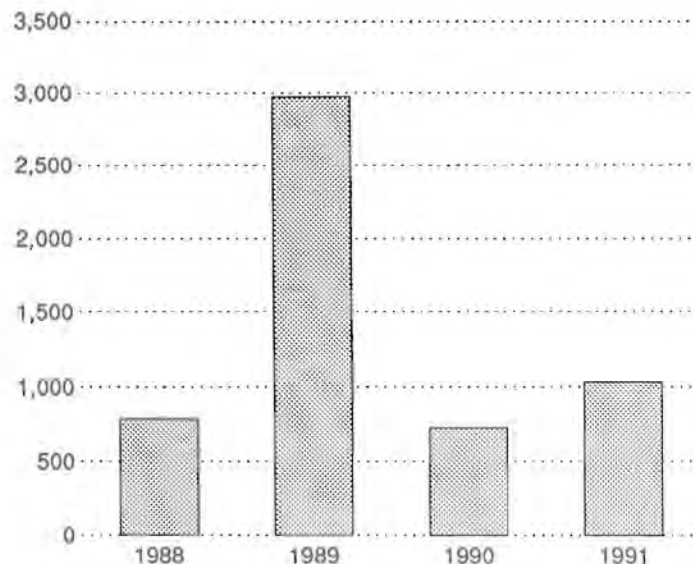
Valdez economy. Fishing is a relative newcomer. In 1979 there weren't any fish processing plants operating in Valdez; today there are three. Road and air access, labor availability, and a dramatic increase in the Sound's salmon fishery made Valdez a good candidate for this expansion. Fish processing employment grew 63% since 1988 as salmon and herring catches increased. Its resident fishing fleet, however, remains small. In 1991 only 33 out of 435 permits fished by people claiming residence in Prince William Sound called Valdez home. (See Table 2.)

The growth at Alyeska Pipeline Service Company and in the fishing industry spurred some growth in the trade sector. However, some of the growth in retail trade comes from a thriving visitor industry,

Figure • 2

Valdez Employment Service Second Quarter Job Openings

Source: Alaska Department of Labor, Research & Analysis Section



Number of Permits Fished by Prince William Sound Residents

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	*1991
Cordova	418	430	430	465	406	398	392	395	411	309	412	389
Valdez	53	61	58	55	55	60	57	66	55	30	54	33
Chenega Bay	0	0	0	0	0	0	0	1	1	1	3	1
Tatitlek	9	8	9	8	10	9	8	11	11	8	6	2
Whittier	5	11	12	18	16	8	13	13	16	9	14	10
Total	485	510	509	546	487	475	470	486	494	357	489	435

Valdez is one of the top ten tourist destinations in the state. It is geographically well situated to take advantage of the visitor industry. Valdez provides the only road access to Prince William Sound. Unlike so much of the state, the tourist trade in Valdez depends more on independent travellers than it does from the organized

tour trade. Valdez is a popular destination for the Southcentral tourist market via the ferry from Whittier. A growing number of Prince William Sound tour charters are operating out of the city harbor. More recreational boaters are using Valdez to access Prince William Sound. Valdez is also a destination for cruise ships -- 38 are expected to dock there this year.

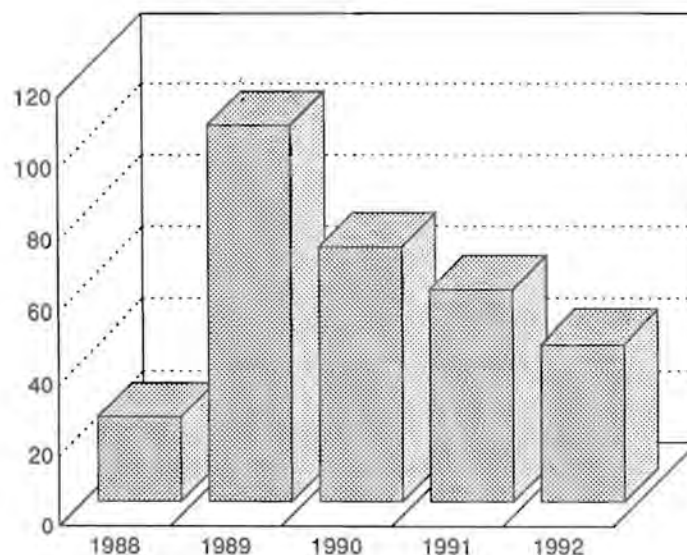
es for recreation vehicles is greater than in 1989. This year a record number of visitors are expected because of the 50th anniversary celebration of the Alaska Highway. **1991 figures are preliminary*
Source: Alaska Commercial Fisheries Entry Commission

Although no new hotels have been built in Valdez in recent years, bed capacity has increased. In 1989 a bed and breakfast industry flourished in response to the severe housing crunch brought on by the spill. (See Figure 3.) Although their numbers have dropped since 1989, there are still more now than in pre-spill years. Bed taxes collected by the city have grown each year. The number of spac-

es for recreation vehicles is greater than in 1989. This year a record number of visitors are expected because of the 50th anniversary celebration of the Alaska Highway. **1991 figures are preliminary*
Source: Alaska Commercial Fisheries Entry Commission

Figure • 3

Bed & Breakfast Accommodations Fluctuate in Valdez



Source: City of Valdez

A Portrait of Prince William Sound Communities (From the 1990 census)

	Chenega Bay	Cordova	Eyak*	Tatitlek	Valdez	Whittier	Alaska
Population in 1990	94	2,110	172	119	4,068	243	550,043
Percent female	44.7	45.5	48.3	52.9	44.9	42.8	47.3
Percent Native	69.1	11.2	7.6	86.6	5.9	12.3	15.6
Percent White	30.9	79.5	90.7	13.4	88.7	80.7	75.5
Percent Other	0.0	9.2	1.7	0.0	5.4	7.0	8.9
Percent under 18 years	38.3	26.8	37.2	37.8	28.7	22.6	31.3
Median age	25.0	31.6	30.5	27.5	31.4	32.4	29.4
Persons per household	3.03	2.61	3.13	3.61	2.90	2.16	2.80
Percent born in Alaska	66.0	37.9	36.8	90.1	31.0	34.4	35.6
Percent of labor force unemployed	14.3	3.1	4.3	—	8.7	8.5	8.8
Per capita income in 1989	\$9,211	\$23,408	\$63,913	\$8,674	\$26,968	\$17,032	\$17,610
Median household income in 1989	\$22,083	\$46,304	\$150,000+	\$27,188	\$68,570	\$33,636	\$41,408
Percent below poverty level	26.6	4.8	—	19.8	5.1	13.1	9.0
Percent with high school or higher education	58.5	85.3	85.4	68.2	84.8	80.0	86.6

*While the U.S. Bureau of the Census considers Eyak a Census Designated Place and presents the figures separately Eyak is actually located adjacent to Cordova.

Source: U.S. Bureau of the Census.

Population growth and a healthy income picture in Valdez also helped boost the retail trade sector. A newly expanded Eagle grocery store, which opened in 1991, is one testament to its healthy retail market. According to the 1990 census, household income in Valdez was 66% above the statewide average in 1989. (See Table 3.) Earnings from oil spill cleanup work distort these income figures somewhat, but income in Valdez has been far above the statewide average in other years.

Another source of post-spill economic growth is the financial windfall many enjoyed from oil spill cleanup work. This windfall was an infusion of new capital into the local economy. Some residents used their earnings to expand their businesses or establish new ones. To what degree this happened is not readily known. We do know, however, that personal income in the Valdez-Cordova census area increased by \$46 million in 1989—the single largest annual increase since personal income has been tracked.

In Valdez, not all sectors have grown; the sizeable public sector has lost some ground. Some of these losses resulted from the demobilization of the oil spill cleanup. For example, the Department of Environmental Conservation based many personnel there during the spill cleanup phase; now most of these positions are gone. Some losses have also come from positions lost at the regional highway office and Harborview, an institution for persons with developmental disabilities.

The immediate outlook for the Valdez economy is relatively good. The fishing and tourist industries are thriving. Petro Star is building a small refinery in Valdez to provide jet, marine and heating fuel. Although it will be a small employer (about 25 jobs) it adds another dimension to the Valdez economy.

Nonetheless, in the longer run Valdez has an Achilles heel—its economic dependence on the pipeline terminal. It will remain the economic mainstay for many years to come. As the volume going through the terminal declines and the facility ages, it will become a less valuable asset. This means it will contribute less to the Valdez tax base. For example, its valuation for tax purposes in 1992 fell by \$78 million. Declining oil production also means Alyeska Pipeline Service Company will eventually pare down its work force. The biggest challenge Valdez faces will be finding a way to replace these losses.

Cordova—fickle fishery affects economy

Cordova has had a different post-spill economic experience than Valdez. Its level of economic activity has returned to pre-spill levels. (See Table 4.) The economic destiny of Cordova is almost entirely tied to the vagaries of the commercial fisheries, specifically the salmon and herring fisheries which account for more than 90% of the total fishery value in Prince William Sound. Of the 435 permits fished in 1991 by residents of Prince William Sound, 389 were from Cordova. Tourism, logging

Cordova Wage & Salary Employment 1980-1991

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Nonag. Wage & Salary	905	1,084	1,076	1,108	952	1,107	909	918	1,154	1,301	1,321	1,223
Construction	17	22	30	26	34	37	25	14	19	29	51	32
Manufacturing	271	351	253	293	188	345	269	256	445	329	361	298
Trans. Comm. & Util.	37	81	88	93	89	78	70	79	83	197	96	92
Trade	140	143	207	194	173	194	174	181	171	178	190	173
Finance-Ins. & R.E.	25	26	24	23	23	25	25	26	24	24	24	25
Services	111	104	122	124	113	102	103	96	112	120	127	113
Miscellaneous	22	50	38	37	28	27	34	44	67	92	101	98
Government	282	308	316	319	305	300	291	282	302	335	372	394
Federal	35	42	37	34	32	30	30	31	38	40	49	51
State	81	87	87	88	92	96	96	89	90	112	121	128
Local	167	179	192	197	181	174	166	162	174	184	202	215

Source: Alaska Department of Labor, Research & Analysis Section.

and public sector activity provide additional economic support.

The Cordova economy got off to a good start in 1990. After major spill-related interruptions to the fishery in 1989, the 1990 catch was the second largest on record (although its value was about average). Some of the growth in Cordova in 1990 was also related to the extra income earned from spill cleanup activity and spent in 1990. Employment grew, as did city sales tax collections, raw fish tax receipts and ferry traffic. All indications were that the economy was on track and returning to normal levels.

In 1991 the economic picture changed. The salmon catch was healthy—the largest in the Sound's history. Prices, however, reached new lows. In spite of this record catch the estimated earnings for Cordova fishermen fell to \$21 million, the lowest figure since 1983. (See Table 5.) The combined herring and salmon harvest in the Sound was valued at \$40.7 million. (See Table 6.) This was less valuable than the 1989 harvest, when no herring were harvested because of the oil spill. To make things worse, two out of the city's five processors closed their doors in 1991. Although no income figures for 1991 are available, income also surely fell sharply; sales and raw fish tax receipts fell. Because of these losses and a costly lawsuit, the city was forced to cut back services.

This year an improved picture is developing. The herring harvest in the Sound set a new record. In metric tons it was nearly twice as large as in 1991. Salmon prices have also improved immensely this year—nearly double last year's prices. The primary salmon fishing season has not yet begun, so harvest levels are unknown.

Tourism and logging activity augment the economy. At the present time both are small contributors. There is potential for growth in both these industries. Limited access hampers tourism growth in Cordova since the only way to get there is by air or water. Some residents pin hopes on the possibility of a new road which would connect Cordova to the state road system. They believe it will expand tourism activity and possibly lead to the development of other industries. Other residents oppose the idea. Nevertheless, there is little doubt that fishing will continue to dominate the economy in Cordova into the foreseeable future.

Chenega and Tatitlek— not yet recovered

It is more difficult to measure the economic well being of Chenega and Tatitlek using traditional economic measures because subsistence harvesting is such an important ingredient in their economies. From traditional economic measures neither community is very prosperous. Little or no economic infrastructure exists in either community. Job opportunities are scarce. The opportunities that do exist are in the public sector or fishing-related. Even these jobs are usually seasonal. According to an Alaska Department of Fish and Game survey, only 18% of the adults in Chenega were employed year-round.²

The lack of employment opportunities is reflected in the income of the residents which is low by any measure. In 1989, household income in both communities was only a little more than half that of Valdez or Cordova. (See Table 3.) These income figures are probably higher than usual because they include oil spill income. According to the 1990 census the number of residents living below the poverty level was greater than 25% in Chenega and 20% in Tatitlek.

Note:
² Alaska Department of Fish and Game, Subsistence Division, *Subsistence Harvests and Uses in Seven Gulf of Alaska Communities in the Second Year Following the Exxon Valdez Oil Spill* March 15, 1992.

T a b l e • 5

**Estimated Earnings from Fish Harvesting Statewide
by Prince William Sound Residents (in thousands of dollars)**

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	*1991
Cordova	35,949	25,803	16,322	22,108	27,716	22,825	42,577	41,500	29,949	31,637	21,859
Valdez	2,393	1,811	1,262	1,008	2,099	1,973	3,920	2,710	1,436	1,959	888
Chenega Bay	—	—	—	—	—	—	**	**	**	**	**
Tatitlek	901	392	166	281	367	270	681	514	196	304	**
Whittier	128	134	174	150	244	234	247	222	42	126	82
Total	39,370	28,140	17,924	23,547	30,426	25,302	47,425	44,946	31,623	34,027	22,829

*1991 figures are preliminary

**Nondisclosable

Note: Chenega Bay was established in 1984.

Source: Alaska Commercial Fisheries Entry Commission

Commercial fishing provides one important source of cash income for these two communities. Although there were only a small number of fishing permits issued to residents of either of these communities, both benefit from the commercial fishery. As elsewhere in the Sound, earnings from the commercial harvest suffered in 1991.

The subsistence economy in both Chenega and Tatitlek declined quite dramatically since 1989, according to surveys conducted by the Alaska Department of Fish and Game. The subsistence harvest in Chenega in 1990 and 1991 was less than half that of pre-spill years. (See Figure 4.) Fewer residents made efforts to harvest wild game and fewer species of game were harvested than in the pre-spill years. The pattern for Tatitlek was similar to Chenega. The residents of these two communities are still concerned about oil contamination and report large declines in the populations of some of their subsistence foods.

On the positive side both communities are developing an aquaculture industry farming oysters. Tatitlek is ready to harvest their first crop of oysters this summer, which grew more quickly than expected. They anticipate these oysters will fetch premium prices. In Chenega the first harvest will come somewhat later. This industry could provide both jobs and income to communities where both are in short supply.

Whittier—gateway to Prince William Sound

Whittier, with a 1990 census population of 243, is the only community on Prince William Sound accessible by railroad. Some retirees choose to live in Whittier, possibly because of the relatively low cost of housing. Others own a condominium there but use it as a base for

weekend excursions into the Sound. Of the 126 employed residents counted in the 1990 census, forty-eight worked in the public sector—mostly for the local school district or the Alaska Railroad. Whittier's harbor generates many of the private sector jobs.

Whittier was probably the Prince William Sound community least affected by the oil spill. Economic indicators for Whittier are scarce, making post-spill trends difficult to measure. Whittier is a major transportation link and gateway to the Sound. Its economy benefits from the growing number of visitors to the Sound. According to the Alaska Railroad, passenger counts have increased substantially during the past two years. (See Figure 5.) In the near future, visitors to Whittier could increase dramatically if a plan to provide road access becomes reality.

Summary

The economies of Prince William Sound communities are more different than they are alike. This diversity meant the post-spill economic trends of these communities have also been distinct. The Valdez economy, for instance, is larger than it was in pre-spill years. Some of its growth has come from the build-up of an oil spill response system. Expansion of the pipeline terminal has also contributed to its growth. Another strength is the diversity of its economy. Both the fishing and visitor industries lent a hand in its post-spill growth. Despite recent robustness, its economy is vulnerable for the same reason the state's economy is—declining oil production.

On the other hand, the fate of the Cordova economy will have little to do with oil production. Instead, the health of the Sound's fishery harvest will guide its future. The

Commercial Fish Harvest in Prince William Sound
(number of fish and ex-vessel value in thousands)

	Herring (catch in metric tons)	Chinook (king)	Sockeye (red)	Coho (silver)	Pink (humpy)	Chum (dog)	Salmon Total
1985 catch	8,283	44	1,450	1,025	25,129	1,297	28,945
Value	\$5,800						\$48,467
1986 catch	11,318	42	1,289	426	11,391	1,700	14,848
Value	\$8,400						\$29,400
1987 catch	7,407	42	1,738	175	29,230	1,919	33,104
Value	\$6,200						\$67,500
1988 catch	11,923	32	768	478	11,736	1,841	14,855
Value	\$12,250						\$70,640
1989 catch	closed due to oil spill	32	1,175	425	21,886	1,002	24,520
Value							\$43,000
1990 catch	8,190	22	912	524	44,165	967	46,590
Value	\$8,010						\$68,000
1991 catch	11,734	35	1,740	632	37,300	373	40,080
Value	\$10,672						\$30,000
1992 catch (projected)	15,547	41	1,663	758	28,040	1,500	32,002

*Source: Alaska Department of
Fish and Game.*

oil spill was a reminder of how singularly dependent Cordova is on this resource. Since the oil spill, the economic performance in Cordova has been mixed. The size of its economy has remained almost unchanged from pre-spill years. The transportation-based economy of Whittier appears to be benefitting from a growing visitor industry in the Sound.

The subsistence economies of Chenega and Tatitlek have not fared as well as the rest of the Sound's communities. Since the oil spill, a substantial decline in their subsistence harvest has been recorded. Few sources of cash income exist for these two communities. There is hope that additional sources of economic support can be developed in these communities.

Figure • 4

Pre- & Post-Spill Subsistence Harvest

Source: Alaska Department of Fish & Game

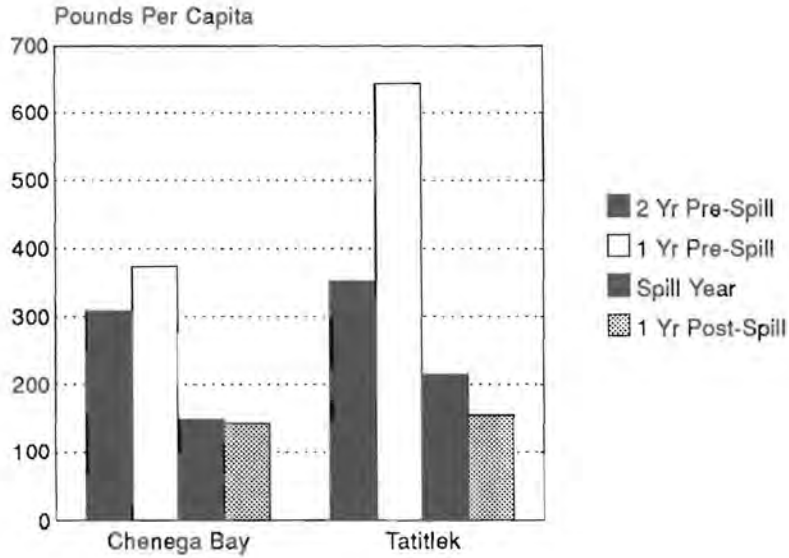
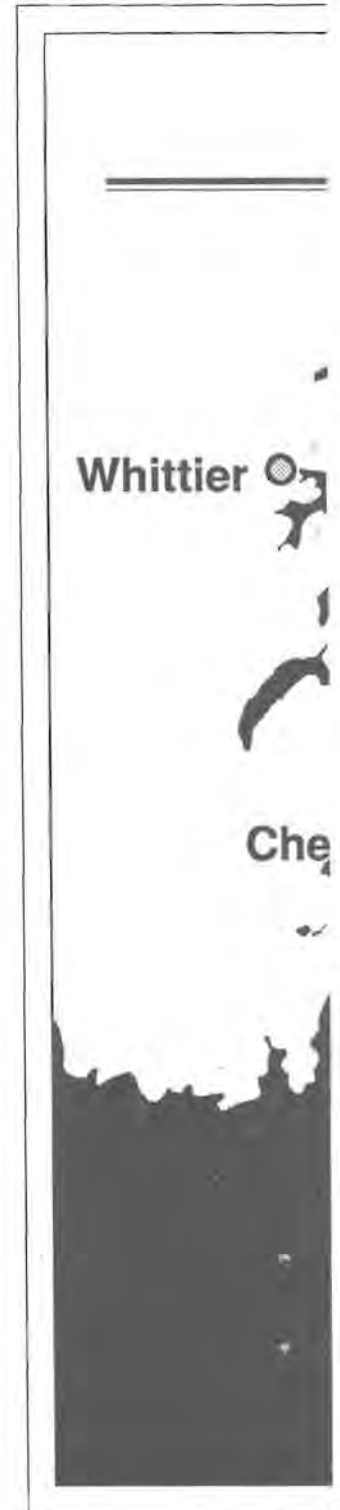
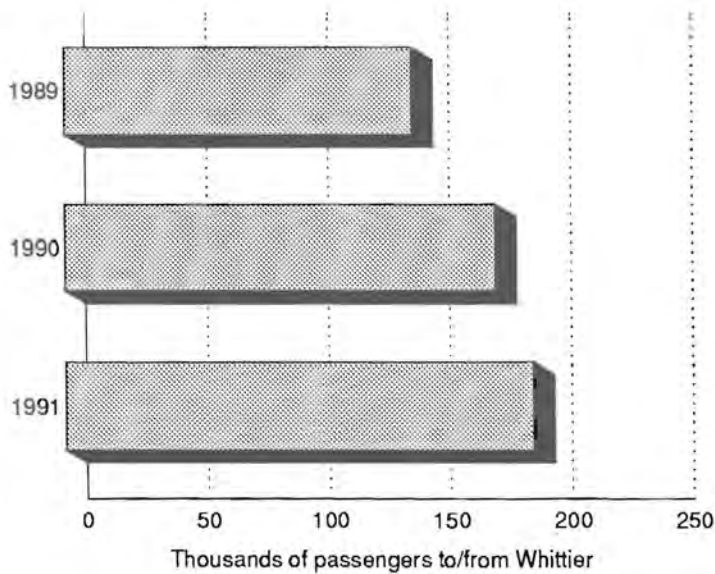


Figure • 5

More People Travel To Prince William Sound by Rail

Source: Alaska Railroad



Prince William Sound

