

Prince William Sound

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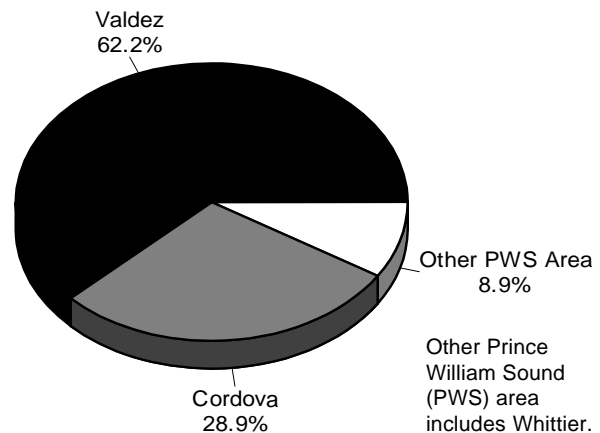
Ten years after the oil spill—an economic profile

Since the oil spill of 1989, the economies of Prince William Sound have undergone a variety of changes—some dramatic and others more subtle. Only a few broad generalizations can be made about the economy of the Sound itself. That is because the region represents not a single economy but five distinct communities that usually operate independently of each other. These include the two medium-sized economies of Cordova and Valdez and the three small communities of Whittier, Chenega Bay and Tatitlek. All of these communities depend on Prince William Sound for their very existence and they benefit from it in a variety of ways. This large body of water is constantly shaping and reshaping their economies.

Cordova's economy depends on the Sound almost exclusively. Commercial fishing is the lifeblood of the community. In recent years, the salmon fishery has represented nearly all of this industry. Valdez, on the other hand, has the largest and most diversified economy on the Sound. (See Exhibit 1.) The transportation of oil, government, tourism and fishing define its economy. At present, Valdez is also the only community on the Sound connected to the road system. The economies of Tatitlek and Chenega rely heavily on subsistence, with some cash earned from commercial fishing. Whittier is the gateway and transportation link to the Sound for Southcentral Alaskans and for thousands of visitors to the state. Whittier is also accessible by rail, and will soon have a road link.

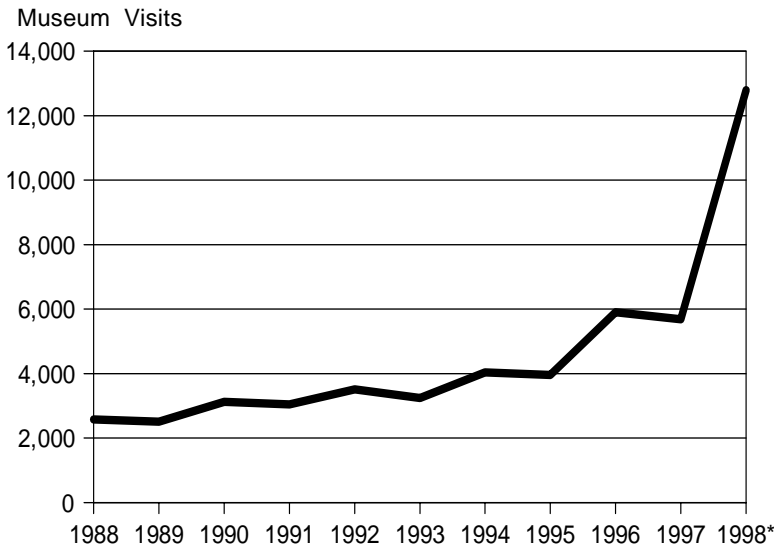
The 1989 oil spill rumbled through the economies of these communities. Valdez, as the command center for the oil-spill cleanup, experienced a short-term economic boom. Some estimated that both its population and its workforce doubled overnight. Cordova, on the other hand, at times took on the atmosphere of a ghost town because much of its fishing fleet was out in Prince William Sound and beyond, trying to preserve their livelihoods by working in the spill cleanup effort. Cancelled fisheries that year added to this atmosphere. During the spill, nearly all of the residents of Tatitlek and Chenega were busily involved trying to save their commercial and subsistence resources. Whittier was the least affected of the communities.

Employment in the Sound is concentrated in Valdez



Source: Alaska Department of Labor, Research and Analysis Section

2 Cruise Ships Increase Visitors To the Cordova Museum



Source: Cordova Museum

* Cruise ship visits begin.

Although most of the economic activity generated by the oil spill was temporary, some of its legacy is still being felt in the economies of Prince William Sound. Some of it is measurable and much is not. But what is certain is that these economies have continued to change. This article will explore some of those changes.

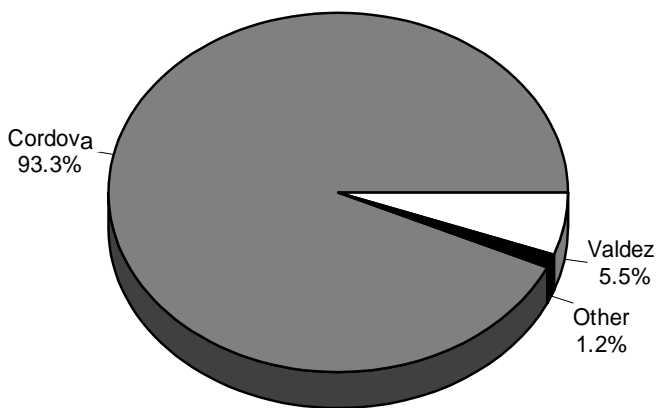
Cordova's post-spill economy stagnates

Cordova was founded in 1906 when it became the rail terminus for the copper shipped from the Kennecott Mines Co. In 1939, the mine shut down. For many communities, that would have been the death blow. But a developing Copper River basin and Prince William Sound fishery sustained Cordova's economy and eventually caused it to grow. Ever since then, fish harvesting and processing have dominated the city's economy.

Each May, the eyes of the salmon world are set on Cordova's Copper River red salmon fishery. It represents the first major Alaska salmon harvest of the year and provides clues to where salmon prices might be headed for the season. Due to their supreme quality and their position as the first fresh fish caught in the season, they are much celebrated and sought after. They also command premium prices. Although Cordova does not sit right on Prince William Sound as do the other four communities, its fishing fleet harvests much of the Sound's huge pink salmon runs. In past years, herring was also important to Cordova's fishing industry. Bottom fish, halibut and other fisheries supplemented the salmon harvest.

Although government's presence in Cordova is not particularly large, it is the community's second most important industry. A small group of federal and state workers and one unit of the Coast Guard enjoy stable year-round employment. In 1989, the Prince William Sound Science Center was established to study and monitor the ecosystem of the Sound. It has a staff of approximately 28 and receives public, foundation and other funding. From time to time, a logging industry provides economic opportunities for Cordova residents. A small tourism industry has been growing

3 Fishing Supports Cordova 1996 Sound resident harvest tops \$23 million



Source: Alaska Commercial Fisheries Entry Commission

incrementally. (See Exhibit 2.) Two cruise ship companies began making regular calls on Cordova in 1998 and there is a growing number of independent visitors who fish, hunt and pursue other recreational activities in the area. Tourism is slowly making new inroads into Cordova's economy, but it remains a small player.

Earnings and workforce figures for Cordova reflect the importance of fisheries to the economy. (See Exhibit 3.) If a rough estimate for fish harvesting employment were included, more than a third of Cordova's workforce would be directly employed in fish harvesting or processing. A survey conducted by the University of Alaska Anchorage found that half of Cordova's households had someone working in commercial fishing. In 1996 (the most recent data available), nearly 80 percent of the Prince William Sound permits fished listed Cordova as residence, and in 1997, 212 workers were employed on an annual average basis at the community's fish processing plants. (See Exhibit 4.) Most of Cordova's remaining workforce provides infrastructure support to this industry. Three of Cordova's 10 largest employers are tied directly to the fishing industry. (See Exhibit 5.)

During the 1980s, fishing was good to Cordova's

fleet. Natural salmon runs were on the upswing. In the late 1980s, the pink salmon harvests grew rapidly because of major hatchery construction in the Sound. Decent herring harvests, along with shrimp and crab harvests for many of those years, supplemented these healthy salmon runs. In 1989, a number of salmon fisheries were interrupted and the herring harvest was cancelled because of the oil spill. But just one year later, in 1990, there was a near-record salmon harvest, coupled with good prices. It was looking like the fishery Cordova had always relied on was ready to bounce back and resume its expanding role in the community's economy.

But in 1991, prices for salmon began to drop quickly and the harvest value of Cordova's catch fell by more than half. (See Exhibit 6.) The fisheries' economic value has not recovered since then. During some years the catch improves, but prices weaken, or vice versa. Since 1989, there have been three years in which all herring fisheries were cancelled, and in the years there was a harvest, it was meager. (See Exhibit 7.) Wage and salary employment in Cordova has changed little since 1991. More dramatic is the toll these less valuable fisheries have taken on the number of participating fishers. In 1992, 789 resident Cordova permits were fished, versus 457 in 1996, a 73 percent decline. (See Exhibit 8.) In 1991,

Cordova Employment 1987–1997 **4**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total Industries	934	1,370	1,314	1,317	1,192	1,074	1,046	1,079	1,140	1,087	1,131
Mining	-	-	-	-	-	-	-	-	-	-	-
Construction	14	19	29	51	32	24	17	16	16	23	21
Manufacturing	189	571	318	347	254	241	236	277	269	180	212
Seafood	189	571	318	347	254	241	236	277	269	180	212
Trans/Comm/Util	79	83	196	95	92	82	84	82	103	105	103
Trade	181	171	178	190	174	157	167	174	188	203	199
Wholesale Trade	39	33	40	41	35	28	37	41	44	50	54
Retail Trade	142	138	138	149	139	129	130	134	145	153	145
Finance/Insur/R.E.	26	24	24	25	25	16	19	23	27	26	23
Services/Misc.	105	120	131	136	124	121	117	130	168	178	188
Ag/Forestry/Fishing	44	67	88	101	97	36	32	32	30	29	25
Government	296	315	350	372	394	397	374	345	339	343	360
Federal	31	38	40	49	51	52	52	51	49	55	56
State	89	90	112	121	128	123	98	102	99	98	101
Local	176	187	198	202	215	222	224	192	191	190	203

Source: Alaska Department of Labor, Research and Analysis Section

5 Top Ten Cordova Employers 1997 annual average employment

Rank	Firm	Employment
1	North Pacific Processors, Inc.	142
2	Cordova School District	78
3	Cordova Community Hospital	62
4	City of Cordova	61
5	AK Dep't. of Transportation & Pub. Facil.	44
6	Norquest Seafoods	42
7	U.S. Dep't. of Agriculture–Forest Service	35
8	Alaska Commercial Company	31
9	Alaska Department of Fish and Game	29
10	Prince William Sound Science Center	28

Source: Alaska Department of Labor, Research and Analysis Section

there were five large processors in Cordova. Today there are three, plus a couple of specialty processors. While the population in the rest of the state increased steadily in the 1990s, Cordova's population remained unchanged. (See Exhibit 9.)

While the vagaries of the fishing industry are nothing new for Cordovans, this string of weak economic returns is taking its toll. Given its reliance on the salmon fishery and the unlikelihood that salmon prices will bounce back any time soon, a growing number of Cordovans are concerned about their community's economic future. Some believe tourism could fill some of this gap. Tied to this issue is a possible road or trail link to Cordova. Over the past 50 years, there have been various proposals to link Cordova by road, using some or most of the old railroad bed. Part of this road has been constructed over the years; yet the issue remains divisive among Cordova residents. The University of Alaska conducted a lengthy study of the road and its effects and concluded that the road's overall impact on Cordova's economy would be moderate. Its biggest effect, said the researchers, would be a substantial increase in summer visitor traffic. The proposal currently under consideration is for a trail link.

Valdez's economy has been more resilient

Valdez differs from the majority of Alaska's coastal communities in that fishing has never played a dominant role in its economy. Founded in 1899, Valdez was a jumping-off point for miners heading into the Interior's gold fields, and in later years it continued to function as a gateway into the state's Interior region. Then in 1964, when the earthquake devastated the town, a flurry of activity followed as the entire town was relocated to its present site. Valdez then gradually developed into a regional governmental center when Harborview, an institution for persons with developmental disabilities, was established in Valdez, as well as other public sector agencies such as a regional headquarters for the Alaska Department of Transportation. During this phase, Valdez came to rely heavily on the public sector for its existence. In the early 1970s, Valdez was chosen as the terminus of the Trans-Alaska Pipeline, and a boom ensued, one that would permanently transform the community. In 1974, the population of Valdez was 1,350. One year later, twice that many people were living at the terminal construction camp and the community's total population had swelled to 6,512. Employment and income more than doubled. By 1977, most of these workers were gone, but Valdez was left permanently with a much larger economy and a new role that dominates its economy to this day—the shipping of oil. Valdez is the largest crude oil port in North America.

Valdez is the only community in the state where nearly a third of the wage and salary workforce is employed in transportation, and in this case, most of this activity is related to the transportation of oil carried out by Alyeska Pipeline Service Company. (See Exhibit 11.) Alyeska is the largest employer in Valdez. Four of the 10 largest employers in Valdez are directly connected to the oil terminus. (See Exhibit 10.) And because Alyeska's wages tend to be among the highest in the state, more than half of the payroll in Valdez comes from transportation. These figures often exclude activity surrounding the oil pipeline terminal that also accrues to the local economy. During the past decade, hundreds of millions of dollars have been

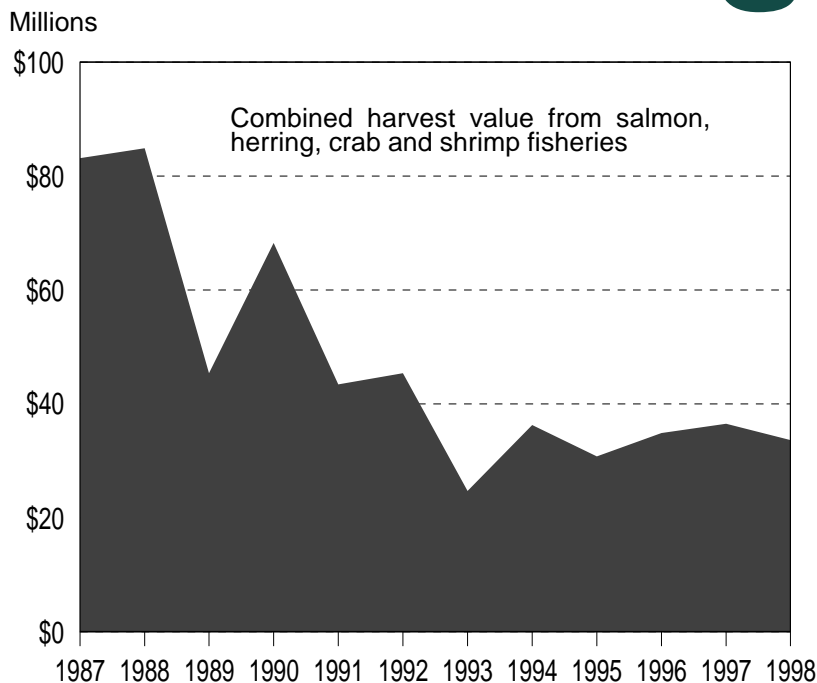
spent on the maintenance and reconstruction of the terminus and parts of the pipeline. The \$100 million oil terminal tanker vapor control project completed this past year is a recent example. A legacy of the oil spill is the presence of a small permanent workforce now headquartered in Valdez, whose mission it is to prevent or react to future spills. The fifth largest employer in Valdez is one of these contractors.

Another side effect of the terminal is a much larger tax base for the City of Valdez. This has allowed the city over the years to provide additional services, build infrastructure and embark on ambitious economic diversification efforts. Some of the efforts to diversify the economy included building a \$48 million cargo and container port to transform Valdez into the Interior's major port of entry. Valdez also built a civic center to attract more visitors. While the extent to which these specific efforts added to the city's diversity is unclear, it is certain that the visitor industry has steadily added a new dimension to the Valdez economy.

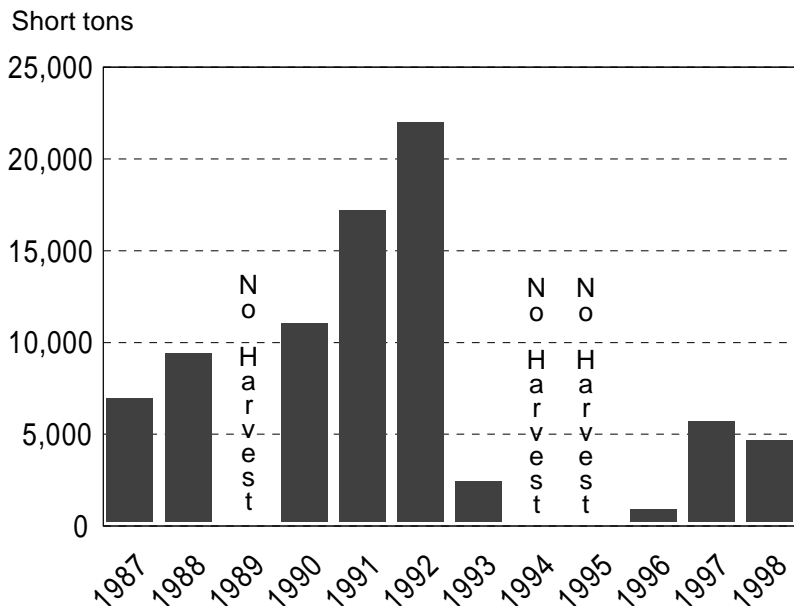
Each year, the number of visitors arriving in Valdez by air, water and road grows. They are usually visiting Valdez to gain access to Prince William Sound. In 1998, it was estimated that 150,000 visitors made their way to Valdez. The visitors include non-Alaskan rubber tire traffic, cruise ship visitors, ferry traffic and lots of Alaskans coming to visit the Sound and Valdez. In 1998, 65 cruise ships docked in Valdez. The city has also developed into a major sightseeing and fishing charter boat community. Over the past two years, the number of charter boats operating out of the Valdez Harbor has nearly doubled. In fact, nearly 70 percent of the boats moored in the Valdez Harbor are registered to non-city residents. Once a sleepy port, Valdez's waterfront has become a bustling player in the city's economy.

Although commercial fishing has never been a dominant player in Valdez's economy, it does add diversity. While only 44 of the 571 commercial fishing permits issued to Prince William Sound residents belong to Valdez residents and their earnings amounted to only

Dwindling Riches from the Waters of Prince William Sound **6**



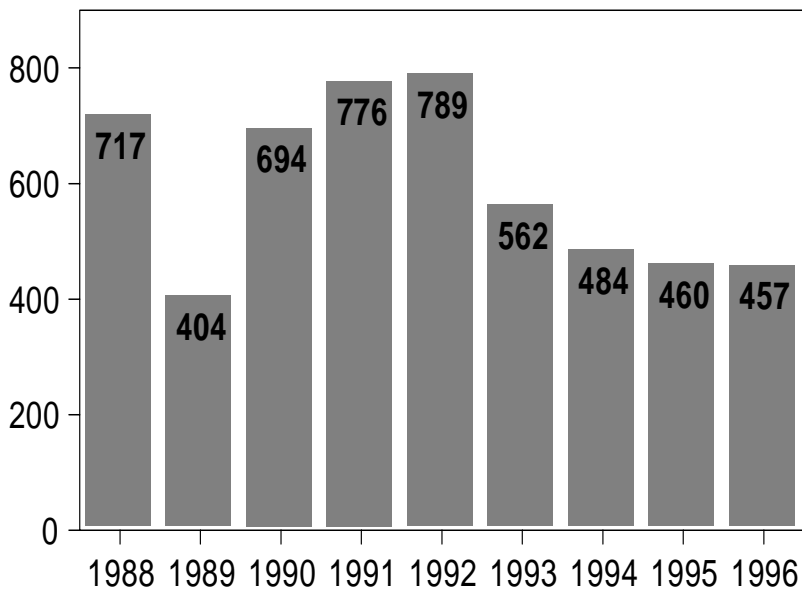
Herring Harvests Turn Meager When not cancelled altogether **7**



Source: Alaska Commercial Fisheries Entry Commission

8 Permits Fished by Residents of Cordova decline

Permits Fished



9 Population of Communities in Prince William Sound

	1990	1998
Prince William Sound Area Total	7,189	7,281
Cordova census subarea	2,579	2,584
Cordova city	2,110	2,571
Eyak CDP ¹ (annexed 1993)	172	-
Remainder of Cordova census subarea	297	13
Prince William Sound census subarea	4,610	4,697
Chenega CDP ¹	94	35
Tatitlek	119	110
Valdez	4,068	4,155
Whittier	243	306
Remainder of PWS census subarea	86	91

¹ Census Designated Place

Source: Alaska Department of Labor, Research and Analysis Section

\$1.3 million, the community is home to three processing plants—the same number as in Cordova. Two of Valdez's 10 largest employers are fish processors. By 1997, the fish processing workforce in Valdez had become nearly as large as Cordova's.

This diversity in Valdez's economy helps explain why its present workforce is considerably larger than it was prior to the oil spill. The present low oil price environment could lead to some downsizing in the pipeline related workforce; Valdez's economic diversity will help it weather these possible losses.

Whittier—big changes in the offing

Whittier was established by the military in the 1940s as the northernmost ice-free defensible port for supplying military installations in Anchorage and the Interior. A railroad spur was tunneled through a mountain to connect the new port with the rest of the state. This remains the only access. A number of large buildings and other infrastructure were built to house and move these troops and dependents. By the 1960s, most of the military-related activity ceased, but Whittier remained a port of entry for freight. It provides the only barge-rail connection in the state as well as a ferry port. Some commercial fishing activity operates out of Whittier. Since Whittier and Valdez provide the only surface access between the Sound and the rest of the state, Whittier has become a major gateway for Southcentral residents and visitors to Prince William Sound. This access is about to improve dramatically and Whittier is in line for major changes.

In 1997, construction of a nearly \$70 million road connection between Whittier and the outside world was begun. By the summer of the year 2000, people for the first time will be able to drive to Whittier from Anchorage. Many believe this easier access to the Sound via Whittier will lead to a dramatic increase in visitors. In recent years railroad passenger trips to Whittier

have run approximately 200,000. (See Exhibit 12.) With the new access, it is expected that the number of person trips to Whittier will mushroom to 1.5 to two million per year. As time passes, these numbers are forecast to grow even larger. Investors are already showing a renewed interest in Whittier. There are plans to build hotels, expand the harbor and build other facilities to accommodate this expected surge in traffic. With over 350,000 Southcentral Alaskans living in proximity to Whittier, along with thousands of visitors from outside of the state, it is not difficult to imagine that significant changes are on the horizon for Whittier. Not only will the face of Whittier change, but this new access to the Sound will also cause traffic to grow in its other communities.

Chenega and Tatitlek

The economies of these two villages are more dependent on subsistence than any of the other communities in the Sound. Subsistence, commercial fishing, an expanding oyster farming operation in Tatitlek and a smaller one in Chenega Bay comprise most of the economic activity in these communities. In recent years, infusions of cash have come when the two village corporations

Top Ten Valdez Employers 10 1997 annual average employment

Rank	Firm	Employees
1	Alyeska Pipeline Service Company	296
2	Valdez City Schools	150
3	City of Valdez	134
4	Tidewater Marine	121
5	TCC LLC ¹	119
6	Peter Pan Seafoods	88
7	Seahawk Seafoods Inc.	70
8	Houston Contracting	64
9	AK Dep't. of Health & Social Services ²	55
10	University of Alaska	47

¹ TCC LLC operates the SERVS contract with Alyeska Pipeline Service Company, Inc.; it is a joint venture owned by Chugach Marine Services, Inc.

² Includes 1997 employment at the Harborview Developmental Center, now closed.

Source: Alaska Department of Labor, Research and Analysis Section

Valdez Employment 11 1987-1997

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total Industries	1,712	1,789	2,886	2,330	2,311	2,385	2,348	2,315	2,292	2,291	2,431
Mining	-	-	-	126	124	5	-	9	31	51	35
Construction	39	38	23	26	34	185	122	131	81	52	113
Manufacturing	200	206	261	247	288	262	258	190	289	244	239
Seafood	193	168	189	210	273	245	214	149	178	151	192
Trans/Comm/Util	373	388	1,129	541	690	740	739	569	507	610	719
Trade	144	175	236	265	229	213	247	265	259	254	260
Wholesale	6	5	2	7	11	11	12	12	13	13	13
Retail	138	170	234	258	218	202	235	253	246	241	247
Finance/Insur/R.E.	18	15	24	30	32	27	32	28	23	24	22
Services & Misc.	248	272	441	326	282	324	320	474	462	421	464
Ag/Forestry/Fishing	16	22	21	21	26	22	28	30	29	28	27
Government	674	673	751	748	606	607	602	619	611	607	552
Federal	16	16	18	17	16	15	14	14	14	15	16
State	371	377	448	422	286	280	274	259	246	227	181
Local	287	280	285	309	304	312	314	346	352	365	355

Source: Alaska Department of Labor, Research and Analysis Section

have sold land and conservation easements. These sales have provided village shareholders with an important source of cash income.

Over the past decade, projects tied to the oil spill cleanup and some infrastructure activity, such as improved boat harbors, have provided intermittent employment. There never has been much cash employment in either one of these communities. In fact, an Alaska Department of Labor special labor market survey, conducted in 1998, found that 54.2% of the adults in Chenega Bay were not part of the labor market, putting Chenega in a similar league with many other rural villages where low labor force participation is common. If Tatitlek had been surveyed, the results would probably have been similar. Incomes are low, and the role played by subsistence in the community economy is of major importance.

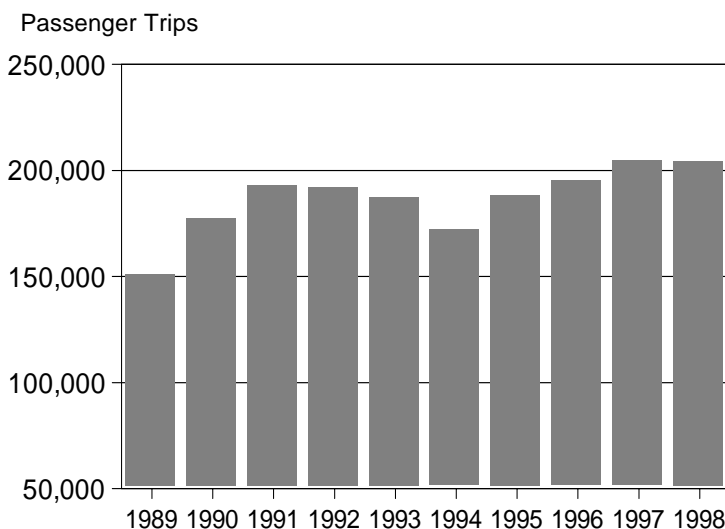
Both communities were among the places hardest hit by the oil spill. Their subsistence harvests plummeted during and after the spill, and commercial fishing has also subsided. Only in recent years did subsistence harvests climb back to pre-spill levels. Moreover, there is evidence that the mix of subsistence foods

has changed because some of the traditional foods are less plentiful or are avoided for fear of contamination. In recent years, Chenega's population has fallen dramatically, while Tatitlek's has remained more stable. The reasons for the decline in Chenega's population are not clear.

Ten years later—a mixed economic picture on the Sound

The economies of all five communities on Prince William Sound look different than they did before the spill. In some cases, the changes are subtle while others are quite dramatic. On the surface, Cordova might appear the least changed. Fishing has always dominated its economy; now salmon does so more than ever before. The size of its workforce and population has not changed much since 1989. But if one looks deeper, changes become apparent. Because of the poor runs of some fisheries, such as herring, and weak prices for salmon, the number of permits fished by Cordova residents has fallen off considerably. There is hope that the visitor industry will continue to expand in Cordova and that the health and economic value of its fisheries will return. Valdez's more diverse economy has buoyed the community's destiny. Its workforce dedicated to the moving of oil has grown considerably since the oil spill. Its burgeoning visitor industry has continued to expand. And its fish processing industry remains healthy. In the communities of Tatitlek and Chenega, subsistence uses are just now returning to levels that existed prior to the oil spill. Employment opportunities remain scarce in both of these communities and population loss in Chenega is a growing concern. Whittier's economy did not stand still with time, but much bigger changes lie ahead when this community becomes road accessible in the year 2000.

12 About 200,000 Ride Railroad to Whittier each year



Source: Alaska Railroad Corporation