Better Times in Alaska

Alaska’s economy rallied at the end of the 1980s, bringing many Alaskans improved fortunes and increased confidence. (See Figure 1 below.) But thousands of empty houses and apartments and depressed real estate prices continued to testify to the power of the recent recession.

This Review reports on the economic well-being of households in Anchorage, the Mat-Su Borough, and Fairbanks in early 1990, based on telephone surveys of hundreds of households in each area.1 The Institute of Social and Economic Research (ISER) has tracked the economic health of Anchorage households since 1987, when the recession that followed the oil price crash was at its worst. In our most recent survey we also questioned residents of Fairbanks and the Mat-Su Borough.

This publication compares conditions in the three survey places in early 1990, and describes trends in Anchorage over the past three years. We asked Alaskans about their jobs, incomes, home equity, plans to move, and expectations for the coming year.

The Municipality of Anchorage’s Economic Development and Planning Department also conducted household surveys in Anchorage in 1987, 1988, and 1989. We use findings from those surveys and from other sources to help shed light on recent economic changes in Alaska’s largest city.2

Below we highlight our most interesting findings. We then recap the conditions that created the severe recession before describing the recovery, incorporating our survey findings. Finally, we end with a snapshot glance of survey households in 1990.

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Figure 1. Signs of Economic Recovery, 1990

<table>
<thead>
<tr>
<th>Workers Reporting Higher Pay Than Last Year</th>
<th>Households Better Off Than Last Year</th>
<th>Households Purchasing Vehicle Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage</td>
<td>Mat-Su</td>
<td>Fairbanks</td>
</tr>
<tr>
<td>63%</td>
<td>61%</td>
<td>57%</td>
</tr>
</tbody>
</table>

This Review is based largely on Alaska’s Households in 1990, a report funded by Alaska Housing Finance Corporation. The report is one of several ISER prepared for AHFC on Alaska’s economy and housing markets in 1990.
brief discussion simply provides useful basic information on households in the three survey places at the start of the decade.

**HIGHLIGHTS OF FINDINGS**

**Employment and Income**
- Bigger paychecks and improved household finances were common in Anchorage, Fairbanks, and the Mat-Su Borough at the start of 1990. About 60 percent of all workers who had held the same jobs for at least a year reported they were earning more than they had been a year earlier. More than half of all households surveyed said their finances were better than they had been the previous year. (Figure 1.)

- The general economic recovery at the end of the decade partly explains the improved conditions for a big share of households. But we also know that many households hurt most by the recession left Alaska in the late 1980s. So in 1990 a bigger percentage of remaining households were those better off.

- Real (adjusted for inflation) median household income in Anchorage was about 12 percent lower at the time of our early 1990 survey than what had been reported in a 1985 survey.

- More Anchorage residents had jobs in early 1990, and more of those were in the private sector. The new jobs are concentrated in the lower-paying service industries. That shift partially explains the decline in median household income in the last half of the 1980s.

- Consumer confidence grew along with improving finances, as many households decided they could afford to make major purchases in 1989. Figure 1 shows that 41 percent of Anchorage households, 29 percent of Mat-Su households, and 34 percent of Fairbanks households bought cars or trucks that year.

- Clean-up of the Prince William Sound oil spill was a major force for economic recovery in Anchorage, the Mat-Su area, and Fairbanks in 1989. About 6 percent of Anchorage households, 9 percent of Mat-Su households, and 6 percent of Fairbanks households had at least one resident who worked directly on oil spill clean-up some time in 1989.

**Housing**
- Negative equity persists for many Alaska homeowners, with around 30 percent in all three survey locations reporting in early 1990 that they owed more on their houses than the current market value. (Figure 2.)

- Most households that own residential rental properties were losing money on them at the start of the year. Around 15 percent of all households in the survey locations own residential rentals. Of those, two-thirds in Anchorage and the Mat-Su Borough and half in Fairbanks reported in early 1990 that their costs for those properties exceeded their rental incomes. (Figure 2.)
The share of Anchorage homeowners reporting negative equity dropped from 37 percent in 1987 to 30 percent in 1990. That decline can be traced to several reasons: (1) thousands of homeowners with negative equity defaulted on their mortgages during that time; (2) housing prices appear to have stabilized; and (3) a few homeowners sold at a loss and bought new houses.

The continuing bargains in housing are attractive to many residents of the survey areas. In early 1990, nearly 25 percent of Anchorage households, 15 percent of Mat-Su households, and 13 percent of Fairbanks households planned to make local moves within the coming year. Of those planning to move, more than half in Anchorage and Fairbanks and more than 80 percent in the Mat-Su region planned to buy rather than rent.

Vacancies in Anchorage declined from 16 percent to below 14 percent—or by about 2,350 units—between 1988 and 1989. That drop was caused by a combination of about 1250 new households, 220 new second homes, and a net reduction in housing stock (the difference between housing removed and housing added) of approximately 880 units.

Roughly half the new demand created by additional households and reduced housing stock in Anchorage was filled by institutional sales of foreclosed houses and condominiums. As Figure 4 shows, the number of vacant, foreclosed houses and condominiums dropped by an estimated 1150 between 1988 and 1989. That means properties that had been in foreclosure accounted for close to half of the 2,350-unit reduction in vacancies.

The inventory of foreclosed housing in Anchorage fell by one-quarter between the summer of 1988 and the winter of 1990. The inventory dropped because more units were sold or removed from the stock than were taken in as new foreclosures. The biggest drops were in the inventories of condominiums, apartments, and zero-lot line units.

Vigorous marketing of bargain-priced condominiums helped reduce the inventory of foreclosed Anchorage condominiums by nearly half between summer of 1988 and winter of 1990. That means financial institutions sold 1,000 more condominiums than they took in during that period.

Many foreclosed properties have been very tough to re-sell. About 40 percent of Anchorage properties in foreclosure in the winter of 1990 had been there at least since the summer of 1988. A big share of those properties were apartments, but hundreds of condominiums, houses, and multi-plexes had also been in foreclosure from at least mid-1988 through early 1990.

Despite the drop in the inventory of foreclosures, about 7 percent of Anchorage's housing stock (nearly 6,000 houses, condominiums, 2-to-4-plexes, and apartments) remained in foreclosure at the start of the 1990s.

The large stock of foreclosed houses and condominiums in Anchorage in 1990 means that despite recent boosts in demand for housing, in...
prices made the State of Alaska wealthy during the first part of the decade, and it spent its oil wealth in ways that reached throughout the economy. By late 1985 Alaska's economic picture was changing. Oil prices had been drifting down since 1982, and by mid-decade a drop in state spending had already started an economic slowdown. In particular, construction began a steep decline. In the spring of 1986 oil prices crashed, and the slowdown quickly became a recession as state revenues and spending dropped.

Over the next three years Alaska lost 20,000 jobs, or nearly 10 percent of all jobs. Half of those were construction jobs. Tens

institutional sellers who are able to offer lower prices and better terms than individual sellers will continue to dominate the market until the foreclosed inventory has been liquidated.

RECESSION AND RECOVERY

Boom and Recession

The first half of the 1980s brought Alaska a tremendous economic boom. In just five years state employment grew 35 percent, population 30 percent, and personal income 70 percent. Alaska's state government created that boom by pumping tens of billions of dollars in oil revenues into the economy within a few years. High North Slope production and high oil

Figure 4. How Much did Anchorage Vacancies Drop Between 1988 and 1989?

<table>
<thead>
<tr>
<th>Total Vacancies</th>
<th>14,562</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreclosed Homes*</td>
<td>4,621</td>
</tr>
<tr>
<td>Market Vacancies</td>
<td>9,941</td>
</tr>
<tr>
<td>Total Vacancies</td>
<td>12,205</td>
</tr>
<tr>
<td>Foreclosed Homes*</td>
<td>3,473</td>
</tr>
<tr>
<td>Market Vacancies</td>
<td>8,732</td>
</tr>
</tbody>
</table>

Contribution to the Change in Market Vacancies

Stock Reduction | 881
Increased Number of Households** | 1,255
Purchase of Second Homes | 221
Reduced Foreclosure Inventory | 1,148

*Includes only single family, zero lot line, and condominium units
**Includes temporary households.

Source: Anchorage Dept. of Planning and Economic Development and property appraisal records

Figure 5. Anchorage Housing in Foreclosure Summer 1988 and Winter 1990

<table>
<thead>
<tr>
<th></th>
<th>Single Family</th>
<th>Condominiums</th>
<th>Apartments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Both Years</td>
<td>Both Years</td>
<td>Both Years</td>
</tr>
<tr>
<td>Single Family</td>
<td>1580 1345</td>
<td>2183 1508</td>
<td>2118 1534</td>
</tr>
<tr>
<td>Zero Lot Line</td>
<td>858 390</td>
<td>1514 428</td>
<td>1040</td>
</tr>
<tr>
<td>2-4 Plex</td>
<td>1165 646</td>
<td>1514 428</td>
<td>1040</td>
</tr>
</tbody>
</table>

Source: Anchorage Dept. of Planning and Economic Development and property appraisal records
of thousands of people, mostly residents of Anchorage and other urban areas, left Alaska. The most obvious result of the exodus was on the housing markets, particularly in urban areas. With many more people leaving than arriving, thousands of houses and apartments stood empty. Homeowners were unable to sell their houses and condominiums. Mortgage defaults mushroomed, and institutions took scores of properties into foreclosure. Prices sank, particularly for mobile homes and condominiums.

Problems in the housing market were most severe in Anchorage and the nearby Mat-Su region. Anchorage had seen the fastest growth in the early 1980s, including a housing boom that increased the housing stock by 40 percent. When the recession came, Anchorage's economy was hit the hardest.

The Mat-Su Borough's housing market was hurt even more than Anchorage's, because during the early 1980s it had increasingly become a bedroom community for Anchorage. As land for building became scarcer and prices soared in Anchorage, more and more people who couldn't afford to buy in the city moved to the Mat-Su Borough and commuted to Anchorage. As a result, the Mat-Su went through its own housing boom. When Anchorage prices dropped Mat-Su prices plummeted even further—partly because now more people could afford to live in Anchorage.6

**Economic Recovery**

By mid-1988 the recession had subsided—mostly because the jobs that couldn't be sustained with less state spending had disappeared. Toward the end of 1988 the economy began creating jobs again.

In 1989 the recovery picked up steam, creating thousands of new jobs. Several factors accounted for 1989 economic growth, including jobs and income created by the clean-up of the March 1989 Prince William Sound oil spill; new jobs in fishing and logging; and a rebound in state and local government spending.7 ISER's 1987-1990 households surveys documented the economic turnaround.

**Household Finances and Hourly Pay**

Figure 6 shows that since 1987 more and more Anchorage households have reported being better off than in the previous year, increasing from just 38 percent in 1987 to 58 percent in February 1990. Households' confidence about the well-being of their communities also increased sharply, with more than twice as many Anchorage households believing the city was better off in 1990 than in 1988. Earlier, in Figure 1, we showed that substantial percentages of Mat-Su and Fairbanks households also reported being better off in 1990 than they had been in 1989.

Another sign of improving economic conditions was that the share of Anchorage workers reporting higher pay has steadily increased, although the jump was the biggest between 1987 and 1988. As Figure 7 shows, in mid-1987 just 46 percent of workers who had held their jobs at least a year reported earning more. By late 1988, that share had jumped to 60 percent, and it increased to 63 percent in early 1990. Earlier, in Figure 1, we showed that 61 percent of Mat-Su workers who had held their jobs at least a year and 57 percent of Fairbanks workers also reported earning more in 1990.

But Figure 7 also shows that hours worked and job benefits were much more likely to remain the same than to increase throughout the late 1980s. And in every survey, close to one in five workers said job benefits had been reduced in the previous year. That finding goes along with a national

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**Figure 6. Anchorage Household and Community Finances 1987 - 1990**

<table>
<thead>
<tr>
<th>Households Who Believe They Are Better Off Than Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1987</td>
</tr>
<tr>
<td>38%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Households Who Believe Their Community is Better Off Than Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1987</td>
</tr>
<tr>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: ISER Household Surveys
trend in which employers are holding down costs by holding down benefits (particularly health benefits).

Employment Differences

Although our 1990 findings about higher pay and improved household finances were similar in the three survey communities, there were differences in employment patterns in the Mat-Su Borough, as Table 1 shows. The table reports overall labor force participation, employment, and unemployment in the survey places in February 1990.

The overall share of adults in the labor force was similar in the three places, ranging from 82 to 86 percent. But much bigger share of adults in Anchorage and Fairbanks (79 percent and 76 percent) had jobs than in Mat-Su (63 percent). And many more adults in Mat-Su had been out of work for longer than a year (7 percent) than in Anchorage or Fairbanks (1 percent).

Part of the explanation of higher unemployment in the Mat-Su region in February is that there are many more seasonal workers in that area than in Anchorage or Fairbanks, and the Mat-Su region has historically had higher unemployment rates. But the fact that there were so many more people who had been out of work longer than a year indicates that Mat-Su residents who lose their jobs are less likely to move than are Anchorage or Fairbanks residents.

Household Income

Finally, despite our survey findings that confirm strong economic growth in 1989, we found that the real buying power of Anchorage households in 1990 was less than it had been five years earlier. (We do not have comparable income figures over time for Fairbanks or the Mat-Su region.)

Figure 8 shows changes in Anchorage median household income income from the time of the 1980 census until our February 1990 survey. The numbers are in 1988 dollars—an adjustment that eliminates the effects of inflation and lets us look at changes in purchasing power over time. (Median income is a mid-point, with 50 percent of households having
higher incomes and 50 percent lower incomes.) Between the 1980 census and a 1985 ISER survey, the annual median income of Anchorage households increased 28 percent. That reflects the fact that during the boom years not only did wages increase, but also that many of the jobs created were high-paying ones in construction and other industries.

At the time of our June 1987 survey, the median income had dropped sharply; the city was suffering high unemployment and many households were preparing to leave the city. By late 1988, many households hurt worst by the recession had in fact left, and the reduced number of households remaining were survivors—who tended as a group to have higher incomes.

Our most recent survey was taken after a number of new households had moved to the city and after a number of new but generally lower paying jobs in service industries had been created. The combination of those factors—more households and more lower-paying jobs—tended to make the 1990 median little different from or even lower than the 1988 median.

The most interesting comparison in Figure 8 is between the 1985 and the 1990 findings, with the 1990 median 12 percent lower than it had been five years earlier. That decline reflects a change in the composition of Anchorage jobs, with the loss of some higher paying jobs and the creation of new lower paying ones.

**Housing: Good and Bad News**

Today's housing markets are good news for many and bad news for some. Prices and rents have not increased significantly—which is good news for renters and prospective buyers but bad news for existing owners and landlords who bought when prices were much higher. The price slide does appear to have stopped and vacancies and foreclosures are down. Much of the poorer quality stock in Anchorage has been demolished, moved, or converted, but financial institutions still own thousands of properties.

**Price Changes, 1980-1989**

Figure 9 illustrates the rise and fall and, finally, the apparent leveling off in urban housing markets in the 1980s: it is a price index tracking the changing price of a standard single-family house in Anchorage, the Mat-Su Borough, and Fairbanks. (The price index is based on 1986 sales financed by AHFC.)

Prices in Anchorage started higher and went up faster in the early 1980s than in the Mat-Su region or Fairbanks. Mat-Su and Fairbanks prices were fairly close through 1987, when the Mat-Su price collapsed but the Fairbanks price fell much less and more slowly.

In 1986 Anchorage prices began to slide; between 1986 and 1989 the price of the standard house dropped 25 percent. The drop was much steeper in Mat-Su: from 1987 through early 1989 the house price dropped roughly by half.

The price of the standard single-family house in Fairbanks began drifting down in 1986 and continued to drop gradually through 1990, decreasing about 20 percent. Prices in Fairbanks were perhaps shored up by expectations about the demand that would be created when a new light infantry division moved to the city. That demand was less than expected, and Fairbanks prices continued down through 1989. They will likely stabilize in 1990.

The figure makes it plain that the Mat-Su market was hardest hit by the recession. While prices in Anchorage and Fairbanks fell close to where they were at the start of the decade, prices in Mat-Su collapsed far below the 1980 level.

The price drops in Figure 9 don't show the full severity of the market crash, because single-family
houses held their value better than any other kind of residential property in the late 1980s. Condominium prices in Anchorage collapsed 50 percent or more, and mobile home prices dropped to a fraction of their previous levels.

ISER projects that populations of the survey areas will grow modestly in the next few years, and that housing prices aren’t likely to increase much over the rate of inflation until the financial institutions have eliminated their inventories of foreclosed properties.9

Households Leaving Alaska

When tens of thousands of residents left Alaska in the late 1980s, urban areas were left with much more housing than the smaller population needed—and so prices and rents fell. ISER surveys have found that the percentage of Anchorage households planning to leave the state has steadily dropped, which is good news for the housing markets. Figure 10 shows that the percentage of Anchorage households planning to leave dropped from a peak of 14 percent in November 1987 to 9 percent in February 1990. Throughout the period, most of those planning to leave Anchorage said the moves were related to jobs—either they were unable to find jobs in Alaska, or hoped to find better jobs elsewhere, or their employers were transferring them. It seems likely that more of those planning to leave in late 1987 were going because they couldn’t find jobs here.

We don’t know how the percentages of Mat-Su and Fairbanks households planning to leave Alaska changed over the past three years, but we do know that in early 1990 the percentages were around 7 to 8 percent—close to Anchorage’s. Most Fairbanks and Mat-Su residents planning to leave the state also cited job-related reasons.

Still A Buyers’ Market

In early 1990 a substantial number of households in all three survey places planned to make local moves within the coming year, mostly to improve housing quality. (Figure 11.) This “flight to quality” has been going on since the real estate market crashed, and in Anchorage more and more households have been taking advantage of depressed prices and rents since 1987. (Figure 12.) In 1987 16 percent of Anchorage households planned to move locally within the coming year. By late 1988 that share was up to 19 percent, and in February 1990 it had jumped to 24 percent—which amounted to one in four households. Most households in every year said the chance to improve housing quality was prompting the moves.

Most of those planning local moves were renters. Close to 70 percent of renters in the three survey locations believed 1990 was a good time to buy homes. Most Anchorage renters since 1987 have found the buying climate
good, but the percentage dropped off considerably from a peak of 80 percent in October 1988 to 67 percent in February 1990. It may be that since prices have stabilized and many foreclosures have been re-sold some renters believe there are fewer bargains now than in 1988.

SNAPSHOT OF SURVEY HOUSEHOLDS

Figure 13 provides a general picture of survey households at the start of the 1990s—what types of households they were, how long they had lived in their communities, whether they owned or rented homes, and what their incomes were. The differences we see are mostly because Anchorage and Fairbanks are more urban and the Mat-Su Borough is semi-rural. The two cities have more renters, more persons living alone, and more households with very high incomes. The Mat-Su has more families, fewer renters, and more households that own their homes outright, without mortgages.

Household Composition

The composition of survey households didn't vary much among Anchorage, Fairbanks, and the Mat-Su Borough in early 1990. Married couples with children were the most common in all three places, but the proportion was higher in the Mat-Su area (47 percent) than in Anchorage (39 percent) or Fairbanks (43 percent). The share of households with just one person was higher in Anchorage and Fairbanks than in the Mat-Su. About 10 percent of households in all three places were single-parent households.

Length of Residence

Alaska has always been a place where many people come and go, but Figure 13 shows that a big share of households stay longer than a few years. Around 40 percent of households in the three survey places had lived in Alaska 20 years or more, and substantial shares (an additional 24 to 38 percent) had been in the state 10 years or more. Newcomers—those who had been in the state less than 2 years—made up substantially more of the population in Anchorage (13 percent) and Fairbanks (12 percent) than in the Mat-Su area (6 percent).

Renters and Homeowners

There are more homeowners than renters in all of the survey places, but in the Mat-Su region homeowners (77 percent) particularly outweigh renters (23 percent). Substantial numbers of households, especially in the Mat-Su Borough, own their homes outright, with no mortgages. About 9 percent of Anchorage households, 24 percent of Mat-Su households, and 16 percent of Fairbanks households own their homes outright.

Household Income

Median household incomes (meaning half the households have incomes above and half below) for
Figure 13. Snapshot of Survey Households, 1990

Household Composition

<table>
<thead>
<tr>
<th>City</th>
<th>Composition</th>
<th>Non-Family</th>
<th>Couple Only</th>
<th>Single Parent</th>
<th>Single Person</th>
<th>Other Family</th>
<th>Average Household Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage</td>
<td>39%</td>
<td>8%</td>
<td>23%</td>
<td>10%</td>
<td>18%</td>
<td>2%</td>
<td>2.76</td>
</tr>
<tr>
<td>Mat-Su</td>
<td>47%</td>
<td>7%</td>
<td>21%</td>
<td>10%</td>
<td>14%</td>
<td>2%</td>
<td>3.04</td>
</tr>
<tr>
<td>Fairbanks</td>
<td>43%</td>
<td>5%</td>
<td>22%</td>
<td>9%</td>
<td>20%</td>
<td>1%</td>
<td>2.87</td>
</tr>
</tbody>
</table>

Length of Residence

- Anchorage: 40% 20 Years or more, 24% 10 Years or more, 23% 4 Years or more, 7% 2 Years or more, 6% 1 Year or less
- Mat-Su: 41% 20 Years or more, 38% 10 Years or more, 16% 4 Years or more, 3% 2 Years or more, 3% 1 Year or less
- Fairbanks: 40% 20 Years or more, 28% 10 Years or more, 20% 4 Years or more, 8% 2 Years or more, 4% 1 Year or less

* Telephone surveys tend to underestimate the number of single person households. The Municipality of Anchorage's 1989 survey found 22% of households were single person households.

Number of Respondents for composition, residence, and ownership- Anchorage: 408
Mat-Su: 105 Fairbanks: 410,
for income - Anchorage: 377 Mat-Su: 95
Fairbanks: 360
Renters and Homeowners

<table>
<thead>
<tr>
<th>Ow n - Mortgage</th>
<th>No Mortgage</th>
<th>No Cash</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>51%</td>
<td>9%</td>
<td>3%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Rent: 37%

Household Income

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Percentage</th>
<th>Average</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $15,000</td>
<td>13.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$16 - $30,000</td>
<td>20.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$31 - $45,000</td>
<td>17.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$46 - $60,000</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$61 - $75,000</td>
<td>19.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$76 - $90,000</td>
<td>7.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$90 - $105,000</td>
<td>4.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than $105,000</td>
<td>8.5%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average: $52,300
Median: $44,000

Length of residence refers to the member of the household who has been living in Alaska the longest.

Telephone surveys underestimate the proportion of renters.

Our survey slightly overestimates income because we undersample poor households (households without telephones are usually poor).
1989 were close in the survey places, with Anchorage's at $44,000, Mat-Su's at $45,000, and Fairbanks' at $40,000. Notice that the average 1989 household income (derived by dividing total household income by the number of households) for Anchorage of $52,300 was considerably higher than for either Fairbanks ($44,000) or the Mat-Su Borough ($44,500). That's because Anchorage has many more households with very high incomes, which draw up the average; while 13 percent of Anchorage households had incomes above $90,000 in 1989, less than 3 percent of Mat-Su households and around 7 percent of Fairbanks households had incomes that high.

ENDNOTES

1. The survey was a random sample of 408 Anchorage households, 105 Mat-Su households, and 410 Fairbanks households. In the Mat-Su Borough we surveyed only households in the Palmer, Wasilla, and Big Lake areas; characteristics of households in the more rural areas of the borough would probably be somewhat different. ISER's telephone surveys probably slightly overestimate household income because they miss households without telephones, which are usually poorer ones. Also, they probably somewhat underestimate the proportions of households that rent, since those who live alone and those who don't have telephones tend to be renters. Finally, telephone surveys provide no information on housing vacancies, since of course they cover only occupied places. Our survey margin of error is ± 5 percent in Anchorage and Fairbanks and ± 10 percent in the Mat-Su.

2. The municipality surveyed 5,000 households. The survey questionnaires were mailed out and interviewers followed up with telephone calls or visits when necessary.


4. ISER's findings on the economic effects of the clean-up of the 1989 Prince William Sound oil spill will be reported in an upcoming Research Summary.


7. See note 3 for source. ISER will be publishing economic projections for Alaska in an upcoming Alaska Review of Social and Economic Conditions.

8. The municipal survey found a median Anchorage household income of $40,000 in mid-1989. ISER's survey may have slightly overestimated household income in early 1990, but because the majority of income from clean-up of the 1989 Prince William Sound came in the last part of 1989, household income as reported in early 1990 was probably higher than in mid-1989.