Institute of Social and Economic Research University of Alaska Anchorage

RESEARCH SUMMARY

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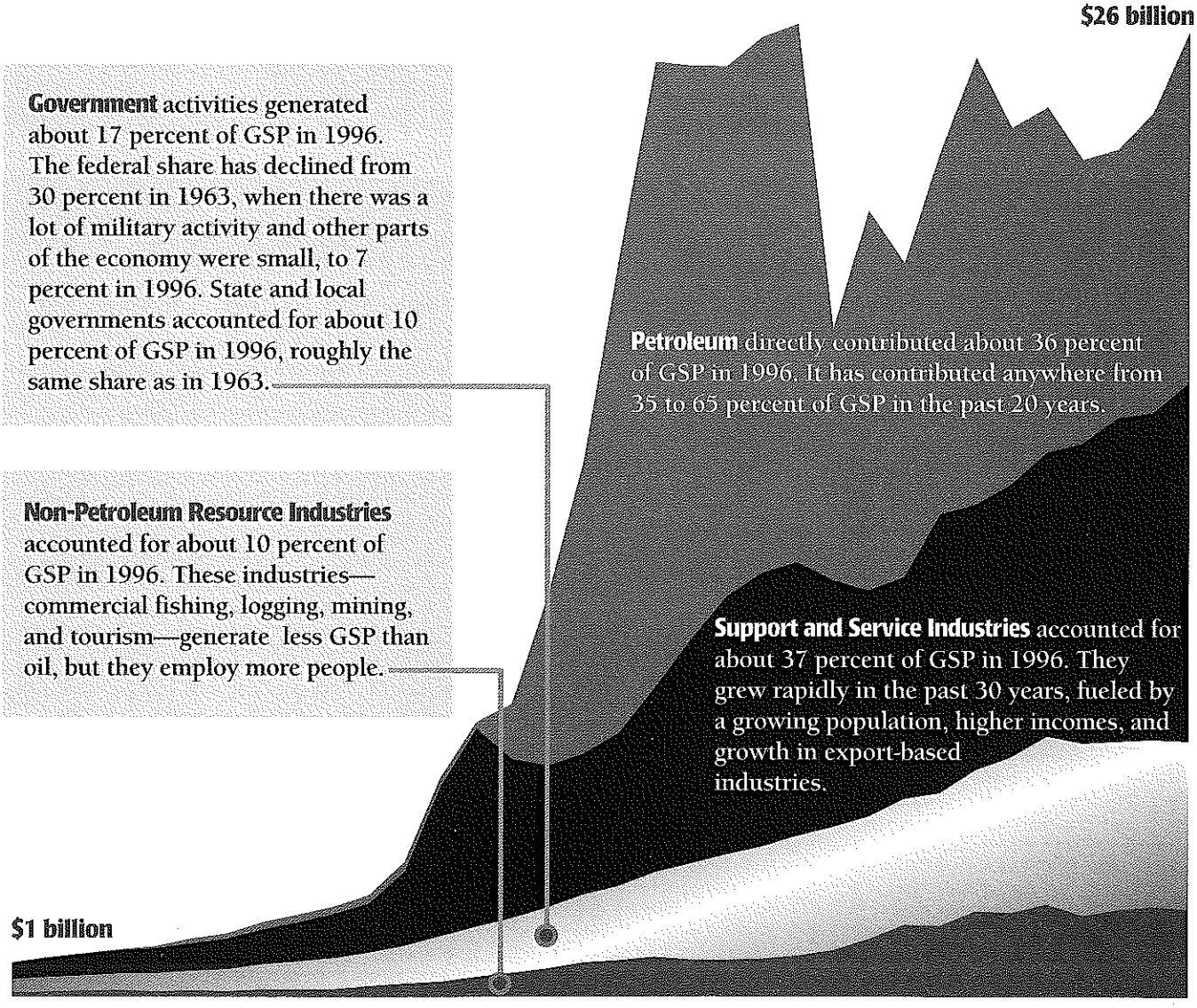
ALASKA'S GROSS STATE PRODUCT, 1963-1996

Alaska's 1996 gross state product (GSP) was about $26 billion. GSP is the value of everything businesses and government in Alaska produce in a year.[1] The figure below shows state GSP from 1963 to 1996 in nominal dollars—that is, not adjusted for inflation.

The biggest influence on Alaska's GSP since 1977 has been North Slope oil production—which not only increased GSP from petroleum, but indirectly contributed to large increases in GSP of state and local government and of service and support industries.

This *Research Summary* is based on a report by Scott Goldsmith and Teresa Hull (see back page). The GSP figures for 1995 and 1996 are preliminary estimates.



Looking at Changes in GSP

We can look at Alaska's changing GSP either:

(1) *with the effects of both price and quantity changes (front page graphic, Table 1, and Figures 1 and 2);* or

(2) *with the effects of just quantity changes (Table 2).*

Alaska's economy is dominated by commodity industries (oil, fish, minerals, timber) that sell to markets where prices fluctuate dramatically. Using these market prices to value GSP (Table 1) causes the composition of GSP to shift with changing prices for commodities, independent of changing production. For example, while oil production was virtually the same in 1985 and 1987, oil contributed 55 percent of GSP in 1985 but only 48 percent in 1987—because oil prices were much lower in 1987.

Adjusting for the effects of inflation (Table 2) isolates the GSP changes that are just the result of changes in quantities produced. However, the importance of different sectors to total GSP depends on the base year chosen. We used 1996 as the base year in Table 2—which adjusts oil, fish, timber, and mineral prices in earlier years to 1996 price levels.

GSP changes from 1963 to 1996 are summarized on the next two pages. Remember, though, that GSP is just one measure of economic contribution; jobs and income generated by various industries are also important measures.

Figure 1. Composition of Alaska GSP 1963 and 1996

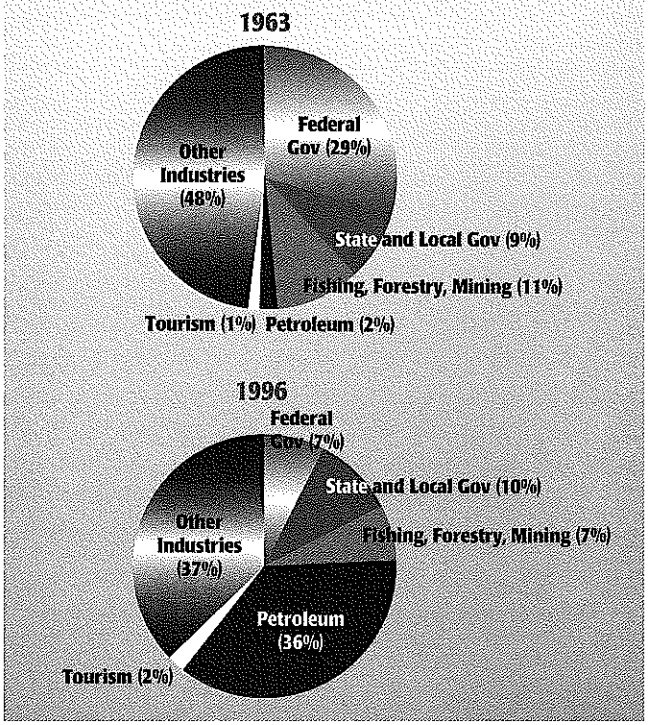


Table 1. Alaska Gross State Product, by Sector, Selected Years
(In Millions of Dollars)

	1963	1970	1977	1981	1985	1986	1990	1994	1995	1996
Total GSP	$921	$1,996	$7,855	$25,060	$26,074	$17,909	$25,160	$22,712	$23,708	$25,855
Total Minus Petroleum	$900	$1,796	$6,371	$8,284	$11,642	$11,165	$13,194	$15,512	$15,642	$16,460
Petroleum	$21	$200	$1,484	$16,777	$14,432	$6,744	$11,966	$7,200	$8,066	$9,395
Seafood	$60	$110	$349	$654	$615	$724	$1,123	$1,166	$1,201	$1,062
Forest Products	$31	$57	$143	$171	$109	$141	$439	$290	$298	$275
Mining	$6	$9	$17	$48	$63	$58	$346	$335	$384	$418
Tourism	$11	$19	$124	$185	$304	$305	$379	$529	$526	$574
Agriculture	$1	$2	$5	$2	$2	$8	$8	$11	$12	$12
Public Utilities	$18	$37	$142	$208	$388	$378	$497	$544	$516	$567
Transportation[a]	$51	$104	$357	$502	$547	$493	$651	$927	$917	$921
Construction	$79	$187	$1,407	$900	$1,309	$978	$815	$1,069	$1,070	$1,248
Communications	$62	$73	$262	$404	$496	$491	$397	$544	$525	$614
Services[b]	$60	$138	$744	$954	$1,446	$1,353	$1,689	$2,057	$2,171	$2,213
Trade[b]	$98	$223	$678	$970	$1,605	$1,480	$1,563	$1,904	$1,928	$2,031
Finance, Ins., Real Estate	$68	$138	$586	$826	$1,453	$1,419	$1,207	$1,538	$1,524	$1,857
Misc. Manufacturing[c]	$5	$30	$98	$197	$95	$29	$298	$84	$105	$164
Federal Government	$271	$457	$769	$1,004	$1,256	$1,314	$1,712	$2,014	$1,953	$1,906
State and Local Govt.	$79	$212	$690	$1,259	$1,955	$1,994	$2,069	$2,501	$2,513	$2,598

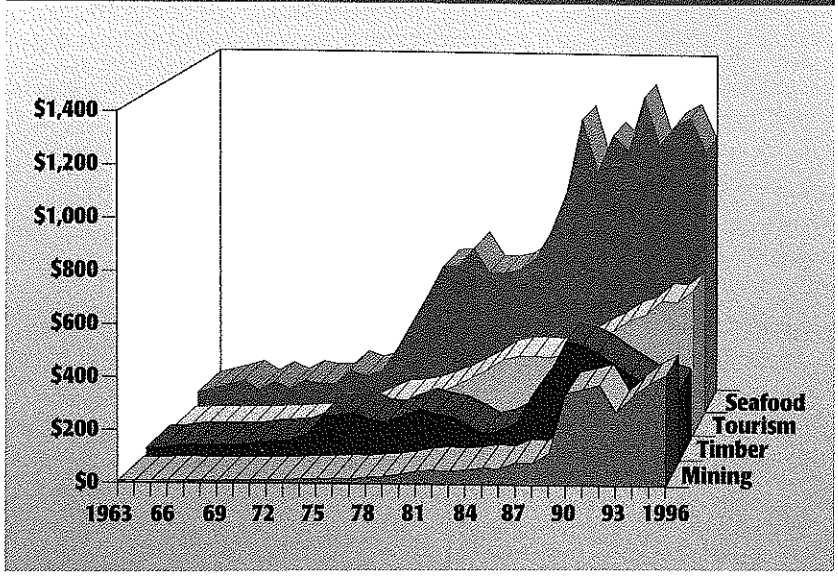
[a] Net of tourism and oil pipeline [b] Net of tourism [c] Net of petroleum, seafood, and forest products processing

Summary of Changes, 1963-1996

- Alaska's estimated 1996 GSP—not adjusted for inflation—was 20 times larger than the 1963 GSP. But even when we adjust for inflation, the real growth in production was substantial—about six-fold. Much of that growth was attributable, either directly or indirectly, to petroleum development.

- The biggest change in the composition of GSP since 1963 has been the shift from dominance of federal activities to dominance of petroleum production. Petroleum also creates GSP indirectly in many other parts of the economy—especially in state and local governments and in support and service industries.[2] That's largely because state government, which owns the Prudhoe Bay oil field, has for 20 years collected very substantial taxes and royalties from North Slope oil production—and it has spent those oil revenues in ways that reach throughout the economy.[3]

Figure 2. GSP of Non-Petroleum Resource Industries, 1963-1996 (In Millions of Dollars)



- Aside from petroleum, the fastest-growing sectors between 1963 and 1996 were tourism, mining, and service industries. Just behind them were trade, finance and public utilities.

Table 2. Real Alaska Gross State Product, by Sector, Selected Years
(In Millions of 1996 Dollars)

	1963	1970	1977	1981	1985	1986	1990	1994	1995	1996
Total GSP	$5,640	$8,790	$14,105	$23,334	$27,224	$25,116	$27,394	$26,065	$25,539	$25,854
Total Minus Petroleum	$5,495	$7,378	$11,388	$12,296	$15,112	$14,317	$15,591	$16,414	$15,971	$16,458
Petroleum	$145	$1,412	$2,717	$11,038	$12,112	$10,799	$11,803	$9,651	$9,568	$9,396
Seafood	$281	$386	$518	$858	$787	$782	$961	$1,135	$1,150	$1,062
Forest Products	$107	$157	$247	$223	$137	$177	$481	$299	$301	$275
Mining	$45	$54	$40	$56	$76	$68	$272	$358	$389	$418
Tourism	$57	$83	$208	$280	$413	$430	$500	$603	$520	$574
Agriculture	$9	$10	$7	$2	$3	$8	$7	$11	$11	$12
Public Utilities	$78	$125	$253	$297	$481	$467	$560	$582	$545	$567
Transportation[a]	$507	$855	$743	$1,040	$1,042	$972	$1,209	$1,324	$907	$920
Construction	$502	$682	$1,801	$1,108	$1,748	$1,315	$998	$1,189	$1,208	$1,248
Communications	$140	$140	$357	$446	$523	$526	$453	$582	$558	$614
Services[b]	$262	$446	$1,093	$1,212	$1,655	$1,618	$1,855	$2,033	$2,132	$2,213
Trade[b]	$294	$535	$1,024	$1,168	$1,735	$1,653	$1,650	$1,891	$1,921	$2,031
Finance, Ins., Real Estate	$280	$440	$1,135	$1,270	$1,798	$1,705	$1,450	$1,644	$1,609	$1,856
Misc. Manufacturing[c]	$21	$94	$207	$342	$154	$47	$470	$107	$118	$164
Federal Government	$2,388	$2,455	$2,233	$2,111	$2,160	$2,170	$2,237	$2,084	$1,996	$1,906
State and Local Govt.	$525	$914	$1,523	$1,885	$2,401	$2,381	$2,488	$2,573	$2,607	$2,598

See notes to Table 1.

- The slowest growth was in federal GSP, which actually declined when adjusted for inflation. Agriculture GSP increased just slightly.

- Seafood prices, like other commodity prices, move up and down. But for most of the time in the 1980s and early 1990s the GSP from seafood was up—because extension of U.S. territorial waters to 200 miles offshore meant growth in the bottomfish fisheries, and because salmon runs and prices were high. In the past few years, weaker prices have depressed seafood GSP.

- Tourism GSP has increased almost continuously since Alaska became a state. It is one of the few Alaska industries that is independent of cyclical movements in the resource industries, depending more on national and international trends in tourism. We estimated tourism GSP by estimating the share of Alaska's service, trade, and transportation industries that serve tourists.

- The opening of several large new mines in Alaska in the past decade has meant substantial growth in mining GSP. But because prices of zinc, silver, gold, and other minerals are volatile, that growth has not been steady.

Endnotes

1. This includes the value of goods, services, and capital investment. It is Alaska's contribution to the U.S. gross domestic product (GDP). It includes the value of commodities produced for export (like oil and fish) as well as goods and services produced for residents (like medical care). We estimate GSP by using market prices, minus the cost of any goods and services used in production. For example, the GSP of pulp is the market value of pulp, minus the costs of logs, petroleum, and other goods and services purchased for pulp production.

2. In future calculations of GSP, we hope to estimate how much of the GSP of other sectors is attributable to petroleum activity; we know it is a significant share.

3. For a description of how the state government spent its oil revenues during the first half of the 1980s—when oil prices and production peaked—see "Where Have All the Billions Gone?" in ISER's *Alaska Review of Social and Economic Conditions*, Vol. 24, No. 1, February 1987.

This summary is based on the report, *Alaska's Gross State Product: 1963 to 1996*, prepared by Scott Goldsmith and Teresa Hull for the Alaska Department of Commerce. It's available from ISER (907-786-7710) in the library building on the UAA campus for $2.50 or by mail for $3.50 at the address in the mailing label below.

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