

Alaska's Construction Spending

2006 Forecast

For the
**Construction Industry
Progress Fund
and the
Associated General
Contractors of Alaska**

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Dear Fellow Alaskan:



For the third consecutive year, the Construction Industry Progress Fund (CIPF) and the Associated General Contractors of Alaska (AGC) have published this "Alaska Construction Spending Forecast."

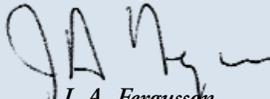
Written for the CIPF and the AGC by Scott Goldsmith and Mary Killorin of ISER at the University of Alaska, Anchorage, the Forecast is both a review and an estimate of the construction activity that will take place in Alaska during the ensuing year.

We are pleased to be able to make this booklet available to you. Alaska's construction industry contributes more than \$6.5 billion to the state's economy or 19% of the gross state product.

The AGC of Alaska is a non-profit, full service construction association for commercial and industrial contractors, subcontractors and associates. The CIPF is organized to advance the interests of the construction industry in the State of Alaska.

Remember, when the construction industry is vibrant, so is the State's economy. AGC and CIPF are helping build your quality of life.

Sincerely,



J. A. Fergusson
President

Overview

Total construction spending in Alaska in 2006 will be \$6.525 billion, an increase of 13% from a revised figure of \$5.755 billion in 2005.¹ This is the amount of money that will "hit the street" for construction during the year.²

Because of increases in the cost of materials during 2005, industry employment and other measures of activity will not expand as much as spending, but 2006 will be another very strong year for the construction industry with some sectors, most notably education, up sharply from 2005.

Uncertainty in the forecast for 2006 comes from the likelihood that material prices will continue to be volatile due to strong demand. This may negatively impact some major projects, as was the case in 2005. For example the Alyeska pipeline reconfiguration project was originally scheduled for completion last year, but cost overruns (and possibly other factors) caused total spending to increase substantially and the estimated time for completion to be moved into 2006.

As in past years, some firms are reluctant to reveal their investment plans to avoid alerting competitors,

¹ Several large projects anticipated in 2005 that were postponed or cancelled included a refinery upgrade, a new electric generating plant, two mines, and a pipeline reconfiguration. Federal spending was underestimated in 2005. The net result was a downward revision of the 2005 spending estimate from \$5.940 to \$5.755 billion.

² We define total construction spending broadly to include not only the construction industry as defined by the U.S. Department of Commerce and the Alaska Department of Labor, but other activities as well. Specifically, our construction spending figure encompasses all the spending associated with construction occupations (including repair and renovation, but excluding design and planning), regardless of the type of business where the spending occurs. For example, we include the capital budget of the oil and gas and mining industries in our figure, except for large identifiable equipment purchases such as new oil tankers.

and some have not completed their 2006 planning. Large projects often span two or more years, so estimation of cash that "hits the street" this year is difficult. And tracing the path of federal spending coming to Alaska without double counting is a challenge. We are confident of the overall pattern of the forecast, but some surprises should be expected, as is always the case.

PRIVATE CONSTRUCTION

Privately funded construction projects will account for about 60% of total construction spending in 2006. This represents an 11% increase in spending compared to the revised total of \$3,525 million in 2005.

Oil and Gas: \$2,040 Million

Spending in 2006 will be up about 20% over last year due to an increase in exploration and development activity on the North Slope and in Cook Inlet as well as investments in refinery and pipeline upgrades, some of which were delayed from 2005 due to cost increases and other factors.

The North Slope majors—BP, Conoco Phillips, and Exxon—expect to invest \$1.5 billion in their Alaska operations in 2006, excluding tanker purchases. Much of this will be spent optimizing production from existing fields, but the development of satellites will continue as well as exploration activity.

Alaska Construction Spending 2006 Forecast

	Level	Change
PRIVATE	\$ 3,925,000,000	11%
Oil and Gas	2,040,000,000	19%
Mining	200,000,000	5%
Other Basic Industry	50,000,000	–
Residential	715,000,000	2%
Commercial	300,000,000	20%
Hospitals	220,000,000	–37%
Utilities	400,000,000	45%
PUBLIC	\$ 2,600,000,000	17%
National Defense	730,000,000	8%
Highways	450,000,000	13%
Airports and Ports	330,000,000	–
Alaska Railroad	80,000,000	7%
Denali Commission	100,000,000	–
Education	310,000,000	107%
Other Federal	400,000,000	23%
Other State & Local	200,000,000	14%
TOTAL	\$ 6,525,000,000	13%

Source: Institute of Social and Economic Research

The independents on the North Slope, particularly Pioneer, will make a significant contribution to exploration activity. Nine exploratory wells have been announced for this year.

In Cook Inlet, exploration and development spending by Marathon and others is expected to be higher this year. But that is contingent both on Marathon getting approval of its gas storage facility, and Chevron, who bought out Unocal in 2005, proceeding with its previously announced expenditure plans of \$60 million for the year.

The project to reconfigure the Alyeska pipeline, which began in 2005, faced significant cost overruns and has been moving forward more slowly than originally anticipated. And the Flint Hills refinery upgrade was canceled last year, but a smaller upgrade at the Tesoro refinery is scheduled for this year.

Mining: \$200 Million

Spending by the mining industry, on exploration, development and construction of new mines, as well as

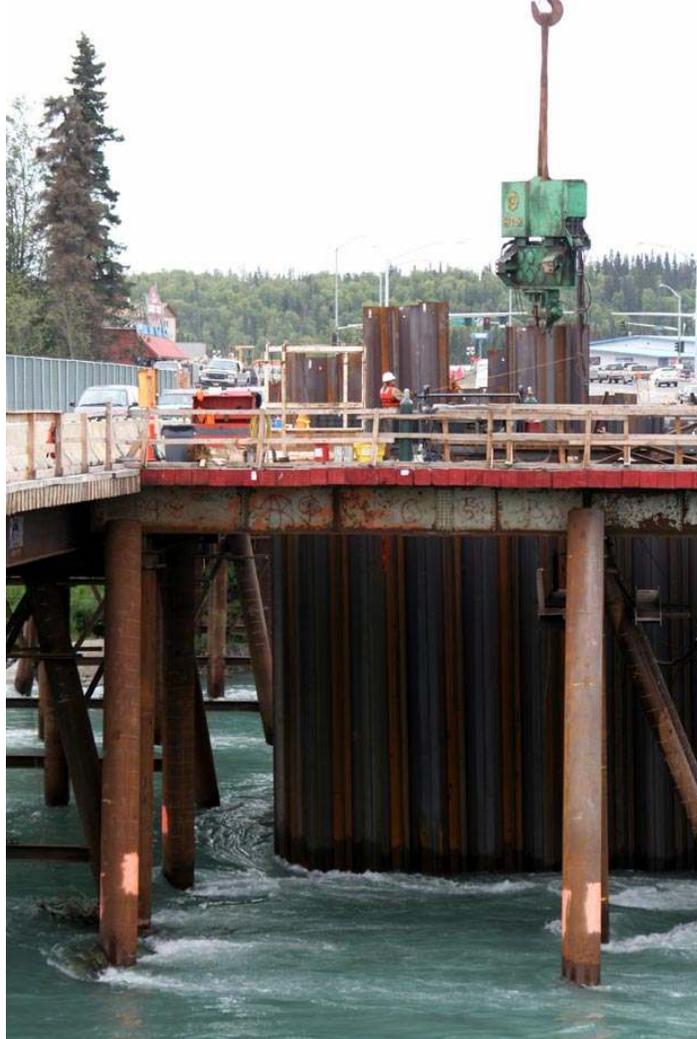
upgrading existing mines, will be about 5% above 2005.

About \$120 million of construction spending in 2005 went towards the development of the Pogo Mine outside Fairbanks. Its completion will not reduce total spending in the mining sector, however, because two large mining projects, announced for 2005, did not go forward last year.

One is the Kensington Mine in Southeast Alaska that continues to move toward the construction stage of development. We have included construction startup in the forecast for this year. A budget of \$70 million for the first year of construction is expected.

The timetable of the smaller Rock Creek project at Nome has also slipped from last year to 2006. We assume it will be under construction this year with a budget expected to be about \$40 million.

Exploration continues at several major sites, including Donlin Creek, Pebble, and Beluga. Expenditures at these sites are modest, but in future years, development of one or



Sterling Highway Kenai River Bridge, Soldotna

more of these prospects would have a large impact on construction spending in the mining sector.

As in years past, upgrades

are expected at some of the existing large mines around the state, in particular at Red Dog and Ft. Knox. Smaller capital budgets are expected at True North, Greens Creek, and Usibelli.

In addition, the normal operations at these and the smaller mines and prospects throughout the state require annual construction spending for maintenance, repair, and upgrading of facilities.

Other Basic Industries: \$50 Million

There are no reported large construction projects announced for the seafood, timber, and manufacturing sectors this year.

The tourism industry continues to add new and expand existing facilities outside the major metropolitan



UAF Museum of the North Addition, Fairbanks



Eagle River High School, Eagle River

areas this year. Westmark intends to build a new hotel in the Denali area and Princess will be expanding two of its hotels. We anticipate a scattering of other smaller projects.

**Residential:
\$715 Million**

Although expenditures in residential construction will be slightly higher than last year, activity will be down modestly due to the increase in construction costs in this

sector. Growth will continue to be driven by population increase, but demand will be tempered by higher prices and interest rates. These tighter conditions will continue to shift demand away from single family and toward multifamily and rehab.

We will continue to see a shift in new residential construction in the largest population center, away from Anchorage and toward the Matanuska-Susitna Borough. Anchorage residential construction will be increasingly

composed of multi-family units and higher value single family units.

Activity in Fairbanks will slow in 2006, after a small boom associated with the buildup to accommodate the new Stryker Brigade at Fort Wainwright and the development and upgrading of mines in the surrounding area.

Activity in the rest of the state will be mixed, depending on local economic conditions. Juneau and the Kenai Peninsula in particular will see strong residential spending.

**Commercial:
\$300 Million**

Private commercial construction spending consists of a wide range of building types including retail, office, hotel, and warehouse space.³ Some growth is driven by both the size and growth in the economy, but the level of spending in this sector tends to be somewhat volatile, as a certain amount of activity depends on the level of optimism about the prospects for the economy. This year we expect spending to be up about 20% statewide, with a large share of that concentrated in Anchorage where a new convention center and museum expansion are planned. Several large office buildings are also in various stages of planning and other projects, including new hotels, and both cargo terminals and rental care facilities at the airport, are likely.

Additional retail space will continue to be the most important component of commercial construction for the Matanuska-Susitna Borough.

As with residential con-

³ Our commercial construction figure is not comparable to the published value of commercial building permits of most communities. Building permit data generally includes construction financed from all sources except the federal government. Our figure is less inclusive.



Geist Road Access & Roundabout, Fairbanks

struction, Fairbanks commercial construction spending should moderate this year in response to an overall slowdown in the rate of economic growth in that community.

Activities in the other smaller markets of the state will be mixed, depending on local economic conditions.

With construction costs rising rapidly, there is an urgent sense of getting projects out on the street, underway and complete as soon as possible, and this will help to fuel demand this year.

Hospitals: \$220 Million

Hospital construction is projected to be lower in 2006 than last year because of the completion in 2005 of the Valley Hospital in the Matanuska-Susitna Borough. Additions are projected for Providence Hospital in Anchorage as well as most other hospitals in the state including those in Fairbanks, Juneau, and the Kenai Peninsula.

Design work is beginning on two hospitals to be located in Barrow and Nome. If funding can be obtained for these facilities, they will become major construction projects later in the decade. A new VA clinic in Anchorage is also in the planning stages,

but will not impact construction spending this year.

Utilities: \$400 Million

The construction spending of the communications, private transportation, electric power, natural gas, and other private utilities will increase 45% this year. A large portion of the expected increase is due to the slippage in the schedule for the construction of the new power plant in Fairbanks. Although construction began in 2005, the plant is behind schedule and we expect most of the work to be completed in 2006.

Capacity additions and upgrades are also scheduled by all the other major electric utilities in response to rising population-driven demand.

There will continue to be strong investment in communications infrastructure by the major companies providing telecommunications services in the state.

Gas distribution company investments will be about \$18 million.

PUBLIC CONSTRUCTION

The majority of funding for public construction comes from the federal government with smaller



O'Malley Overpass/C Street Extension, Anchorage

amounts from state and local sources financed by current revenues and bonds.

There are numerous ways to categorize public construction spending. For ease of collecting information about them, we have put them into eight categories.

National Defense: \$730 Million

We expect defense spending to grow by 8% this year to \$730 million, from a revised total of \$675 million last year. This budget consists of all military expenditures for defense purposes, as well as Corps of Engineers spending for environmental reme-



Alaska Sales and Service Building, Wasilla



Bassett Army Hospital, Fort Wainwright

diation and civil works—such as flood control. In recent years Alaska has benefited from an exceptionally large share of the total defense budget, and that is likely to actually increase in the future. In 2005 Alaska received over 7% of the entire budget of the Army Corps of Engineers, making Alaska the third largest recipient of Corp of Engineers construction dollars.

This is partially due to the continued buildup associated with the deployment of the new Stryker Brigade to Fort Wainwright at Fairbanks. However, other large projects are also driving spending,

including the deployment of two new squadrons of F-22 fighter jets as well as new C-17 cargo aircraft to Elmendorf Air Force Base in Anchorage, a new hospital at Fort Wainwright, and additional facilities at Fort Richardson in Anchorage.

Highways: \$450 Million

The current controversy surrounding the large share of federal highway funds that have been earmarked for bridge construction makes it difficult to forecast spending for highway construction this

year. The amount of federal funds for construction over the next several years has increased, but the schedule over which funds will actually be expended is uncertain at this time.

To the extent that federal funds continue to be allocated to construction of the Knik Arm and Gravina bridges, funds for other projects will be reduced. And because bridge construction could not begin this year, spending out of federal highway funds could be lower this year than in the past. For this forecast, however, we assume federal highway fund spending will not be constrained by the bridge earmarks, resulting in \$350 million in highway spending from federal funds.

In addition, \$100 million from state sources will augment these federal dollars so that total highway spending in 2006 is 12% higher than 2005.

Airports and Harbors: \$330 Million

The budget for airports and harbors will be about the same level in 2006 as it was in 2005—\$330 million.

The largest share of funding comes from about \$200 million in federal funds from the Federal Aviation Administration. This will be spent on airport construction projects in the \$5 to \$10 million range throughout the state.

Spending at the major airports in Anchorage and Fairbanks will total about \$90 million. Most of the activity will be at the Ted Stevens International Airport in Anchorage. This will be concentrated on renovations to Concourses A and B with the recent completion of Concourse C.

The Anchorage Port will spend about \$40 million on renovations and upgrades. The port is still in the process of putting together its large scale expansion project which will cost upwards of \$300 million. This will boost construction spending for airports and ports in future years.

Alaska Railroad: \$80 Million

The Alaska Railroad capital construction program for modernizing and upgrading the railroad will continue this year at a slightly increased level, up from \$75 million in 2005. Funding comes from a variety of federal sources as well as retained earnings from operations.

Denali Commission: \$100 Million

The Denali Commission, created by Senator Ted Stevens to more efficiently direct federal capital spending to rural Alaska infrastructure needs, has a larger budget this year, but we forecast the same amount as last year hitting the street as capital spending.

Construction dollars continue to be concentrated on energy projects, health facilities, and to a lesser extent



Bristol Bay Corporation Building, Anchorage



Central Peninsula Hospital Expansion, Soldotna

transportation. Some of the budget increase is funding the planning for new hospitals in Nome and Barrow. If these facilities obtain federal funding, hospital construction spending will expand in future.

The Denali Commission's inventory of project needs is quite long, and we can expect a continuation at least at the current level as long as there is federal support for this program.

Education: \$310 Million

Education related construction spending—including both K-12 and University of Alaska—will more than double this year from \$150 million in 2005. The increase is being driven by an expansion of state grant funding and local bond authorizations for school maintenance and renovations. These

authorizations essentially guarantee state reimbursement for a certain percent of the repayment of the bonds of local school districts, up to a limit, for the costs of school construction, maintenance, and renovation.

Including the local share, we expect \$210 million of K-12 construction spending.

University of Alaska construction projects will total \$90 million spread among the Anchorage, Fairbanks, and Juneau campuses.

Other Federal: \$400 Million

National defense, transportation spending for roads, airports and ports, and the Denali Commission make up the largest and most visible part of federal construction spending in Alaska. We forecast an additional \$400 million of federal capital

spending in Alaska for other types of projects.⁴ This is a 23% increase from an adjusted total last year of \$325 million.

Most of the state capital budget is funded by federal grants. Excluding transportation projects, the largest category is rural sanitation projects, based on grants from the Indian Health Service, Department of Agriculture–Rural Development, the Environmental Protection Agency, and other federal agencies. This initiative will again be contributing \$100 million to state construction spending, about the same amount as in past years. Other state departments with significant federal funding for capital projects include Commerce, Natural Resources, Veterans Affairs, and Public Safety.

Aside from the Department of Defense, we expect an increase in the level of construction spending by other federal departments with significant capital spending programs of their

⁴ It is difficult to track all the federal dollars that find their way into construction spending in the state because there are so many pathways, and they change every year. The possibility of double counting funds as they pass from agency to agency, or become part of a larger project, also creates difficulties for the analyst.

own. These include the Department of Interior (the National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management), the Postal Service, the Department of Agriculture, and the National Oceanic and Atmospheric Administration (NOAA). For example, NOAA is constructing a fish research facility complex in Juneau in cooperation with the University of Alaska.

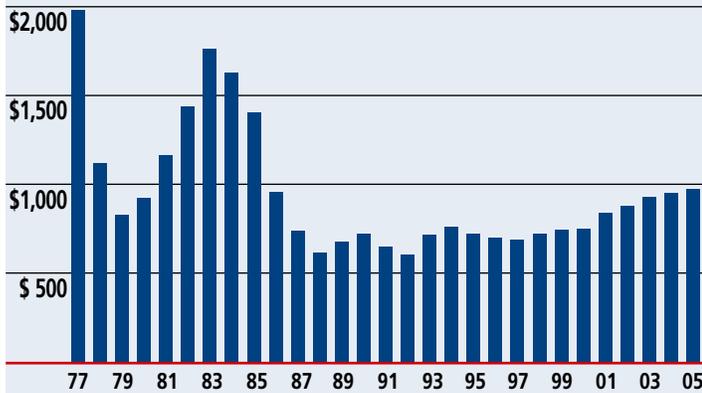
The federal government also provides grants and other construction funding to Alaska tribes, non-profit organizations, and local governments across the state. The most important recipients of these grants are Native non-profit corporations, housing authorities, and health care providers. The largest single program is the Native American Housing Self-Determination Act (NAHSDA) that provides funds for housing construction in Native communities through a large number of Native housing authorities throughout the state. We expect spending from this program to be about the same as last year.



Alaska Railroad Station, Fairbanks

Construction Industry Payroll

In Millions of 2005 Dollars



Other State and Local: \$200 Million

Other state and local government capital spending from own sources (not federal or state) will be \$200 million in 2006, up 14% from an adjusted \$175 million in 2005.

State funded construction spending that is neither based on federal grants nor related to transportation or education includes about \$40 million. These projects fall primarily in the Departments of Commerce, Health and Social Services, Corrections, Military Affairs, and Public Safety.

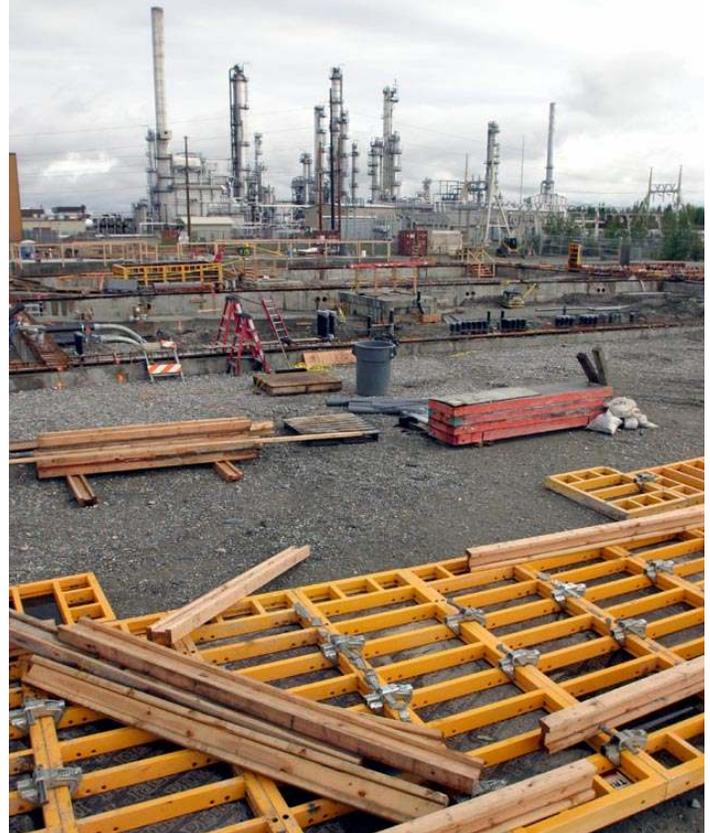
Local government general fund capital budgets and capital spending from local gov-

ernment enterprise funds are the majority of spending in this category. For example, the Anchorage Water and Wastewater Utility plans call for capital spending of \$60 million this year.

WHAT'S DRIVING SPENDING?

Construction activity—measured by total spending, jobs, payroll, or gross product—has experienced strong growth for nearly a decade, driven largely by growing federal capital grants to Alaska, as well as by large federal agency capital budgets.

These grants not only fuel public spending by state, local, and quasi-government entities, but they also give a general boost to the economy—and thus add to the



Golden Valley Electric Power Plant, North Pole

aggregate demand for new residential, commercial, and private infrastructure spending. So federal spending has a multiplier effect on other components of construction spending.

This growth is evident in the construction industry payroll (U.S. Dept. of Commerce) shown in the graph above.

CONSTRUCTION IN THE OVERALL ECONOMY

Construction spending is one of the important contributors to overall economic activity in Alaska. It supports firms not only in the construction industry itself, but also construction activity “hidden” in other sectors of the economy such as oil and gas and mining.

In addition, construction spending generates activity in a number of industries that provide inputs to the construction process.

These “backward linkages” include, for example, sand and gravel purchases (mining); equipment purchase and leasing (wholesale trade); design and administration (business services); and construction finance and management (finance).

When the “hidden” construction activity and the “backward linkages” are included, the contribution of construction spending to the economy is considerably greater than reflected in Alaska Gross State Product (GSP).

Measured by Gross State Product (GSP), the construction sector is only 5% of the economy. But this consists mostly of the payroll of construction firms and does not reflect either construction “hidden” in other sectors or “backward linkages” to other industries. Including these would significantly increase the importance of construction as a component of GSP.



Cook Inlet Tribal Council Building, Anchorage

Cover photo: Million Dollar Bridge, Cordova
Courtesy Mowat Construction

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