

Alaska's Construction Spending

2008 Forecast

*Fifth Annual Report
for the
Construction Industry
Progress Fund
and the
Associated General
Contractors of Alaska*

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SKILL RESPONSIBILITY INTEGRITY

Dear Alaskans,

The Construction Industry Progress Fund (CIPF) and the Associated General Contractors of Alaska (AGC) are pleased to provide you with this "Alaska Construction 2008 Spending Forecast."

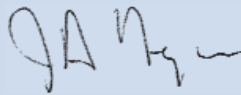
This is the fifth year of publication which provides an informative review and estimate of construction activity in the state of Alaska for the year ahead.

Compiled and written by Scott Goldsmith and Mary Killorin of ISER at the University of Alaska Anchorage, the "Forecast" looks at construction activity, projects and spending by both the public and private sectors for 2008.

Construction is the third largest industry in the state, pays the state's second highest wages, employs nearly 22,000 workers with a payroll over \$1 billion, accounts for 20 percent of Alaska's economy and currently contributes more than \$7 billion to the state's economy.

I hope you enjoy reading this publication. When the construction industry is vigorous, so is the state's economy.

Sincerely,



Jim Fergusson
CIPF President



Overview

Total construction spending "on the street" in Alaska in 2008 will be \$7.01 billion, down 2% from last year.^{1,2,3}

Excluding the oil and gas sector—which accounts for 41% of the total—construction spending will be down for the second year in a row, falling 6% to \$4.12 billion. Last year it declined 3%.

Lower construction spending, combined with higher material and labor costs, will result in a modest reduction in the level of construction employment in 2008. Although this will be the second year of decline in

construction employment, it remains well above the long-term trend.

Construction costs continue to rise faster than the general rate of inflation—and that trend is expected to continue, further reducing the purchasing power of each construction dollar.

Private-sector construction spending is projected to be \$4.64 billion in 2008, an increase of 2% over 2007. Strong growth is expected in oil and gas, mining, utilities, and the other basic sectors. A modest decline is expected in commercial construction, while activity in the residen-

¹ Our projection for 2007 was \$7.005 billion. The year-end revised figure was \$7.130 billion. The underestimated private sectors included oil and gas and mining. Defense spending and state and local government not federally funded were also higher than anticipated. On the other hand, residential construction declined much faster than anticipated, particularly in the second half of the year. The net effect of these revisions was an increase of \$125 million in the preliminary 2007 figure.

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 also other activities. 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.

³ "On the street" is a measure of the level of activity anticipated during the year. It differs from a measure of new contracts because many projects span more than one year.

tial and health (hospital) categories will be considerably below the 2007 level.

Public spending will be \$2.38 billion, down 8% from 2007. The drop is the result of reduced federal spending, mostly defense spending. State and local spending remains robust, cushioning the federal reduction.

Uncertainty in this year's forecast comes from several sources. The high price of energy will continue to drive up the cost of construction materials and squeeze project budgets. The recent change in the way the state taxes the oil industry will affect investment in new and existing fields and result in continued re-evaluation of capital budget decisions. The collapse of the housing market bubble in the Lower 48 and the likely economic recession that will follow will certainly be felt in

the Alaska economy. But as has often been the case, we should be somewhat insulated from negative economic news arising from those events.

Public construction spending estimates are perennially complicated by the fact that passage of the budget for the federal fiscal year (October through September) is consistently delayed until after the start of the fiscal year. In the absence of a budget, federal agencies generally assume constant funding levels.

As in past years, some firms are reluctant to reveal their investment plans, because they don't want to alert competitors, and some have not completed their 2008 planning. Large projects often span two or more years, so estimation of cash on the street in any year is always difficult, because the construction "pipeline" never

Alaska Construction Spending 2008 Forecast

	Level	Change
PRIVATE	\$ 4,635,000,000	+2%
Oil and Gas	2,890,000,000	+5%
Mining	355,000,000	+15%
Other Rural Basic Industry	70,000,000	+250%
Utilities	565,000,000	+47%
Hospitals	80,000,000	-60%
Other Commercial	315,000,000	-10%
Residential	360,000,000	-35%
PUBLIC	\$ 2,375,000,000	-8%
National Defense	495,000,000	-21%
Highways	415,000,000	+4%
Airports and Ports	375,000,000	+4%
Alaska Railroad	65,000,000	-19%
Denali Commission	90,000,000	-10%
Education	280,000,000	-20%
Other Federal	320,000,000	-12%
Other State & Local	335,000,000	+18%
TOTAL	\$ 7,010,000,000	-2%

Source: Institute of Social and Economic Research. Percent change based on revised 2007 estimates.

flows in a completely predictable fashion. Tracing the path of federal spending coming to Alaska without double counting is also a challenge.

We are confident of the overall pattern of the forecast—but as is always the case, some surprises should be expected.

PRIVATE CONSTRUCTION

The private sector will spend \$4.64 billion on construction-related activities in Alaska in 2008. That is 66% of total construction spending⁴ and is an increase of 2%, compared with \$4.56 billion in 2007.

Oil and Gas: \$2,890 Million

Oil and gas industry spending, which will account for 41% of all construction spending in the state in 2008, is expected to be about 5% above the level of last year, due to an increase in exploration and development activity by both the major producers and the smaller independents. Part of the increase is due to higher construction costs, but oil and gas employment is increasing, driven by the high price of oil, and the industry is investing to take advantage of new opportunities.

The state imposed a new and higher production tax on oil and gas in late 2007 (ACES—Alaska's Clear and Equitable Share), and companies have been re-evaluating their investment decisions. Some have announced bud-

get reductions, compared with their original plans. Consequently, while the total is higher than in 2007, it is less than it might have been. The increase this year is also less than in 2007, when spending was up 30%.

We expect the North Slope majors—BP, ConocoPhillips, and Exxon—to invest \$1.9 billion in their Alaska operations in 2008 (including the oil pipeline). Expenditures will concentrate on development of existing assets rather than new exploration.

Other companies will spend an estimated \$690 million for North Slope activities—down from last year. Development of the new Oooguruk field, the first by an independent, will commence and Shell will continue its exploration activities. Anadarko and a number of other independent companies have also announced significant budgets for the North Slope this year.

Spending in Cook Inlet will be an estimated \$300 million. Activity is expected to be up, led by Marathon, Chevro and ConocoPhillips. The state decision to support the extension of the export license for LNG—which has yet to be approved by the

⁴ Here we try to include just spending financed primarily by private sources. But for hospitals, utilities, and commercial construction in general that is not simple. In some years federal money finances most hospital spending, and the state provides some money for electric utility investment. So our estimates of hospital and utility spending may include some public money.



J L Tower, Anchorage

federal government—creates an incentive for companies to find more gas to feed that export market. (This should also have the benefit of increasing the supply of gas for the domestic market.) The high price of oil is also stimulating companies to look for oil in Cook Inlet.

No significant new construction is anticipated at refineries and other petroleum-manufacturing facilities.

Mining: \$355 Million

We anticipate spending by the mining industry—on exploration, development, and upgrading existing mines—to be up 15% this year. With the completion of the Kensington and Rock Creek mines, no new large-scale mines will be in the development phase this year. But the high prices for both base and precious metals



Oooguruk Island, North Slope, Bering Sea

PHOTO COURTESY F & W CONSTRUCTION



Dena'ina Convention Center, Anchorage

have stimulated interest in exploration and expansion of existing mines.

Exploration work will continue to be centered at the Pebble prospect west of Anchorage and the Donlin Creek prospect northeast of Bethel. Although development plans for one or both of these projects may be forthcoming in the near future, it is likely to be several years before construction could occur at either of these large mining prospects.

Significant expansions are planned at the Red Dog and Fort Knox mines, to extend their life and take maximum advantage of resources. The other large operating mines, including Pogo, Greens Creek and Usibelli, will have more modest construction budgets this year.

Exploration continues at many smaller prospects, buoyed by high metal and energy prices.

Other Basic Industries in Rural Alaska: \$70 Million

Investments in facilities to support tourism, the seafood industry, timber processing, and other sectors related to natural resources often occur in rural parts of the state, “hidden” from view. The increase in this category in 2008 is due to the construction of a large-scale private dock at Dutch Harbor,

which is expected to cost \$150 million and take several years to complete. A number of fish processing plants are planning modest upgrades of their facilities. No large new tourism facilities have been announced for rural Alaska this year.

Utilities: \$565 Million

Spending by utilities will be up 47% this year, driven by a strong increase in spending by the major telecommunications firms, particularly GCI and ACS. Total spending by the telecommunications sector is projected to be \$360 million—up 137%.

No large-scale projects are expected from the electric utilities. Their spending will be up 12%, to \$190 million. Gas utility spending is projected to be \$15 million.

Hospitals: \$80 Million

Hospital spending will be an estimated \$80 million this year, down from \$200 million in 2007. For the first time in several years there are no new large-scale projects ready for construction. The new hospitals planned for Barrow and Nome do not yet have financing to move forward.

The largest 2008 project will be continued construction of the VA clinic in Anchorage, scheduled for completion in 2010.

Most other private, public, and nonprofit hospitals around Alaska have smaller 2008 capital budgets. Expansions of the hospitals in Juneau and Homer represent the most significant other additions in this category.



Bassett Army Hospital, Fairbanks

Other Private Commercial: \$315 Million

Private commercial construction spending consists of a wide range of building types, including retail, office, medical, hotel, and warehouse space.⁵ The level of spending from year to year in this category can be influenced by a few large projects—and that is the reason we project spending to be down this year by 10%. A number of large projects in Anchorage are underway, including the new convention center and the museum expansion, and no projects of comparable size are on the horizon.

Because the economy is basically healthy, we expect commercial spending to be strong as well. Numerous large retail and office building projects are expected throughout the state.

Residential: \$360 Million

In the second half of 2007 the housing market softened throughout the state and continued to weaken as the year ended. Unlike in many parts of the Lower 48, this was not due to problems associated with sub-prime mortgages or insufficient demand due to high unemployment. In Alaska housing prices have been rising faster than household incomes, and that has caused a temporary imbalance in the market. The housing market is basically sound, because the economy is strong, but it needs to slow

⁵ Our commercial construction figure is not comparable to the published value of commercial building permits reported by Anchorage and other communities. Municipal reports of the value of construction permits often include government-funded construction, which we capture elsewhere in this report.



Alaska USA Building, Palmer

until demand can grow to absorb the excess supply that has accumulated in recent months.

Re-establishing balance in the housing market will mean a downturn in new housing starts this year, and that will be on the heels of a fall in 2007. We expect spending to be down 35%, to \$360 million. This lower level of spending should stabilize the housing market later in the year, positioning it for subsequent recovery.

PUBLIC CONSTRUCTION

Public construction⁶ spending in 2008 is expected to be about \$2.38 billion, down 8% from last year. The decline is due to reductions in federally financed spending that are not completely offset by increases in state and local spending.

The majority of funding for public construction comes from the federal government, and much of this money comes as grants to the state.

Once in the state budget, these federal funds become intermingled with funds from local sources.

Non-federal funds for state capital spending have historically come primarily from the state General Fund and bond sales. With the growth in complexity of the state

⁶ This category includes all spending financed by federal, state, and local government sources, except hospitals and publicly owned electric utilities. Funding for some projects comes from multiple sources and for others from sources that could be categorized as either public or private. We tried to include all such cases in the public category.



Nicholas J. Begich Middle School, Anchorage



NC Machinery building, Wasilla

budget, an increasing share of state-financed construction is coming from other sources.

An important source of local government spending is grants from the state. For the larger communities, current revenues and bond proceeds also contribute to construction spending.

National Defense: \$495 Million

At an estimated \$495 million, defense spending will be down 21% this year. But it remains high by historical standards and is likely to continue to be strong in future years as troop levels grow. In recent years Alaska has benefited from an exceptionally large share of the total defense budget.

The Corps of Engineers manages almost all spending for military construction, as well as spending for environmental remediation and civil works, such as flood control.

The drop in spending this year will be mainly in military construction, but that total is still expected to be \$413 million. This year construction will be concentrated in housing, operations structures, runway upgrades, and the transfer of Kulis Air Force Base to Elmendorf. Spending for environmental remediation

and civil works will be slightly lower than in 2007.

Highways: \$415 Million

Spending for highways and roads will be up 4% this year—but the dollars will not go as far, since this is a sector particularly hard hit by cost increases in recent years,

⁷ Federal highway funds are particularly difficult to project because of the presence of politically controversial federal earmarks. The Governor has redirected much of the Gravina Bridge earmark, but the Knik Arm Bridge earmark is in place, awaiting a successful private proposal to finance and construct the bridge.

including 2007. Federal highway funds, which provide a large share of the funding for highways in the state, will be modestly higher than last year.⁷

State funding of roads will be down slightly, and local funding is expected to be about the same as last year.

Airports and Harbors: \$375 Million

The budget for airports and harbors will be up marginally (4%) from 2007, to \$375 million. As in past years, the largest share of funding comes from about \$210 million in funds from the Federal Aviation Administration. This will be spent on airport construction projects in the \$5 million to \$10 million range throughout the state, including Anchorage.

Spending financed by other sources at the major airports in Anchorage and Fairbanks will be \$80 million. The larger share will be spent at Ted Stevens International Airport in Anchorage on terminal upgrades and the beginning

of construction of an airport operations center.

Spending at the Anchorage port will be \$70 this year, as the \$400 million multi-year expansion program moves forward.

Alaska Railroad: \$65 Million

The capital construction program for modernizing and upgrading the Alaska Railroad will continue this year but at a reduced level, down from \$80 million last year. Funding will come from a variety of federal sources as well as retained earnings. The focus of the program continues to be track rehabilitation, siding extensions and upgrades, bridge replacement and upgrades, passenger equipment, and a collision avoidance system.

Denali Commission: \$90 Million

The Denali Commission, created by Senator Ted Stevens to more efficiently direct federal capital spending to rural infrastructure needs, will spend about \$90 million for construction, down 10%.



Providence Hospital addition, Anchorage

PHOTO KEN GRAHAM PHOTOGRAPHY



PHOTO COURTESY KEN GRAHAM PHOTOGRAPHY

Fort Wainwright Southern Cross Family Housing

The base funding for the commission has declined, but funding for transportation and health projects has not changed. The commission also continues to fund energy projects—including bulk storage units—and health facilities. Development work has begun on hospitals in Nome and Barrow, but no construction is expected this year.

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: \$280 Million

Education funding of \$280 million is 20% less than last year, due to lower spending on K-12 at the state level as well as less University of Alaska construction activity.

Primary and secondary funding is estimated to be \$220 million, funded by both state grants and local bonds.

The state school construction priority list contains projects totaling more than \$1 billion for both construc-

tion and maintenance, so K-12 education spending should continue to be strong in future years.

University of Alaska construction projects will total \$60 million, concentrated in Anchorage with work on the new integrated science building. Other capital spending will be spread among the campuses in Fairbanks, Juneau, and elsewhere.

Other Federal: \$320 Million

Categories we just discussed—national defense; transportation spending for roads, airports, ports, and railroad; and the Denali Commission—make up the largest and most visible part of federal construction spending in Alaska. We forecast an additional \$320 million of federal capital spending in Alaska for other types of projects.⁸ This is down from \$365 million last year.

⁸ 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.

In a normal year, most of the state capital budget is funded by federal grants. Excluding transportation projects, the largest category of projects funded largely by federal grants is rural sanitation projects, with grants from the Environmental Protection Agency, Indian Health Service, and other federal agencies. This initiative will again contribute \$100 million to state construction spending—the same as in 2007—for the village safe water program. Other state departments with significant federal funding for capital projects—including Commerce, Natural Resources, Veterans Affairs, and Public Safety—will spend roughly \$50 million.

The federal government also provides grants and other construction funding to Alaska tribes, nonprofit organizations, and local governments across the state. The most important recipients of these grants are Alaska Native nonprofit corporations, housing authorities, and health care providers. The largest single program is the Native American Housing Self Determination Act (NAHS-

DA), which provides funds for housing construction in Native communities through a large number of Native housing authorities throughout the state. Grants for health care not associated with a hospital or passing through the Denali Commission are also counted here. We expect spending for these programs to be about \$100 million again this year.

We expect the level of direct construction spending by other federal departments to be down modestly from 2007, to \$70 million. This includes spending by the Department of Interior (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).

Other State and Local: \$335 Million

State and local government capital spending for all other categories⁹ will be \$335 million, up from \$285 million in 2007.

⁹ Excluding transportation and education.



PHOTO COURTESY ALASKA TRAILBLAZING

Stariski Creek Improvements, Kenai Peninsula



Kenai River Bridge, Soldotna

We expect state-funded construction spending that is based neither on federal grants nor related to transportation or education to be about \$180 million. That's slightly higher than in 2007 and assumes a number of larger projects, including two fish hatcheries in Anchorage and Fairbanks, will get underway. These projects fall primarily in the Departments of Commerce, Community, and Economic Development,

Health and Social Services, Corrections, Military Affairs, and Public Safety.

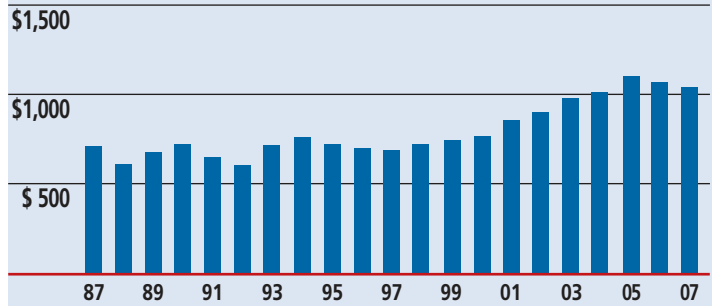
Local government capital spending, from general funds as well as enterprise funds, is estimated to be \$155 million. This is higher than in 2007, because it includes an estimate of first-year construction spending for a new state prison, to be located in and financed by the Mat-Su Borough. Construction should begin in late 2008.



Alaska Railroad Bear Valley Bridge, Portage

Construction Industry Payroll

In Millions of 2007 Dollars



WHAT'S DRIVING SPENDING?

Construction activity—measured by total spending, jobs, payroll, or gross product—has experienced strong growth for more than a decade, driven largely by growing federal capital grants to Alaska, large federal agency capital budgets, oil and gas spending, and more recently, large state capital budgets.

These large external sources of construction funds not only fuel public spending and oil patch spending but also give a general boost to the economy—and thus add to the aggregate demand for new residential, commercial, and private infrastructure spending.

This growth is evident in the construction industry payroll (Alaska Department of Labor) shown in the chart above, which in 2005 surpassed \$1 billion for the first time since 1985. (The values in years before 2007 are adjusted upward to account for inflation.)

CONSTRUCTION IN THE OVERALL ECONOMY

Construction spending is one of the important contributors to overall economic activity in Alaska. It supports employment and firms not only in the construction

industry itself but also in other sectors of the economy, such as oil and gas and mining, where it is “hidden.”

In addition, construction spending generates activity in a number of industries that provide input 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 this “hidden” construction activity and these “backward linkages” are included, it turns out that construction spending directly accounts for a much larger share of the workforce than the number of workers or payroll reported as “construction” would suggest.

Furthermore, the income from these high-paying jobs supports business activity in every community in the state. As this income is spent and circulates through local economies, it generates jobs in businesses as diverse as restaurants, dentists’ offices, and furniture stores.

If we include all these aspects of construction that don’t show up in standard measures, we see that construction spending is a major driver of the Alaska economy.

Cover: **Elmore Road, Anchorage** Photo by Kurt Hulteen, PE, DOWL Engineers
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