

Dear Construction Forecast Reader,

The Construction Industry Progress Fund (CIPF) and the Associated General Contractors (AGC) of Alaska are pleased to have produced this ninth edition of "Alaska's Construction Spending Forecast."

Compiled and written by Scott Goldsmith and Mary Killorin of the University of Alaska's Institute of Social and Economic Research (ISER), the "Forecast" reviews construction activity, projects and spending by both the private and public sectors for the year ahead.

The construction trade is Alaska's third largest industry, paying the second highest wages, employing nearly 21,000 workers with a payroll over \$1 billion. It accounts for 20 percent of Alaska's total economy and currently contributes approximately \$7 billion to the state's economy. The construction industry reflects the pulse of the economy. When it is vigorous, so is the state's economy.

Both CIPF and AGC are proud to make this publication available annually and hope it provides useful information for you.

AGC is a non-profit, full service construction association for commercial and industrial contractors, subcontractors and associates. CIPF is organized to advance the interests of the construction industry throughout the state of Alaska through a management and labor partnership.

Phil Anderson CIPF Chairman

The 2012 Forecast is generously underwritten by Northrim Bank

Overview

The total value of construction spending "on the street" in Alaska in 2012 will be \$7.7 billion, up 3% from 2011. 1.2.3

Wage and salary employment in the construction industry will be stable at the same level as last year—15,800. This is down from a peak of 18,300 in 2005.

Excluding the oil and gas sector—which accounts for 41% of the total—construction spending will be \$4.6 billion, up 4% from 2011 and about the same rate of increase as last year.

Oil and gas spending will be \$3.2 billion, 1% higher than in 2011.

Private spending for construction will be up in 2012. Public spending for traditional government purposes will be down somewhat, but public funds also help finance some projects in the utility and health sectors, which are primarily private. So overall, an increase in state spending for construction will offset a decline in federal spending.

Uncertainty is always an element of the forecast and this year is no exception—especially in the oil and gas sector—in spite of high oil prices. Regulation, litigation, and taxation issues are affecting many of the large projects in various stages of development on the North Slope,

including those at Point Thomson, Alpine West, Liberty, and offshore in the Chukchi and Beaufort seas. All these projects have seen some progress in the past year, but none are yet scheduled to move forward this year.

Combined with the continued challenge surrounding the commercialization of North Slope natural gas, as well as the decline in North Slope oil production, this uncertainty also translates into some caution in private sector construction spending.

Furthermore, the national economic recovery continues to be extremely weak. And although Alaska has been insulated from the worst effects of the recession—the crash in the housing market, high unemployment, and lack of credit—concerns about the national recovery will continue to influence investment decisions in the state, particularly in the commercial and residential markets.

Still, slow growth of the Alaska economy resumed in 2010, after taking a hit with the rest of the nation in 2009, and that growth is expected to continue into 2012, contributing to a positive outlook for the near term. With economic growth has come a strong increase in Alaska's population, driven by in-migration from regions still in recession.

Also contributing to the positive outlook is the continuing high oil price, which has allowed the state to fund huge capital budgets for several years running, while at the same time adding several billion dollars to the financial cushion against the potential decline in future oil revenues. Large state capital budgets have offset the decline in federal construction funding coming into the state as the federal budget tightens.

In spite of the uncertainty associated with the economy this year, there is little downside risk to the forecast. Most non-petroleum spending will be financed by public money that is already committed. Of course, it is not always possible to predict exactly

2012 Alaska Construction Spending Level Change		
TOTAL	\$ 7,725,000,000	+3%
Total Excluding Oil and Gas	\$ 4,573,000,000	+4%
PRIVATE	\$ 5,141,000,000	+6%
Oil and Gas	3,152,000,000	+1%
Mining	340,000,000	+11%
Rural Other Basic Industry	10,000,000	0%
Utilities*	794,000,000	+29%
Health*	325,000,000	+7%
Other Commercial	120,000,000	0%
Residential	400,000,000	0%
PUBLIC	\$ 2,584,000,000	-3%
National Defense	460,000,000	-17%
Highways	585,000,000	+10%
Airports, Ports and Harbors	375,000,000	+21%
Alaska Railroad	55,000,000	+10%
Denali Commission	20,000,000	-67%
Education	408,000,000	+15%
Other Federal	207,000,000	-27%
Other State and Local	474,000,000	-7%

^{*} Some projects in these categories are supported by public funds.

Source: Institute of Social and Economic Research. Percent change based on revised and re-benchmarked 2011 estimates.

¹ Our revised projection for 2011 was \$7.5 billion, based on revisions in oil and gas spending and an upward re-benchmarking of spending on residential construction. Because of this re-benchmarking, direct comparisons with 2010 and earlier years are not possible.

 $^{^2}$ We define 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), regardless of the type of business where the spending occurs. The value of construction is the most comprehensive measure of construction activity across the entire economy.

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 a single year.

when that money will "hit the street." And public construction spending estimates are perennially complicated by consistent delays in passage of the federal budget for the federal fiscal year (October through September).

As in past years, some firms are reluctant to reveal their investment plans, because they don't want to alert competitors; also, some have not completed their 2012 planning. Large projects often span two or more years, so estimating "cash on the street" in any year is always difficult—because the construction "pipeline" never flows in a completely predictable fashion. Tracing the path of federal spending coming into Alaska without double counting is also a challenge.

We are confident in the overall pattern of the forecast—but as always, we can expect some surprises as the year progresses.

PRIVATELY FINANCED CONSTRUCTION Oil and Gas: \$3.152 Billion

Oil and gas industry spending, which will account for 41% of all construction spending in 2012, is expected to be up 1% from last year.⁴

None of the three major producers on the North Slope—British Petroleum (BP), Conoco Phillips, and Exxon—will be exploring, and all are anticipating less spending this year than in 2011. BP will concentrate on sustaining production of light oil in existing reserves, maintaining aging infrastructure, and developing heavy oil. Conoco Phillips and Exxon will also concentrate on developing existing reserves. Work at Alpine, Point Thomson, and Liberty is not currently scheduled for this year.



Peters Creek Bridge, Peters Creek

Also on the North Slope, ENI and Pioneer will continue their drilling programs to develop the Oooguruk and Nikaitchuq fields, while Linc and Anadarko will be working to determine whether the known deposits at Umiat and Gubik can be economically produced.

A number of other companies—including Brooks Range Petroleum, Savant, Great Bear, and Repsol—will be drilling exploratory wells. The North Slope Borough will be drilling a number of wells to increase compression in its gas field.

On the other hand,

Chevron has no plans for new activities at this time, and we assume that Shell will make only limited progress towards its goal of starting exploratory drilling in the Chukchi and Beaufort seas.

Taken together, the decline in spending by the big three will be balanced by the increase in spending by other companies—so the overall level of spending on the North Slope could be about the same this year as last year.

By contrast, spending is definitely up in Cook Inlet, where companies are reporting significant spending to maintain facilities and gas field pressure, to develop recent discoveries, and to explore for both oil and gas, stimulated by generous tax credits. One jackup rig (currently being used by Escopeta/Furie) arrived in the Inlet in 2011, and another (the Endeavour) is scheduled to be delivered early this year, for use by Buccaneer. Among companies operating in the inlet, only Marathon is cutting back, while most others are increasing their spending, including several relative newcomers like Linc, Nordag, and Apache.

Two significant projects nearing completion are the



UAA Health Sciences Building, Anchorage

⁴ The 2011 estimate was re-benchmarked to \$3,110 million.



Ruth Burnett Sport Fish Hatchery, Fairbanks

upgrade at the Tesoro refinery to reduce the benzene content of its gasoline, and the construction of the gas storage facility in Cook Inlet, to deal with the challenge of having enough gas to meet demand in Southcentral during the winter. Looking ahead, Alyeska Pipeline Service Company has announced plans for a large pump station pipe configuration project, to get underway next year and extend through 2014.

Mining: \$340 Million

Spending by the mining industry—on exploration and development,5 as well as upgrading of existing mines —will be up 11% this year. Capital spending at the seven large mines operating in the state (Pogo, Kensington, Greens Creek, Red Dog, Fort Knox, Usibelli, and Nixon Fork) will be down just slightly, with continued upgrading of facilities—such as elevation of the tailings storage dam at Fort Knox and the start of production from the Aqqaluk deposit at Red Dog. In addition, the Kensington mine will curtail production to allow for new construction.

Three large-scale mine prospects (Donlin Creek, Pebble, and Livengood) continue to be studied, with significant spending that includes drilling programs to evaluate reserves.

High world metal prices have stimulated a lot of interest in exploration, as well as development of smaller prospects throughout the state, from Prince of Wales Island to the Northwest Arctic.

Other Basic Industries in Rural Alaska: \$10 Million

Investments in facilities to support tourism, the seafood industry, timber processing, and other natural resource industries often occur in rural areas, hidden from view. No significant construction spending for projects related to the tourist and seafood industries in rural areas is expected in 2012. A seafood waste facility is planned for Naknek, but won't be built this year.

Utilities: \$794 Million

Utility spending⁶—electric power generation, transmission, and distribution, telecommunications, and natural gas transmission and distribution—will increase 29% this year.

Spending on electricity generation and transmission will be occurring throughout the state. In Anchorage work continues on the new gasfired power plant shared by Anchorage Municipal Light and Power and Chugach Electric. All the Southern Railbelt utilities have expansions and upgrades in various stages of planning and execution. In addition, the Fire Island wind farm will be under construction this year.

⁶ Although we include utilities and health spending in private spending, there is also a significant amount of public spending for some projects in these categories.



Humpback Creek Intake Diversion Rehab, Prince William Sound

⁵ Excluding exploration and development costs associated with environmental studies, community outreach and engineering.

Elsewhere in the state, another large wind farm project (Eva Creek outside Fairbanks) and several hydroelectric projects (Blue Lake near Sitka, Terror Lake outside Kodiak, and Allison Creek in the Copper Valley region) are under development. These, as well as other renewable-resource projects and transmission upgrades, have been partially financed by a major increase in state grants in the FY 2012 state capital budget.

Spending by the telecommunications industry will also be higher this year, in spite of completion of a large project to expand broadband coverage to Southwest Alaska. Spending will be driven by new firms moving into the market (Verizon), as well as continued expansion and upgrading of facilities by existing companies like GCI and ACS.

Telecommunications spending in Alaska benefits from funds generated by the Universal Service Funds, which channel revenues collected from services provided in other locations to help pay for needs in Alaska.

Health: \$325 million

Health care spending⁷ will be 7% higher than last year. The largest share of spending will be for various federally funded projects for the Alaska Native community. These include continued work on the new hospital in Barrow, as well as completion of the new hospital in Nome, the Chief Isaacs Medical Center in Fairbanks, and the Southcentral Foundation clinic in the Mat-Su Borough. A new parking garage and a Healthy Communities building will be under construction at the ANTHC medical complex in Anchorage, and numerous other smaller facilities will also be under construction around the state.

Providence Alaska Medical Center in Anchorage will continue its tower expansion, to provide for enhancements of the newborn intensive care program; prenatal, motherbaby, and labor and delivery units; and cardiac surgery and other services. It is also expanding its power plant to handle increased demand.

Elsewhere other non-profit, public, and private facilities are also under development or expansion. For example, the expanded Anchorage Neighborhood Health Center should be completed this year, and the Wrangell Medical Center hopes to break ground. The only segment of this sector without identifiable growth is military health-care facilities.

Other Commercial: \$120 Million

Commercial construction spending consists of many



building types, including retail, office, private medical, hotel, and warehouse space.⁸ The level of spending from year to year can be influenced by a few large projects, which is one reason we project spending will be about the

same this year as last. There are no new large projects—like new high-rise office towers or shopping centers—planned for this year.

The absence of large projects reflects both the adequacy of the existing stock of retail, commercial, and warehouse space in most communities—due to growth in prior years—as well as uncertainty about the future of the petroleum industry in the state.



New Police Station, Kodiak

⁷ Formerly called Hospital spending.

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 may include government-funded construction, which we capture elsewhere in this report. We have also excluded hospitals and utilities from commercial construction, so we can provide more detail about those types of spending.



Doyon Building, Anchorage

Residential: \$400 Million⁹

Alaska has been largely insulated from the national housing market crash—both in prices and foreclosures and the market is currently stable. Spending on new single and multi-family housing will be similar to what it was last year.

PUBLICLY FINANCED CONSTRUCTION National Defense: \$460 Million

Spending for national defense will be down 17% due to significant cutbacks in defense spending nationally. Military spending is divided into three basic categories— MILCON (Military Construction), civil works, and environmental remediation, including FUDS (Formerly Used Defense Sites).10

The largest share of the budget is for military construction at the main bases in the Anchorage and Fairbanks regions. Typical projects include aircraft hangars, housing replacements, training facilities, air support facilities, and utility upgrades. This component of military spending has experienced the largest cut, and further reductions in future years are likely as well.

The Corps of Engineers provides funds for civil works such as flood control and maintenance of harbors. We include these corps activities in the national defense total, although one could argue that they are primarily for the benefit of communities rather than for national defense. This component of spending has also been significantly reduced.

The only element of defense spending that has not declined this year is environmental remediation (FUDS).

Transportation— Highways: \$585 Million

Spending for highways and roads will be 10% higher than last year, due to the large increase in grant funding for roads in the state capital budget within the Department of Commerce.

The federal government continues to be the largest contributor to highway

spending in the state through the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (known as SAFETEA-LU) grant program. That program expired in 2009, and Congress has not yet reauthorized it. Until a new formula grant program is put in place, federal dollars will continue to be allocated based on a continuing resolution, and Alaska will continue to receive about the same amount each year—as was the case this year. But when Congress does replace this formula program, Alaska might receive a smaller share if—as many think will be the case—mass transit receives a larger share of the allocation, and if the allocation formula is changed in other ways.

A smaller amount of funding is currently coming from state bonds from the FY 2009 state budget.

Transportation— Airports, Ports, and Harbors: \$375 Million

Spending for airports, ports, and harbors will increase 21% over last year. As with highways the bulk of funding for airports generally comes from federal grants—in this case, through the Federal Aviation Administration's Airport Improvement Program (AIP). The level of funding this year from AIP grants is about the same as last year. Those grants fund airport projects throughout the state.



⁹ The projected level of residential spending in 2011 and earlier years has been revised, based on a more complete analysis of the residential housing market. This re-benchmarking of the historical estimate means that readers must take care when using projections from earlier reports.

¹⁰ The military capital budget for Alaska also includes a category called "Interagency and International Services and Humanitarian Assistance." Much of this spending occurs outside the state, but we include an estimate of the share that takes place in Alaska.



F-22A Bay Aircraft Shelter, Joint Base Elmendorf-Richardson

As with highway spending, the increase in airport, port, and harbor spending this year is due to the increase in grants in the state capital budget for transportation infrastructure. Significant grants went to airports, including a number of projects at Ted Stevens Anchorage International Airport for taxiway reconstruction, storm water treatment facilities, residential sound insulation, and other improvements. Funds were granted to the Anchorage and Point MacKenzie ports for a small part of the costs of their expansion (although the Anchorage port has announced it will temporarily stop work on expansion plans). Other ports and harbors around the state also benefited from Department of Commerce grants in the state capital budget. Another smaller source of funding for ports is the cruise ship tax, and a number of small projects have been authorized with funding from that source.

Alaska Railroad: \$55 Million

The capital construction program for modernizing and upgrading the Alaska Railroad will continue this year at a slightly faster pace than last year—up 10%. Project funding comes 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. Construction of the Tanana River bridge, the first step in extending the railroad to Fort Greely, is underway (but not included in the estimate of railroad spending), as is the Point MacKenzie rail extension.

Denali Commission: \$20 Million

The Denali Commission an innovative federal-state partnership Congress created in 1998 to more efficiently direct federal capital spending to rural infrastructure needs-will take a huge budgetary hit this year, with the anticipated budget for capital spending down 67% from a year ago. Major activities will include waterfront development and road projects, bulk-fuel tank farms, rural power system upgrades, and renewable and alternative energy projects, as well as clinics and behavioral health projects. Projects funded by the commission are frequently leveraged with additional federal, state, and local contributions.

Education: \$408 Million

Education project funding will be up 15% from last year. State funded spending is up because a large state education general obligation bond package was passed in late 2010, in addition to the normal spending from the general fund. The bond proceeds are funding primary and secondary schools throughout the state; university facilities in Anchorage, Fairbanks, Mat-Su, and other locations; and other state educational facilities.

Local school district spending will be higher this year as well. The Mat-Su Borough recently passed \$214 million in school bonds, which will be spent over the next five years on construction of new schools. Fairbanks, Anchorage, and other communities have

recently passed smaller education bond packages that should be hitting the street this year. The state reimburses local governments for most of the cost of these bonds.

Other Federal: \$207 Million

Other federal spending in Alaska is projected to be down 27% from last year, largely due to federal fiscal restraint and the fact that most American Recovery and Reinvestment Act (ARRA) funds have been spent.

In addition to funding a large share of spending on transportation infrastructure—highways, airports, and ports—through grants to the state, the federal government has many other smaller grant programs that funnel money through the state capital budget.¹¹

Excluding transportation, the largest capital program funded by federal grants to state government is the Village Safe Water program for rural sanitation. These funds come from a number of sources, including the

¹¹ 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.



Salvation Army Enrichment Center, Anchorage



Spirit of Alaska Credit Union, Fairbanks

Environmental Protection Agency and the Indian Health Service. Funding from these agencies for sanitation projects has been slowly trending downward (although it temporarily increased due to an infusion of ARRA funds).

The federal government also provides grants and other construction funds to Alaska tribes, non-profit organizations, and local governments across the state. ¹² Alaska Native non-profit corporations, housing authorities, and health-care providers receive most of this money. The largest of these programs in Alaska is the Native American Housing

Assistance and Self-Determination Act (NAHASDA), which provides funds for housing construction in Alaska Native communities, through grants to federally recognized tribes and Alaska Native housing authorities statewide. Funding for these programs is also lower this year.

We expect the level of direct construction spending by other federal departments to be somewhat less than in 2011 as well. That includes spending by the Department of the 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: \$474 Million

State and local government capital spending—excluding transportation (roads, airports, and ports), education, health, and utilities—will be 7% lower than last year, largely due to completion of the new Goose Creek prison in the Mat-Su Borough.

Like last year, the FY 2012 capital budget contains significant capital grants to local governments and non-profits for deferred maintenance. The budget continues the weatherization and energy rebate programs.

Local government capital spending, from general funds as well as enterprise funds and direct federal grants, will be about the same as last year.

WHAT'S DRIVING SPENDING?

The three primary drivers of construction spending are private basic sector investment (mainly petroleum and mining), federal spending (military and grants to state and local governments and non-profit organizations), and state capital spending (which itself depends on petroleum).

These large external sources of construction funds also give a general boost to the economy—and thus add to the aggregate demand for new residential, commercial, and private infrastructure spending.

CONSTRUCTION IN THE OVERALL ECONOMY

Construction spending is one of the important contributors to overall economic activity in Alaska. Annual wage and salary employment in the construction industry in 2011 was about 16,000 workers, with average annual payroll of \$70 thousand per worker, second only to mining (including petroleum). But that figure doesn't include the "hidden" construction workers employed in other industries like oil and gas, mining, utilities, and government (force account workers). In addition, it does not account for the large number of self-employed construction workersestimated to be about 9,000 in 2011.

Construction spending generates activity in a number of industries that supply 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).

The payrolls and profits from this construction activity support businesses 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.

Cover:

Glenn Highway MP 108 to 119, looking towards Lions Head and Glacier Point



William Jack Hernandez Sport Fish Hatchery, Anchorage

PHOTO BY DANNY DANIELS

¹² Federal spending on health care projects for the Native community funneled to Native organizations is included in the Health section.