

# 2015 ALASKA'S CONSTRUCTION SPENDING FORECAST

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



By Scott Goldsmith and Pamela Cravez  
Institute of Social and Economic Research  
University of Alaska Anchorage



  
Northrim Bank



## Dear Alaskans,

The Construction Industry Progress Fund (CIPF) and the Associated General Contractors (AGC) of Alaska are pleased to have produced the 13th edition of "Alaska's Construction Spending Forecast."

Underwritten by Northrim Bank, compiled and written by Scott Goldsmith and Pamela Cravez 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 16,000 workers with a payroll over \$1 billion. It accounts for 20 percent of Alaska's total

economy and currently contributes approximately \$8.5 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.



Mike Shaw, CIPF Chairman



The 2015 Forecast is generously underwritten by Northrim Bank

## OVERVIEW

The total value of construction spending "on the street" in Alaska in 2015 will be \$8.5 billion, down 3% from 2014.<sup>1,2,3</sup>

**Wage and salary employment** in the construction industry, which increased an estimated 6 percent last year, to about 17,600, will decline slightly in 2015.<sup>4</sup>

**Oil and gas** sector spending will fall 2% to \$3.8 billion from its record level of \$3.9 billion last year.

**Other spending** will be \$4.7 billion, a decline from \$4.9 billion last year.

**Private spending**, excluding oil and gas, will be about \$1.7 billion, down from \$2.0 billion last year—while **public spending** will increase from \$2.9 to \$3.0 billion.

Construction spending in Alaska in 2015 is expected to be

strong in spite of the drop in the price of oil from more than \$100 per barrel in the summer of 2014 to between \$45 and \$50 today.

However, the longer the price stays low, the greater the risk that some projects will be cancelled or postponed. It is impossible to predict what will happen to the oil price, because world supply has outstripped demand. The price will stabilize, and perhaps begin to increase, only when the low price stimulates more demand and eliminates high cost production, a process that could take more than a year. A further complication is the unpredictability of the role of OPEC in determining oil supply. In particular Saudi Arabia, the largest producer, could decide to restrict supply for political or strategic reasons.

Because of the drop in the price of oil, the state is facing a general fund budget deficit of

about \$3 billion for the current fiscal year (FY2015) and is projected to have a similar deficit in FY2016 (which begins July 1 of this year). However, this will not have a large negative impact on state government construction spending this year for several reasons.

In FY2013 the state appropriated a record high \$2.3 billion from the general fund (excluding grants from the federal government) for capital spending. In addition the legislature gave the state authority to sell \$.45 billion of general obligation bonds for transportation

## 2015 Alaska Construction Spending

	Level	Change
<b>TOTAL</b>	<b>\$ 8,510,000,000</b>	<b>-3%</b>
<b>Total Excluding Oil &amp; Gas</b>	<b>\$ 4,670,000,000</b>	<b>-5%</b>
<b>Private</b>	<b>\$ 5,545,000,000</b>	<b>-6%</b>
Oil and Gas	\$ 3,840,000,000	-2%
Mining	\$ 210,000,000	+19%
Rural Other Basic	\$ 25,000,000	-46%
Utilities*	\$ 680,000,000	-20%
Hospitals/Health Care*	\$ 240,000,000	0%
Other Commercial	\$ 135,000,000	-21%
Residential	\$ 415,000,000	-14%
<b>Public</b>	<b>\$ 2,965,000,000</b>	<b>+1%</b>
National Defense	\$ 435,000,000	+10%
Highways and Roads	\$ 755,000,000	-1%
Airports, Ports, and Harbors	\$ 465,000,000	+9%
Alaska Railroad	\$ 25,000,000	+11%
Denali Commission	\$ 10,000,000	+11%
Education	\$ 465,000,000	-3%
Other Federal	\$ 255,000,000	-15%
Other State and Local	\$ 555,000,000	0%

\* Many projects in these categories are supported by public funds.  
Source: Institute of Social and Economic Research, UAA. Percent change based on revised 2014 estimates.

<sup>1</sup> Our revised projection for 2014 was \$8.8 billion, slightly lower than the original estimate of \$9.2. The revision is based primarily on lower than anticipated oil and gas spending in 2014.

<sup>2</sup> 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. 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. Furthermore, we account for construction activity in government (like the carpenter who works for the school district) and other private industries. The value of construction is the most comprehensive measure of construction activity across the entire economy.

<sup>3</sup> "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.

<sup>4</sup> Alaska Department of Labor

projects. Much of that record appropriation is only now becoming “cash on the street.” And even though the general fund capital budgets in the last two years have been only \$1.1 billion, there are still billions “in the pipeline” that will keep state spending strong this year.

Because of the size of the state budget deficit, it is possible that some projects in the pipeline that have not yet been approved could be cancelled. This will be moderated by concern over the negative impacts on the economy.

In any event the project backlog will begin to taper off next year. Furthermore, the governor has proposed a bare-bones general fund capital budget of about \$100 million for FY2016 that would just cover the state match on federal grants.

Fortunately, federal spending, mostly consisting of grants, both to the state (about \$1 billion annually) for transportation (roads, harbors, the railroad and the ferry system) and sanitation projects, and to non-profits for health facilities and housing, is not sensitive to the price of oil. Although the federal government has a difficult time producing a budget, the level of federal spending this year should be similar to last year. Furthermore, spending for national defense has also remained robust.

Photo By Danny Daniels



### **UAF Woods Center, GHEMM Company**

The oil and gas sector is always a difficult category to forecast. Because plans can and do change, and because of many factors associated with weather, logistics, the availability of supplies, the evaluation of work completed, regulatory and environmental challenges, tax policy and other operational and strategic concerns.

Spending plans developed by the oil and gas companies during the last quarter of 2014 suggested an increase in spending of 18% for 2015 compared with the year before. However, this target is un-

likely to be met because oil prices have continued to fall since those plans were announced. We estimate spending will be about the same as last year. As price expectations continue to change every company will continue to re-evaluate its investment plans.

The lower oil price means both a dramatic reduction in cash available for investment in new projects and also a reduction in the profitability of those new investments. Fortunately the industry tends to make investment decisions based on a conservative, and long run, oil price. Consequently the drop will have less negative impact on the viability of projects than on the ability of companies to move forward with investments because of capital constraints.

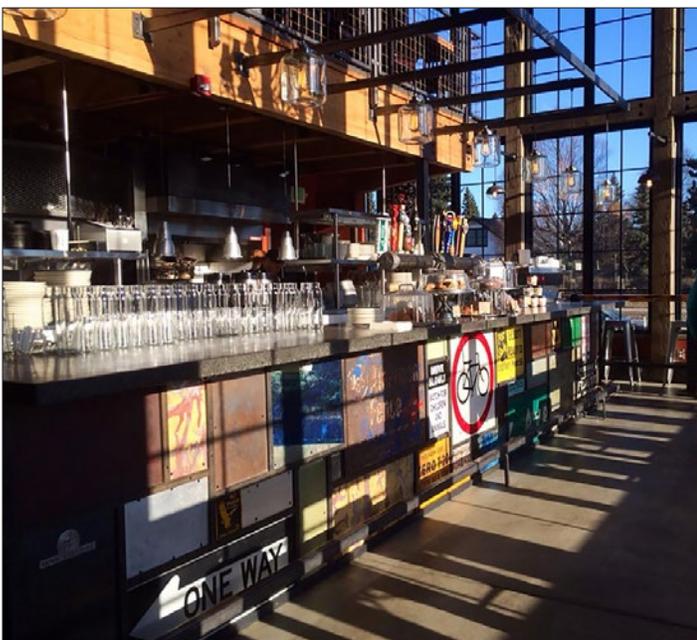
However, some of the largest operators in Alaska are quite strong financially, and others have funding sources not tied to the oil price. Furthermore, in Cook Inlet, activity is more sensitive to the price of natural gas than of oil, and the state, through its tax credit programs, has also provided a funding source not directly tied to the price of oil. Finally, the industry is under political pressure to show that the new state production tax, SB21, has stimulated new investment. Consequently, strategic considerations might help to keep the flow of investment spending high.

The economy of the state has slowed somewhat over the last three years. Job growth continues, albeit at less than 1% per year. Population growth, which had been tracking employment, came to a halt in 2014. Out-migration exceeded in-migration for the second year in a row.

This slowdown, combined with the heightened uncertainty about the future direction of the economy brought on by the sudden fall in the oil price, will slow new private investment in the commercial and residential construction sectors as investors adopt a “wait and see” attitude.

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 2015 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. And because of the large number of projects financed by federal and state dollars, tracing all those dollar flows 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.



### **Rustic Goat Restaurant, Anchorage Benchmark Construction**



© Ken Graham Photography.com

**AVTEC Dormitory, Seward, Cornerstone General Contractors**

## PRIVATELY FINANCED CONSTRUCTION

### Oil and Gas: \$3,840 Million

The biggest sector, and the most difficult to predict, is oil and gas. We expect spending will be about 18% less than originally anticipated by the industry and that spending will be down about 2% from last year, to \$3.8 billion.

The long-term development prospects for oil and gas in Alaska remain strong, but cash for investment will be tight this year. The following description of activity is based on the announced plans of the companies. As indicated, we expect some to be postponed.

On the North Slope, Conoco Phillips' largest project will be developing the CD-5 satellite, west of the Colville River and the Alpine field, which should begin production late this year. It will be developing a new production site in the Kuparuk field and adding two new rigs to slow the rate of decline of that field. Its other major efforts will be the West Sak viscous oil project (NEWS) and Greater Moose's Tooth (GMT-1) in the NPRA (National Petroleum Reserve Alaska) west of the Colville River.

British Petroleum will concentrate on expansion in the Prudhoe Bay field after selling its full interests in Endicott and Northstar and half interests in Liberty and Milne Point to Hilcorp. It will be expanding drilling pads and adding two new drilling rigs.

Exxon Mobil is continuing work on development of the Point Thomson field, which it expects to bring into production this year. Modules for operation of the field will be delivered this summer from Anchorage and Korea.

The Italian firm ENI (Enti Nazionale Idrocarburi) still has a two-year program of well drilling to bring the Nikaitchuq field into full production.

Caleus will be working on both the Ooguruk and Nuka fields. It has two more years of drilling for total build out of Ooguruk and is considering expansion of the offshore island from which the field is accessed. Development of the Nuka field will begin this year if it gets a favorable ruling on its royalty relief request.<sup>5</sup>

Brooks Range Petroleum is moving forward to develop the Mustang field, west of Kuparuk, with financial assistance from AIDEA (Alaska Industrial Development and Export Authority).

The North Slope will host two new operators this year—Hilcorp and Cook Inlet Energy, which have taken over fields formerly operated by BP and Savant.

A number of other firms have announced plans for exploration including Repsol, Nordaq, Great Bear, and Linc Energy.

Other companies, including Chevron and Anadarko, have interests in various fields on the North Slope but are not operators. Their expenditures are also included in the total.

Shell Oil is hoping to come back and complete the well it started to drill in 2012, on the OCS (Outer Continental Shelf) in the Beaufort Sea. Meanwhile, Statoil has not announced any plans to explore its prospects in the Beaufort Sea.

Spending in Cook Inlet will be dominated by Hilcorp, a relative newcomer to Alaska that recently purchased the assets of both Chevron and Unocal. Hilcorp drilled 20 new wells in 2014, and plans are for a similar level of effort this year. Cook Inlet Energy, which operates in the Redoubt, West Mac, and North Fork fields has been forced to cut back on development plans but will still be drilling this year.

Blue Crest Energy, which purchased the assets of Buccaneer, is working on development of the Cosmopolitan field from an existing onshore pad, and Furie is working to develop the Kitchen Lites offshore field using a new monopod platform. Buccaneer had been using the Endeavour jack-up rig but that has been sold and will no longer be available for use in the inlet. Furie is using the other rig—Spartan 151—in its operation.

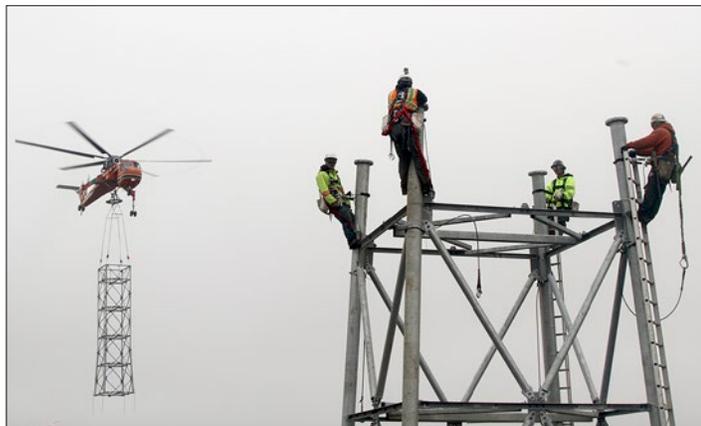
Other companies active in Cook Inlet include Apache, Nordaq, Aurora, and XTO.

Elsewhere in the state, there will be exploration for gas near Nenana and Copper Center.

### Mining: \$210 Million

Spending by the mining industry—on exploration and development,<sup>6</sup> as well as maintaining and upgrading existing mines—will be higher in 2015 in spite of some weakness in metal prices.

The bright spot is the anticipated spending of the six major mines operating in the state, some of which have higher capital expenditures planned this year. This spending is for both



**Heavy Lift Tower Section, Yukon River, STG Inc.**

<sup>5</sup> Pioneer recently sold its assets to Caleus.

<sup>6</sup> Excluding exploration and development costs associated with environmental studies, community outreach, and engineering.

exploration to extend the life of the mines and for upgrading of facilities for existing operations.

Spending for drilling and other site work remains low this year at the three world-scale mine projects currently in various stages of development (Donlin Creek, Pebble, and Livengood).

Numerous smaller projects across the state, such as the Bokan rare earth metals prospect in the Southeast, and the Nova Gold upper Kobuk mineral projects, will also see activity. Construction has also begun on a new ore terminal in Skagway.

### **Other Basic Industries in Rural Alaska: \$25 Million**

Investments in facilities to support tourism, the seafood and timber industries, and other natural resource industries often occur in rural areas. Although the number of tourists visiting Alaska is increasing, there are no announced significant capital investments in rural parts of the state. A number of seafood plant additions have been announced across the state.

### **Utilities: \$680 Million**

A decline in spending for new and upgraded electric generating plants will drive utility spending lower this year.

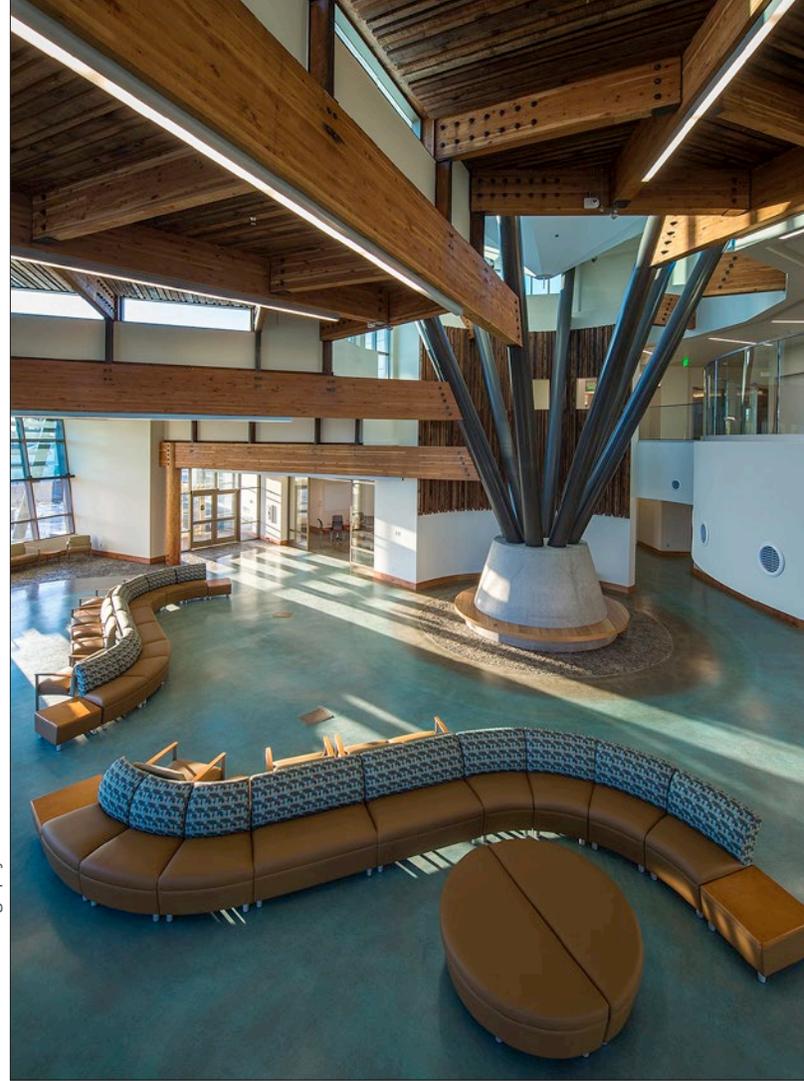
Among the Railbelt electric utilities, the large new MEA

(Matanuska Electric Association) plant at Eklutna is essentially finished. The largest remaining project is the AML&P (Anchorage Municipal Light and Power) replacement plant in northeast Anchorage. GVEA (Golden Valley Electric Association) has taken over the Healy Clean Coal plant and also plans substation work at Clear Air Force base. CEA (Chugach Electric Association) will be doing substation, distribution and refurbishment work. HEA (Homer Electric Association) has finished both its new power plants.

The smaller utilities continue to be involved in hydroelectric projects like Allison Creek at Valdez and facilities like the new headquarters building in Kodiak. Many of these have received at least partial funding from the state Renewable Energy Fund.

Telecommunications spending will also be somewhat lower this year as new firms (Verizon) become established. Expenditures continue to bring better service to rural Alaska. 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.

One phase of the state project to transport LNG from the North Slope to Fairbanks will get under way—expansion of the gas distribution system in Fairbanks.



© Ken Graham Photography.com

**Dena'ina Wellness Center, Anchorage, Neeser Construction**

### **Hospitals and Health Care: \$240 Million**

Spending will be about the same as last year, concentrated in Anchorage at facilities supported by federal government grants to the ANTHC (Alaska Native Tribal Health Consortium) and Southcentral Foundation. One major project is the 200-room patient housing facility on the Anchorage campus of the Alaska Native Medical Center.

Private, non-profit, and public hospitals around Alaska are continuously renovating and expanding. This year major projects are expected in Fairbanks, Ketchikan, Anchorage, and on the Kenai Peninsula. On the other

hand Providence, the largest hospital complex in the state, has recently finished a large capital expansion program and will have only modest capital expenditures this year.

Smaller projects are underway across the state, in response to the growing need and aging of the population. For example, a new blood bank facility in Anchorage will be completed this year.

### **Other Commercial: \$135 Million**

Commercial construction spending consists primarily of office buildings, banks, hotels, retail space, and warehousing.<sup>8</sup> The level of spending from year to year



© Ken Graham Photography.com

**Norton Sound Regional Hospital, Nome  
Neeser Construction**

<sup>7</sup>Although we include utilities and hospitals/health care spending in private spending, there is also a significant amount of public spending for some projects in these categories.

<sup>8</sup>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.



Photo By Danny Daniels

**Parks Highway MP 239-252, QAP**

can be influenced by a few projects, like large office buildings.

We expect the commercial construction rate will be down both because of the slowing of growth of the economy and uncertainty generated by the falling price of oil. A couple of new office buildings are under construction in Anchorage and several new hotel projects have been announced. A new Fred Meyer store is scheduled for construction in Palmer, and Wasilla may see construction of a “Fun Center.” Elsewhere the Sealaska Heritage Institute is building the Walter Sobelev Center in Juneau, and the Richard Foster Building in Nome is progressing.

Projects with government funding are more likely to move forward than privately financed projects. Private investors will want to wait and see how the fall in oil prices impacts the general economy before moving forward with new projects.

**Residential: \$415 Million**

Activity in the residential housing market continues to be

concentrated in the Matanuska Susitna Borough, where state population growth is concentrated. Other large markets face either shortages of land for expansion, like Anchorage, or high heating costs, like Fairbanks. The deceleration of economic and population growth will slow activity in this sector of the construction industry. Uncertainty over the impact of lower oil prices will also take a toll.

Projects with public funding will be less sensitive to these economic trends.

**PUBLICLY FINANCED CONSTRUCTION**

**National Defense: \$435 Million**

Defense spending, which has been trending downward, will be slightly higher this year. The budget for MILCON (military spending for facilities on bases) is forecast to be \$144 million, but won't involve any large projects. The environmental program budget, including FUDS (For-

merly Used Defense Sites), will be a little higher than last year, at \$130 million. This program includes cleanup of hazardous substances and contaminants at former defense sites as well as on current Army and Air Force installations.

Spending on the smaller civilian programs and other inter-agency programs will be higher than in past years. This spending mostly funds Corps of Engineers projects for other federal agencies like NOAA, FAA, and the BLM, and projects done in cooperation with Alaska communities, such as harbor improvements.

Missile defense spending at Fort Greely, was recently added to the federal budget at an expected level of \$50 million. This is the start of a \$1 billion expansion that will add 14 interceptor missiles to the defense system at Fort Greely over the next several years.

Other defense entities like the Pacific Air Forces Regional Support Center will have modest capital budgets.

Although the federal government keeps postponing dealing with the problem of adequate funding of this program since gasoline tax revenues are falling, the program continues to limp along. Alaska continues to receive between \$400 and \$500 million annually from this and other federal programs.<sup>9</sup>

These funds will pay for major projects throughout the state, such as reconstruction along the Parks highway, pavement preservation on the Seward and Sterling highways, bridge construction, and extension of major arteries in Anchorage. Some federal funds also go directly to Alaska Native tribal organizations for transportation projects.

The state also funds road construction through both the Department of Transportation and grants disbursed by the Department of Commerce, Community, and Economic Development. This source of funds will be marginally lower this year because the large size of the grant program in FY 2013 was not repeated in FY2014 or FY2015. Some money was also allocated for the state's Roads to Resources program, largely for continued planning. The state will continue to pay for deferred maintenance.

The \$453 million state general obligation bond package for transportation that passed the legislature in 2012 included \$227 million for highways and \$35 million for bridges, with the rest allocated

**Transportation—Highways & Roads: \$755 Million**

Spending on highways and roads will be marginally lower this year. The largest source of funding for highway construction is federal grants, in particular MAP21 (The Federal Transportation Reauthorization Act).

<sup>9</sup> Not all of the federal appropriation funds highway construction because it also includes the funding for the marine highway system and research and planning of transportation facilities.



**Natural Pantry roofing, Anchorage, Rain Proof Roofing**

to ports. Many of the projects identified in that appropriation are now under construction.

Local governments also spend on road construction and maintenance. For example, the Matanuska-Susitna Borough is in the second year of road improvements financed by general obligation bonds.

### **Transportation— Airports, Ports, and Harbors: \$465 Million**

Federal funds, mainly from the Federal Aviation Administration's AIP (Airport Improvement Program), provide the bulk of funding for airport improvements both at the large international airports in Anchorage and Fairbanks and the many smaller state-owned airports across the state. This continues to be a stable source of funding that has averaged about \$200 million in recent years. The biggest single project is improvements at the Kodiak airport. The international airports also fund some improvements through revenue bonds.

Spending related to ports and harbors will be up this year in spite of an absence of progress on the redevelopment of the Port of Anchorage. Federal funding, state general funds, the transportation bond package, and local sources are combining to underwrite projects in Nome in the Northwest; Kodiak, Homer, and Seward in Southcentral; and Juneau, Sitka, Hoonah, and Haines in the Southeast. In addition to upgrading of harbors, some of these facilities will enhance the capability of communities to handle larger cruise ships and others will upgrade the ferry system.

Spending on the Point McKenzie rail extension will be lower this year.

### **Alaska Railroad: \$25 Million**

The core capital construction program for modernizing and upgrading the Alaska Railroad will continue at about the same level as last year. This is funded through a combination of federal grants, cash flow, and revenue bonds. The railroad is awaiting

© Ken Graham Photography.com



**UAA Alaska Airlines Center, Cornerstone General Contractors**

funding to move forward on the PTC (Positive Train Control) system, mandated by the federal government.

### **Denali Commission: \$10 Million**

The Denali Commission—an innovative federal-state partnership Congress created in 1998 to more efficiently direct federal capital spending to rural infrastructure needs—continues to decline in importance. Most of its modest capital budget will be for energy-related projects.

### **Education: \$465 Million**

Spending for education will be about the same as last year, with a slight decline in University of Alaska spending offset by more K-12 spending.

University of Alaska construction spending on buildings will be down at both main campuses. The new Seawolf Arena in Anchorage is now complete and work is focused on completion of the engineering building, a parking garage, and a pedestrian overpass. In Fairbanks the engineering building will be enclosed, but funds to complete the interior have not yet been identified. The largest project on the Fairbanks campus is the initial stage of replacing the power/heating plant.

The state has appropriated funds for construction of several new rural schools as part of the

settlement of the Kasayulie case. Construction of new schools is now planned or underway at Kwethluk, Nightmute and Napaskiak. They will be built over the next two years. The general fund also contains numerous education-related grants for local school districts throughout the state.

New schools will be under construction in Anchorage, the Matanuska-Susitna Borough, Fairbanks, and Kodiak, funded by local bonds that are largely reimbursed by the state. Local school bonds in Anchorage, Fairbanks, the Mat-Su Borough, and elsewhere are also funding upgrades and renovations for other educational facilities.

### **Other Federal: \$255 Million**

Other federal construction will be lower this year as the federal government tries to hold down growth in the budget. In Alaska this will be felt in a decline in spending for direct procurement by federal agencies like 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 NOAA (the National Oceanic and Atmospheric Administration).

In addition to funding a large share of spending on transportation infrastructure through grants from the Department of Trans-

© Ken Graham Photography.com



**UAF Margaret Murie Building  
Davis Constructors & Engineers**



Photo By Danny Daniels

**North Pole Library, GHEMM Company**

portation, the federal government funnels construction dollars to the state though many other programs.<sup>10</sup>

Most of the funding for the state-administered Village Safe Water program for rural sanitation comes from federal sources, including the Environmental Protection Agency and the Indian Health Service. With the state contribution, it is expected to be constant at about \$60 million this year. Other types of federal grants fund armories and veterans' facilities and ferry terminals, among other things.

The federal government also provides construction grants to Alaska tribes, non-profit organizations, and local governments across the state.<sup>11</sup> Alaska Native non-profit corporations, housing authorities, and health-care providers receive most of this money. The largest of these programs in Alaska is NAHASDA (the Native American Housing Assistance and Self-Determination Act), which provides about \$100 million annually for housing construction in Alaska Native communities, through grants to federally recognized tribes and Alaska Native housing authorities statewide.

**Other State and Local: \$555 Million**

State and local government capital spending—excluding

transportation (roads, airports, and ports), education, health, and energy—will be about the same as last year. Many of these projects have been funded through the grants by the Department of Commerce, Community and Economic Development to local governments and non-profits throughout the state.

The state budget also includes the ongoing state weatherization and home energy rebate programs, which have now been expanded to include commercial buildings. Work is expected on a number of state-funded buildings, including the new library-museum in Juneau. The budget also funds a modest amount of deferred maintenance spread across all state departments.

Local government capital spending, from general funds and bonds as well as enterprise funds and direct federal grants, tends to be stable from year to year. A large share of this spending is for water and sewer facilities, but it also includes other construction, such as libraries, museums, recreational facilities, and solid waste facilities.

**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 ultimately depends on petroleum revenues), through the general fund and bond sales.

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 2014 was about 17,600 workers, with an average annual wage of \$75 thousand, 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 workers—estimated 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.



Photo By Danny Daniels

**KTUU Media Center Murals, Anchorage Neeser Construction**

<sup>10</sup> 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.

<sup>11</sup> Federal spending on health care projects for the Alaska Native community funneled to Alaska Native organizations is included in the Hospital/Health Care section of this report.

**Cover Photo: Northern Rail Extension across the Tanana River, Kiewit Infrastructure West**