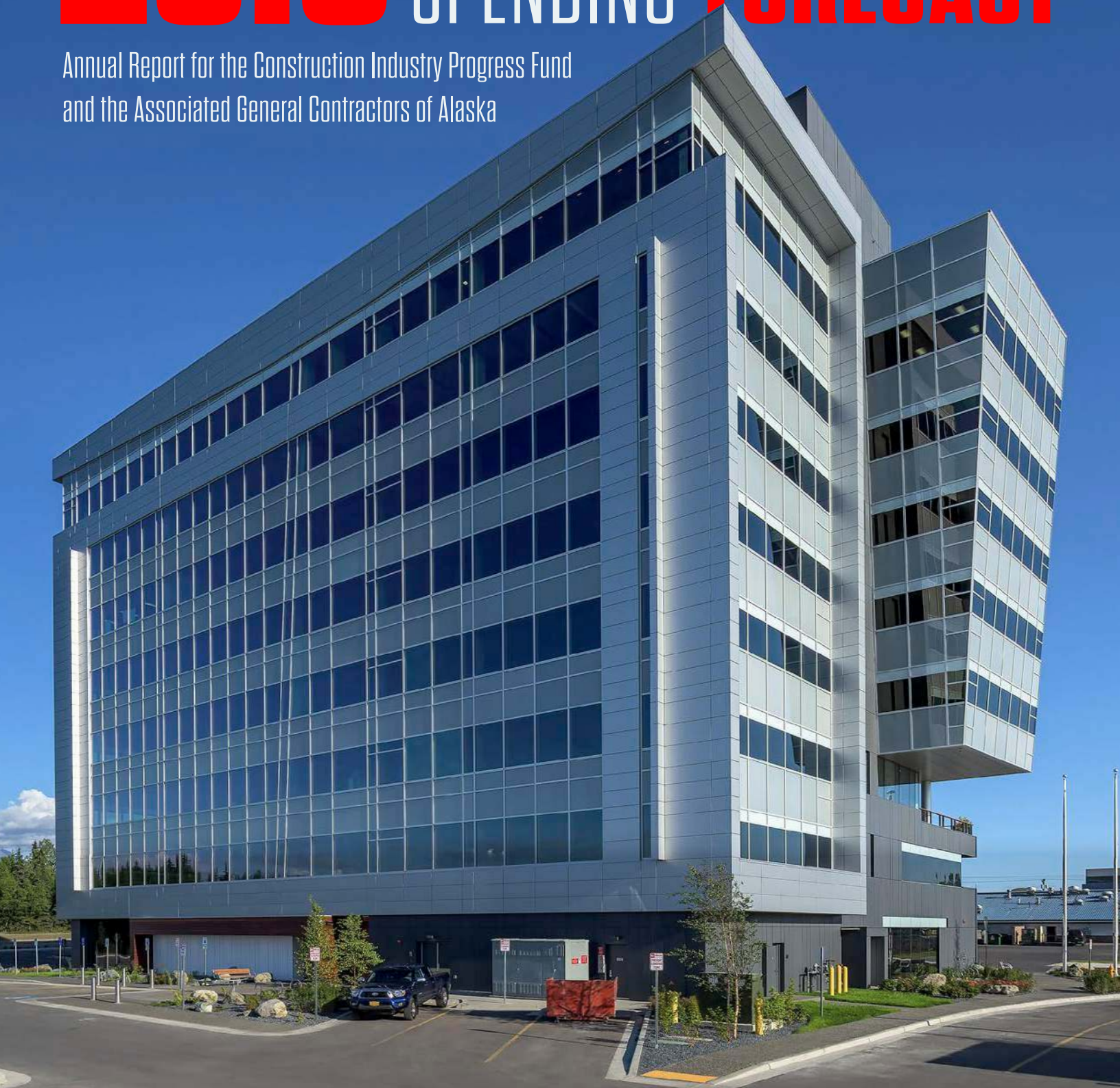


2016 ALASKA'S CONSTRUCTION SPENDING FORECAST

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



Dear Alaskans,

The Construction Industry Progress Fund (CIPF) and the Associated General Contractors of Alaska (AGC), proudly offer the 14th consecutive Alaska Construction Spending Forecast as a guideline to construction activity and its effect on the 49th State.

Under a special arrangement with the Institute of Social and Economic Research (ISER) at the University of Alaska Anchorage, Scott Goldsmith and Pamela Cravez have again compiled and written the Forecast. The forecast reviews construction activity, projects and spending by both the public and private sectors for 2016.

CIPF and AGC are proud to make this publication available annually and are confident it provides useful information for many of you.

We recognize in these times of economic uncertainty there is a likelihood of reduced construction activity, and some of this information contained herein may change.

The construction trade is Alaska's third largest industry, paying the second highest wages, employing nearly 18,000 workers with a payroll over \$1 billion. It accounts for 20 percent of and contributes \$7 billion to Alaska's economy. The construction industry reflects the pulse of the economy, and when it is vigorous so is the state's economy. Therefore, it is imperative to keep building and repairing necessary infrastructure laying the groundwork for the future.

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.



Michael I. Shaw
CIPF Chairman

2016 ALASKA CONSTRUCTION SPENDING

	Million	Change
TOTAL	\$ 7,303,000,000	-18%
TOTAL EXCLUDING OIL & GAS	\$ 4,178,000,000	-11%
PRIVATE	\$ 4,542,000,000	-24%
Oil and Gas	\$ 3,125,000,000	-25%
Mining	\$ 180,000,000	0%
Other Basic	\$ 104,000,000	39%
Utilities*	\$ 459,000,000	-33%
Hospitals/Health Care*	\$ 195,000,000	-19%
Other Commercial	\$ 150,000,000	-23%
Residential	\$ 329,000,000	-21%
PUBLIC	\$ 2,761,000,000	-6%
National Defense	\$ 552,000,000	27%
Highways and Roads	\$ 705,000,000	0%
Airports, Ports, and Harbors	\$ 387,000,000	-15%
Alaska Railroad	\$ 26,000,000	-4%
Denali Commission	\$ 10,000,000	0%
Education	\$ 406,000,000	-13%
Other Federal	\$ 253,000,000	-1%
Other State and Local	\$ 422,000,000	-26%

* Many projects in these categories are supported by public funds.
Source: Institute of Social and Economic Research, UAA.
Percent change based on revised 2015 estimates.

OVERVIEW

The total value of construction spending “on the street” in Alaska in 2016 will be \$7.3 billion, down 18% from 2015.^{1,2,3}

Oil and gas sector spending will fall 25% to \$3.1 billion from its record level of \$4.2 billion last year.

All other construction spending will be \$4.2 billion, a decline of 11% from \$4.7 billion last year.

Private spending, excluding oil and gas, will be about \$1.4 billion, down 24% from \$1.8 billion last year—while public spending will decline 6% to \$2.8 billion from \$2.9 billion.

Wage and salary employment in the construction industry, which increased an estimated 6 percent

last year to almost 18,000, will decline slightly in 2016.⁴

The decline in construction spending in Alaska in 2016 can be traced directly to the precipitous drop in the price of oil over the last 18 months, after the previous period of unprecedented high prices a few years earlier. In mid-2014 the price was above \$110 per barrel, but as this report is being written the price has fallen below \$30 for the first time in 12 years. Furthermore, the short-term outlook is for the price to remain low, or even decline further, because supply continues to outstrip demand and inventories continue to accumulate. The longer term outlook for price also continues to fall, because of the resilience

¹ Our revised projection for 2015 was \$8.9 billion, higher than the original estimate of \$8.5. This revision is primarily the result of higher than anticipated oil and gas spending in 2015.

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. 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.

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.

⁴ Alaska Department of Labor

of production in the face of the falling price.

The high price stimulated increases in construction spending across all sectors of the Alaska economy, particularly among oil and gas companies and the state government. The low price is now beginning to reduce construction spending within the economy, except for federal spending and spending by basic industries that benefit from lower oil prices.

So far the price drop has been felt most directly in the oil and gas sector. Although many companies announced optimistic investment programs for 2016, most, if not all, have recently announced cutbacks or postponements. The longer the price remains low, the greater the likelihood of further cutbacks in the oil patch.

Because of the oil price drop, a deficit of \$2 billion opened in the state general fund in FY2014, and it has increased to \$3.5 billion for each of the last two years. Although the state has been fortunate to have sufficient cash reserves to offset this revenue shortfall in the short term, it has meant a dramatic decline in new state funding for capital projects. Whereas the general fund capital appropriation in FY2013 was more than \$2 billion, in this past year it was only enough to cover the required match on federal transpor-

tation grants. And looking ahead, there is very little prospect for a significant increase in the capital budget in the coming years.

But the sharp decline in the state capital budget over the last three years has so far had limited effects on construction spending. This is because it takes considerable time for appropriated funds to become “cash on the street.” Several billion dollars of capital appropriations remain “in the pipeline,” which will keep state spending from falling dramatically this year. However, the amount of construction spending will be winding down in many communities like Juneau, Kodiak, and Fairbanks (excluding Eielson Air Force Base) because of declining state spending.

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. However, this will be moderated by concern over the negative impacts on the economy from such cancellations.

Spending for national defense will be higher this year. And fortunately, federal spending not related to defense—mostly consisting of grants, both to the state for transportation (roads, harbors, railroad and ferry system) and sanitation projects and to non-profits for health facilities



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Eklutna East II Senior Housing Facility, Unit Company

and housing—is not sensitive to the price of oil.

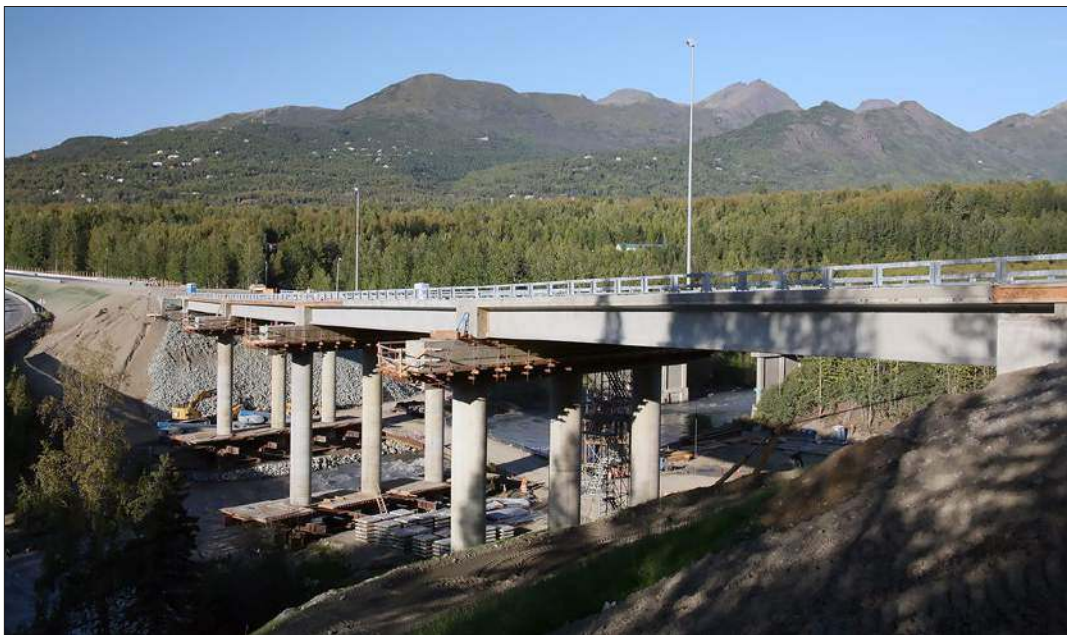
Since 2013 the Alaska economy has underperformed compared with the national average in spite of the stimulus of high oil prices that led to record high levels of employment in the oil and gas and construction sectors. Job growth has been less than 1% annually and is forecast to be negative in 2016. State population has not increased in the last two years.

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—particularly in the commercial and residential construction sectors as investors adopt a “wait and see” attitude, in regard to both the private economy and the ability of the state government to deal with the deficit. The decline in private construction spending this year is also partially due to the completion of a number of large utility and hospital projects.

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 2016 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, and because of the complexity of the state capital budget, it is always difficult to follow all the flows of state money into the economy.

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



Eagle River Bridge Addition, Kiewit Infrastructure West



Davis Office Building, Anchorage, Davis Constructors and Engineers

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PRIVATELY FINANCED CONSTRUCTION

**Oil & Gas:
\$3,125 Million**

Construction spending related to oil and gas will be down this year, both because of the lower oil price and completion of several very large projects.

Oil and gas is always a difficult sector 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.

This year the continuing volatility and uncertainty surrounding the oil price make forecasting the spending level significantly more challenging. The short-term price decline has an immediate negative impact on cash flow of firms already producing oil, and the long-term price decline has a negative impact on the economic viability of investments in new production. Both have a negative impact on the ability of the industry to draw investment dollars from outside the industry.

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 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 keep the flow of investment spending higher than price alone would suggest.

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, but further cutbacks are possible as the year progresses.

On the North Slope, three big projects that generated several hundred million in annual construction spending ended last year. Shell abandoned its search for oil in the Chukchi Sea, Exxon completed development of the technically challenging Point Thomson field east of Prudhoe Bay, and ConocoPhillips finished development of the CD-5 satellite, west of the Colville River and the Alpine field.

The major leaseholders—ConocoPhillips, British Petroleum, and Exxon—continue to invest in new developments at Prudhoe Bay and Kuparak to slow the rate of

decline in those fields. Although they have announced spending cuts in their Alaska operations, the cuts have been less severe than in other locations in other parts of the world.

ConocoPhillips is still developing a new production site in the Kuparak field and adding two new rigs to slow the rate of decline of that field. Its other major efforts are 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 with two new drilling rigs.

The budgets of the other companies active on the North Slope are smaller this year than last.

The Spanish company Repsol has deferred its winter exploration drilling program in the Colville River area.

The Italian firm ENI (Ente Nazionale Idrocarburi) announced that it is postponing its two year program of well drilling to bring the Nikaitchuq field into full production.

Caleus will be exploring at Smith Bay and working on both the Oooguruk and Nuka fields. It has two more years of drilling for total build out of Oooguruk, and is considering expansion of the offshore island from which the field is accessed. It has postponed work on the Nuka field. Brooks Range Petroleum is mov-

ing forward to develop the Mustang field, west of Kuparak, with financial assistance from AIDEA (Alaska Industrial Development and Export Authority).

Hilcorp will concentrate activity at Northstar, Milne Point, and Endicott. In addition, it is working on a plan for development of the Liberty prospect.

The North Slope Borough will be drilling an exploration well in the Placer Unit.

A newcomer, AEA88, drilled an exploration well at the end of last year but has announced no plans for 2016.

Great Bear and Linc Petroleum are spending this year evaluating prospects.

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

Spending in Cook Inlet will again be dominated by Hilcorp, which recently purchased the assets of both Chevron and Unocal. It continues to increase production from new production wells, repairs, workovers, and replacing facilities.

Blue Crest Energy, which purchased the assets of Buccaneer, continues to work on development of the Cosmopolitan field from an existing onshore pad.

Furie is developing the Kitchen Lites offshore field using a new monopod platform. It has postponed two new wells because of uncertainty over the local gas market.

Aurora is planning an exploration program in the Susitna Flats.



KLU#3 Furie Platform Grout Seal Remedial Work, Davis Block Co., Inc.

Other lease owners and operators in Cook Inlet, like the Municipality of Anchorage and ConocoPhillips, will continue to spend on investments to optimize production.

Elsewhere in the state, Doyon will continue to explore for gas at its site near Nenana, and Ahtna will be looking for gas for the local market at a site near Glennallen.

A new asphalt plant will be built at the refinery at North Pole.

Mining: \$180 Million

Spending by the mining industry on exploration and development,⁵ as well as maintaining and upgrading existing mines will be about the same as last year, in spite of continued weakness in metal prices.

Spending by the six major mines currently in operation will be higher than last year, as producers make new investments to increase efficiency and to develop new prospects for future production to extend the life of the mines. Examples include a dry stack tailing storage facility at Greens Creek and extensive exploratory drilling at Pogo and Kensington.

Spending for drilling and other site work will be low again 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 limited activity.

Other Basic Industries: \$104 Million

Other basic industries—tourism, seafood, air cargo, and timber—benefit from lower oil prices, and construction spending in this sector of the economy will be higher than last year.

Plans for several new hotels in



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Coronado Park Senior Village, Solar Hot Water, Anchorage, Klebs Mechanical

Anchorage, as well as hotels in Fairbanks, Sitka and Denali have been announced for this year. The number that are actually built will depend both on the strength of the tourism industry and the overall economy.

Although 2015 was a difficult year for seafood markets, a number of small seafood-related capital projects have been announced for this year.

Alaska Airlines has announced a multi-year \$50 million program of investments to upgrade facilities in Alaska. This year the program includes a new hangar in Anchorage and upgrades to terminal facilities at a number of other locations around the state.

Utilities: \$459 Million⁶

Utility spending will be down sharply this year because several large electricity generation expansion and renovation programs have now been completed.

Among the Railbelt electric utilities, the large new MEA (Matanuska Electric Association) plant at Eklutna is finished, and the AML&P (Anchorage Municipal Light and Power) replacement plant in northeast Anchorage is also complete. HEA (Homer Electric Association) has finished both of its new power plants. CEA (Chugach Electric Association) will only be doing subst-

tion, distribution, and refurbishment work. GVEA (Golden Valley Electric Association) is finishing work on its Healy 2 unit.

Some of the smaller utilities, such as Copper Valley and Kodiak, are also finishing large projects. Other smaller electric utilities are mostly doing routine maintenance. However, there are 49 small projects currently underway across the state, with funding assistance through the Renewable Energy programs of the state.

No significant expenditure related to gas utilities is projected as development of the gas distribution system for Fairbanks is currently on hold.

Telecommunications spending will be about the same as last year, as firms make expenditures to improve the quality of service. 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.

Hospitals & Health Care: \$195 million

Hospital and health care spending will be lower this year as a result of the completion of a number of large projects that expanded capacity in a number of markets, including Anchorage, Kenai, and Ketchikan. However, most public and private hospitals continue to expand and renovate in response to growing demands. The largest project this year will be in Fairbanks.

Alaska Native health-care spending will be somewhat lower this year, as the pace of expansion in Anchorage decelerates. However, smaller projects are underway throughout the state, including in the southeast and the northwest. The Alaska Native Tribal Health Consortium (ANTHC) is completing its 200-room hotel on the campus of the Alaska Native Medical Center.

The Yukon Kuskokwim Health Corporation has received a letter of commitment for a loan from



Boney Courthouse Renewal, Anchorage, Cornerstone General Contractors, Inc.

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

⁶ 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.



Middle Fork Chulitna River Bridge, Quality Asphalt Paving (QAP)

Photo By Danny Daniels

pact on the demand for housing as well. Growth of both the senior and millennial populations is increasing the demand for smaller housing units.

for other federal agencies like NOAA, FAA, the BLM, as well as projects done in cooperation with Alaska communities, such as harbor improvements.

PUBLICLY FINANCED CONSTRUCTION

National Defense: \$552 Million

Defense spending, which had been trending downward for several years, will be higher in 2016. The Corps of Engineers budget for MILCON (military spending for facilities on bases) will be higher because of an influx of sustainment, restoration and modernization (SRM) work at Eielson Air Force Base and the beginning phase of the F-35 bed-down. Large projects will include an F-35 flight simulator building and work on the central heat and power plant, both at Eielson.

The first phase of a \$1 billion expansion at Fort Greely and Clear Air Force Base for missile defense will also be underway this year. This program will add 14 interceptor missiles to the defense system at Fort Greely over the next several years.

Spending on the civilian and other interagency programs of the Corps of Engineers will also be substantially higher than in past years. This spending typically funds Corps of Engineer projects

The environmental program budget of the Corps of Engineers, including FUDS (Formerly Used Defense Sites), will be lower than in past years. This program includes cleanup of hazardous substances and contaminants at former defense sites, as well as on current Army and Air Force installations.

Transportation—Highways & Roads: \$705 Million

Spending on highways and roads has tended to be stable and predictable, and 2016 is no exception, with spending expected to be the same as last year. The good news is that Congress finally passed a new federal transportation bill after many years of continuing appropriations. The new bill ensures that funding for Alaska roads (as well as the Marine Highway System and the Alaska Railroad) will continue to increase for at least the next five years. Some federal funds also go directly to Alaska Native tribal organizations for transportation projects.

Although spending on highways comes primarily from federal transportation funding, the state also funds highway and road construction with an annual capital appropriation to the Department of Transportation and Public Facilities, and through

the USDA, which will be the cornerstone for funding a large (\$287 million) new hospital and outpatient clinic in Bethel. Work will start on the clinic this year.

Other Commercial: \$150 Million

Commercial construction spending consists primarily of office buildings, banks, retail space and warehousing.⁷ The level of spending from year to year can be influenced by a few projects, like large office buildings or shopping malls, as well as the current and projected health of the economy.

Market indicators like vacancy rates and turnover are relatively healthy, but the outlook is fragile.

We expect the pace of commercial construction will slow this year, both because of weakness in the economy (slow growth over the last three years and forecasted decline in 2016 and possibly beyond) and uncertainty about the ability of the state

government to successfully deal with the deficit. Specific larger projects now under construction or in the planning stage for this year include an expansion of the Anchorage Museum, a new retail development in East Anchorage (tenants include Krispy Kreme Doughnuts), and a new Fred Meyer store in Palmer.

Residential: \$329 Million

Although indicators for the residential market are relatively healthy as the new year begins, the economic slowdown and out-migration of population will begin to have a dampening effect as the year progresses. The strongest market is likely to continue to be the Mat-Su, since it is the only area continuing to see population growth. Projects with public funding will be less sensitive to these economic trends.

The changing composition of the population is having an im-



Fairbanks Airport Way Repaving Phase 2, HC Contractors, Inc.

Photo By Danny Daniels

⁷ 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, utilities, and this year hotels, from commercial construction, so we can provide more detail about those types of spending.

bonding. In addition the Department of Commerce, Community, and Economic Development disburses grants to local governments for road construction.

The most recent state transportation bond package was approved in 2013, and grants for local road construction were also large at that time because of the high price of oil. Since it takes considerable time for transportation appropriations to become “cash on the street” these funds are still contributing to current spending.

These funds will pay for major projects throughout the state, such as the Glenn Highway and Muldoon Road Interchange project in Anchorage and reconstruction work on both the Dalton Highway and the Parks Highway in Wasilla. Several bridge projects are also on the schedule, including the Slana River and Tulsona Creek replacements. (Construction of the major reconfiguration of the Sterling Highway at Cooper Landing would begin in 2018.)

Local governments also spend on road construction and maintenance. Anchorage has a small bond issue for road construction each year, and other communities also bond for road improvements on a regular basis.

Transportation— Airports, Ports, & Harbors: \$387 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 is augmented by revenue bonds and other local sources. Most projects are scattered around rural Alaska.

Spending related to ports and harbors will be lower this year. Work on the redevelopment of the Port of Anchorage will be slow, and there will be no money to continue development of the Point McKenzie rail extension.

Spending from a combination of federal funding, state general funds, the transportation bond package, tourist-related fees, and local sources will be combined to underwrite projects throughout the state, including significant activity at Skagway, Valdez, Juneau, and Seward.

Alaska Railroad: \$26 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 waiting for 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—received a breath of new life as a result of the recent visit by President Obama. Spending will be stable.

Education: \$406 Million

Spending for education comes mostly from state government, and it will be lower this year.

Direct state funding of rural schools will be less this year, with the completion of new schools as part of the settlement of the Kasayulie case. The schools at Nightmute and Napaskiak have been completed, and work continues on the school at Kwethluk. Work on the only other school to be built as a result of that settlement, Kivalina, will not start this year. Other state funding will be for renovations and repairs.

The legislature last year imposed a five-year moratorium on the decades-old practice of reimbursing municipalities for a share of the debt they incurred to build new and repair existing schools.

© Ken Graham Photography.com



Glenn Massay Theatre-MatSu Community College, Roger Hickel Contracting

This will more than double the price of new schools for urban school districts. This year the local school districts are still using funds from debt incurred before the moratorium to complete a number of projects.

In Anchorage the biggest projects will be completion of the upgrades to the Airports Heights and Mountain View Elementary schools. In Fairbanks construction of the Ryan Middle School will be the big project. In the Mat-Su two schools are under construction—Dena’ina Elementary School and the replacement of the Iditarod Elementary School.

There will also be a new charter school in the Mat-Su, funded by a USDA loan. The school that recently burned down in Bethel may be replaced using funds from the insurance policy.

There will be little University of Alaska construction spending on buildings on either main campus this year. Work to complete the new engineering building in Fair-

banks has been deferred due to lack of funds. Replacement of the power/heating plant in Fairbanks will be the biggest project. Only small projects will be undertaken at the other campuses.

Other Federal: \$253 Million

Although the largest categories of federal construction spending in Alaska are transportation grants (highways and airports) and national defense, there are several other sources of federal spending that contribute to construction spending. The largest of these are a series of grants that support housing and safe water programs in the state. Because these grants have been stable over the years, other federal spending has tended to be constant from year to year, as is the case in 2016.

Most of the funding for the state-administered Village Safe Water program for rural sanitation comes from federal sources,

Photo By Danny Daniels



UAA Engineering and Industry Building, Neeser Construction



UAF Woods Center, GHEMM Company

Photo By Danny Daniels

including the Environmental Protection Agency and the Indian Health Service. With the state contribution, it is expected to be constant this year. Other types of federal grants to the state 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.⁸ 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 assistance for housing construction in Alaska Native communities through grants to federally recognized tribes and Alaska Native housing authorities statewide.

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) also provides funding for construction each year.

**Other State & Local:
\$422 Million**

State and local government capital spending—excluding transportation (roads, airports, and ports), education, health, and energy—will be lower this year. Many projects have been funded in recent years through the grants from the Department of Commerce, Community and Economic Development to local governments and non-profits throughout the state. These

⁸ 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:
CIRI Fireweed Business Center,
Davis Constructors and Engineers**

funds are starting to dry up.

The state budget also includes the ongoing state weatherization and home energy rebate programs, which have now been expanded to include commercial buildings. 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, direct federal grants, and foundations 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 buildings, 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 thus adding 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 2015 was about 18,000 workers, with average annual pay of \$75,000, 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, dentist's offices, and furniture stores.



**Chester Creek At Muldoon Realignment, Anchorage,
Bristol Construction Services**

Photo By Danny Daniels