

**2005**  
**Alaska Construction Spending Forecast**

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For  
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## Overview

We estimate total construction spending in Alaska in 2005 to be \$5.94 billion, with \$3.835 billion provided by private funds and \$2.105 from public sources.

This is an increase from 2004, both for private and public spending<sup>1</sup>. On the private side it is primarily the result of more oil and gas related projects, construction related to the development of new mines, and hospital construction and expansion around the state. On the public side it is the result of a strong defense budget and transportation related spending throughout the state.<sup>2,3</sup>

Our estimate is subject to error because some industries are reluctant to reveal their investment plans for fear of alerting their competitors, and some have not completed

<sup>1</sup> A portion of the growth compared to our estimate for last year is due to a more comprehensive identification of projects this year. Some of the projected growth is also due to the inevitable postponement of some projects from last year to this year. We anticipate that there may also be some postponements this year, but cannot forecast their magnitude.

<sup>2</sup> We define total construction spending broadly to include not only the construction industry as defined by the U.S. Department of Commerce and the Alaska Department of Labor, but other activities as well. Specifically, our construction spending figure encompasses all the spending associated with construction occupations, 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 and other industries, such as the carpenter that works for the Anchorage School District. The reason we do this is to get a figure that recognizes the total occupational demand construction activity places on the work force.

<sup>3</sup> Not all of the total represents projects that will go out to bid.

their planning for the year. A number of large projects span two or more years, and estimating the share of expenditures that will occur in each construction season is difficult.

Inevitably we'll miss some projects in an exercise of this nature, and some announced projects will be postponed or will never materialize.

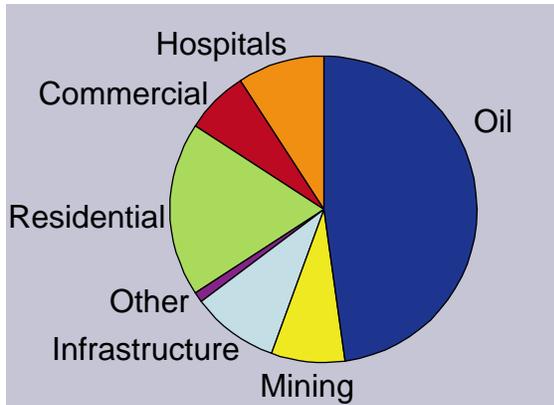
This is the second year we have prepared a forecast of construction spending, and our categories of spending are not exactly comparable to those last year. Consequently it is not possible to directly compare the forecasts by category between 2004 and 2005. Although we have not conducted a formal year-end review of construction spending in 2004, in the process of collecting information for 2005 we have determined that our projection for 2004 was robust.

<b>Alaska Construction Spending 2005 Forecast (Million \$)</b>	
<b>TOTAL</b>	<b>\$5,940</b>
<b>PRIVATE</b>	<b>\$3,835</b>
Oil and Gas	1,835
Mining	300
Other Basic Industry	50
Residential	700
Commercial	250
Hospitals	350
Utilities	350
<b>PUBLIC</b>	<b>\$2,105</b>
Defense	600
Highways	400
Airports and Water Transport	330
Alaska Railroad	75
Denali Commission	100
Other Federal	300
Education	150
Other State & Local	150

## PRIVATE CONSTRUCTION

The larger piece of the construction pie is funded by private sources using both imported and local capital.

**Figure 1. Projected 2005 Construction Spending in Alaska: Privately Financed (\$3,835 million)**



### Oil and Gas: \$1,835 Million

Spending in 2005 will be up over last year due to an increase in investment by the majors and the independents on the North Slope as well as the start of the Alyeska reconfiguration project and a refinery upgrade in Fairbanks. The recent announcement by the Governor of a reinterpretation of the method used to calculate the severance tax for North Slope oil production could, however, result in some revisions to these plans.

The North Slope majors—BP, Conoco Phillips, and Exxon—expect to invest \$1.9 billion in their Alaska operations in 2005. Backing out the purchase of tankers and expenditures related to the Alyeska pipeline, the total construction budget for optimizing production from existing fields, including new wells and facilities to handle water and gas produced with oil, and for exploration will be \$1.4 billion.

The independents on the North Slope, including Kerr McGee, Pioneer, and Armstrong will spend about \$85 million on exploration.

In Cook Inlet, exploration and development spending by Unocal, Aurora, Marathon, Forest, Pelican Hill, North Star Energy Group and others will increase this year to an estimated \$155 million.

A two year project to reconfigure the Alyeska pipeline will begin this year. In addition, the Flint Hills refinery will begin a two year project to upgrade their refinery in Fairbanks. We anticipate about \$175 million in spending in 2005 associated with these projects.

The oil and gas spending level in 2006 and beyond will depend largely on whether any new fields, such as Liberty, are given the go-ahead for development.

### Mining: \$300 Million

Spending by the mining industry, on exploration, development and construction of new mines, as well as upgrading existing mines, will be greater this year than last.

Development of several important prospects, including Donlin Creek and Pebble, bodes well for a continuation of strength in this sector in future years although the construction spending currently associated with those prospects is small.

The Pogo mine, outside Fairbanks, is in its second year of construction and should be completed this year with expenditures expected to be about \$120 million.

Construction of the Kensington Mine in Southeast Alaska was scheduled to begin

last year. It was postponed but we have included construction startup in the forecast for this year. A budget of \$70 million for the first year of construction is expected.

The smaller Rock Creek project at Nome will also be under construction this year with a budget expected to be about \$40 million.

Significant upgrades are expected at some of the existing large mines around the state, in particular at Red Dog and Fort Knox. Smaller capital budgets are expected at True North, Greens Creek, and Usibelli bringing the total to about \$40 million.

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

#### **Other Basic Industries: \$50 Million**

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

The tourism industry is adding limited additional facilities outside the major metropolitan areas this year. For example, the Denali Wilderness lodge will be expanded. We anticipate a scattering of other smaller projects. On the down side, the planning for a large private cruise ship dock for Ketchikan has not moved forward this past year.

#### **Residential: \$700 Million**

2005 will be another good year for residential construction based on continued population growth and general optimism about the prospects for the Alaska economy. We expect the total value of

construction to be about the same as last year, in spite of an increase in the cost of materials, although the number of new units will be down slightly. This is the result of the fact that the refinancing and upgrading boom associated with low mortgage rates has run its course, and an expected increase in mortgage rates in response to a general tightening of credit markets.

We will continue to see growth in rehabs as land becomes more scarce in urban areas like Anchorage and Juneau.

In the largest market --Greater Anchorage and the Mat-Su Borough will continue to get an increasing share of new residential construction, particularly moderately priced single family units. Anchorage residential construction will be increasingly composed of multifamily units and higher value single family units.

Fairbanks should have another strong year in 2005, driven by activities surrounding the deployment of the new Stryker Brigade to Fort Wainwright and the development and upgrading of mines.

Activity in the rest of the state will be more mixed, depending on local economic conditions, but slowly rising mortgage interest rates will begin to have an effect.

#### **Commercial: \$250 Million**

Commercial construction spending consists mainly of retail, office, hotel, and warehouse space<sup>4</sup>. (Hospitals are considered in a separate category this

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<sup>4</sup> Our commercial construction figure is not comparable to the published value of commercial building permits. Building permit data generally includes construction financed from all sources except the federal government. Our figure is less inclusive.

year.) Growth is driven by both the size and growth in the economy. Renewed optimism about the prospects for the economy—in particular the high oil price, the possibility of construction of a gas line, and the potential for the opening of ANWR—will be a positive factor, particularly in the Greater Anchorage and Fairbanks markets.

There are no giant projects that have been announced for this sector (with the possible exception of a new parking garage at Ted Stevens International Airport), which generally consists of numerous smaller buildings, many of which are not well publicized prior to actual construction. Because of this, it is impossible to develop a complete listing for each community.

We expect new hotels, some additional box stores, new office space, and some new warehouse space in Anchorage. However, vacancy rates are generally a little higher moving into 2005 than was the case last year, and interest rates will likely rise during the year. Thus, the total volume of new square footage may be down slightly, although higher construction costs will keep the value of construction at about the same level as last year.

Additional retail space will continue to be the most important category for the Matanuska-Susitna Borough.

As with residential construction, Fairbanks should see another strong year in response to economic growth from mining and the military.

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

### **Hospitals: \$350 million**

Hospital construction will be dominated by expansion of Providence Hospital in Anchorage at a cost of \$110 million, and completion of the hospital in Mat-Su (\$75 million). Expansions of hospitals in Fairbanks, Juneau, and on the Kenai Peninsula will add another \$125 million.

Projects at other smaller facilities around the state will further increase the total for this sector.

### **Utilities: \$350 Million**

Communications, private transportation, electric power, natural gas, and other private utilities have annual construction budgets driven largely by the population growth that generates new housing and businesses. In addition, they need to make large new investments from time to time to increase capacity and enhance their business activities.

The communications sector will continue to be a dynamic sector with about \$110 million of new investments.

No large private transportation construction projects have been identified for this year.

The electric utilities may spend \$200 million on generation, transmission, and distribution projects throughout the state. The largest single project is a new generation plant in Fairbanks, estimated to cost \$90 million.

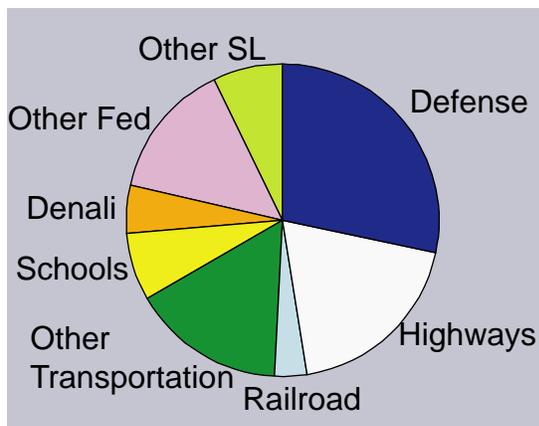
Gas distribution company investments will be about \$10 million.

## PUBLIC CONSTRUCTION

Most public construction money comes from the federal government with smaller amounts from state and local sources financed by current revenues and bonds.

There are numerous ways to categorize public construction spending. For ease of collecting information about them, we have put them into the eight categories shown in the pie in Figure 2.

**Figure 2. Projected 2005 Construction Spending in Alaska: Publicly Financed (\$2,105 million)**



### **Defense: \$600 Million**

For several years, construction spending for defense has been twice the long term Alaska average. A number of big ticket items will continue to boost spending this year, some of which were postponed from last year.

The most significant is the continued buildup associated with the deployment of the new Stryker Brigade to Fort Wainwright at Fairbanks. Construction will be underway to prepare for the full force, much of which will temporarily be housed at Fort Richardson in Anchorage.

Considerable construction activity is also associated with the mobilization of a new airborne brigade combat team and a C-17 cargo plane squadron. Both of these deployments will be in Anchorage.

Spending on the missile defense system at Fort Greeley and other sites will continue this year with the deployment of ten additional missiles.

After this year, defense construction spending may begin to taper off back down to levels more consistent with the late 1990s.

### **Highways: \$400 Million**

The federal highway budget in Alaska has been trending upward and got a large boost a couple of years ago. Spending in 2005 should be a little higher than last year because of the replacement of some funding that was lost last year.

This budget funds highway construction throughout the state, with the largest projects typically located in the Anchorage area and along the rest of the railbelt.

Smaller amounts of highway construction spending is also coming from the state general fund, and special earmarks in federal legislation.

Highway funding in future years depends on the outcome of discussions currently underway in Washington D.C. about the size of the future transportation budget for the entire nation.

### **Airports and Water Transport: \$330 Million**

About \$230 million from the Federal Aviation Administration will go to fund

airport construction projects in the \$5 to \$10 million range throughout the state.

Activity at Ted Stevens International Airport in Anchorage has been winding down with the completion of Concourse C, but this year will see spending on the refurbishing of Concourse B as well as a normal level of spending on runway enhancements, and other projects totaling about \$40 million.

Port and ferry dock spending from the Economic Development Administration and other sources will add another \$60 million.

A large project on the horizon is a major expansion of the Anchorage port. If that happens, it will be a big boost to this category in the coming years.

#### **Alaska Railroad: \$75 Million**

The Alaska Railroad's construction spending will increase modestly this year as the railroad works to continue to improve the quality of the operation and keep transportation costs along the railbelt as low as possible.

Important projects include not only track improvements, but also completion of the new operations center in Anchorage, and rail yard expansion. Preliminary design work for extension of the railroad to Fort Greeley will also be underway.

Most of the railroad's funding comes from the federal government, and the future level of spending also depends on the continued important role played by our Congressional delegation.

#### **Denali Commission: \$100 Million**

The Denali Commission, created by Senator Ted Stevens to more efficiently

direct federal capital spending to rural Alaska infrastructure needs, has been spending about \$100 million annually, and a similar amount is planned for this year.

This year about two-thirds of the commission's budget will fund energy related needs, including bulk fuel upgrades and electric power projects. About one-quarter will fund health facilities, and the rest will go toward a variety of types of projects, including training programs and housing for teachers.

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

#### **Other Federal: \$300 Million**

National defense, transportation spending, and the Denali Commission make up the largest and most visible part of federal construction spending in Alaska, but there are a number of other important elements to federal capital spending.<sup>5</sup>

Federal agencies other than the Department of Defense, such as the Department of Interior (the National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management), the Postal Service, Department of Agriculture, and others have their own capital budgets. For example, the Park Service is building new facilities in some of the National Parks this summer.

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<sup>5</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. In addition, we have tried to avoid the possibility of double counting funds as they pass from agency to agency, or become part of a larger project.

Most of the state capital budget is funded by federal grants. Excluding transportation projects, the largest category is rural sanitation projects, based on grants from the Indian Health Service, Housing and Urban Development, the Environmental Protection Agency, and other federal agencies. This initiative will be contributing \$100 million to state construction spending, about the same amount as in past years.

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

### **Education: \$150 Million**

Construction spending for schools will be down this year due to the completion of a large number of projects funded by an earlier state bond issue. Current projects are largely funded by local bond issues that were passed before the expiration date for inclusion in the state bond reimbursement program at the end of 2004. More limited funding is coming from the state general fund capital budget.

One large project on the horizon for Anchorage is the new Muldoon middle school with a projected cost of \$50 million. Other projects are much smaller, with many renovations and repairs scheduled.

Two large University of Alaska construction projects were completed in 2004—the library in Anchorage and the museum in Fairbanks, and the next large project, the Integrated Science Center in Anchorage, has not yet gotten underway.

### **Other State and Local: \$150 Million**

Local governments fund non-education construction projects such as roads, drainage, trails, parks, and police and fire stations. For example, Anchorage expects to spend about \$50 million on such projects.

Local government enterprises not included in other categories, such as Anchorage Water and Wastewater, which has a \$40 million capital budget this year, are another component of this residual category.

A small amount of state funded construction spending that is neither based on federal grants nor related to transportation or education also falls into this category. An example is grants from the state to local governments for facilities construction and maintenance.

## **WHAT'S DRIVING SPENDING?**

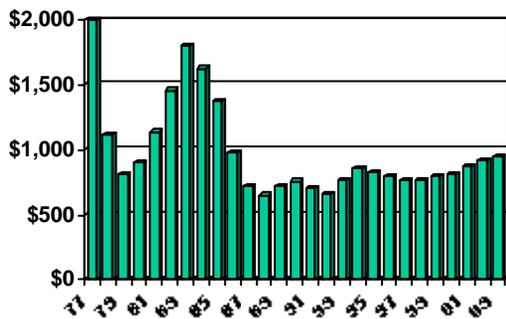
Construction tends to be the most cyclical industry in the economy, expanding and contracting over the course of the business cycle much more dramatically than any other sector. Construction activity—measured by jobs, payroll, gross product, or total sales—has been booming in recent years, driven largely by growing federal capital grants to Alaska, as well as by large federal agency capital budgets.

These grants not only fuel public spending by state, local, and quasi-government

entities, but they also give a general boost to the economy—and thus add to the aggregate demand for new residential, commercial, and private infrastructure spending. So federal spending has a multiplier effect on other components of construction spending.

The boom in construction spending is evident in the pattern of construction industry payroll shown in Figure 3. Corrected for inflation, it has been increasing for several years. However, in contrast to earlier periods of economic boom during Alyeska pipeline construction and the early 1980s, the expansion has not been precipitous.

**Figure 3. Construction Industry Payroll (In Millions of 2003 Dollars)**



### CONSTRUCTION IN THE OVERALL ECONOMY

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

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

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

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

Measured by Gross State Product, the construction sector only makes up 5 percent of the economy (Figure 4.). But this consists mostly of the payroll of construction firms and does not reflect either construction “hidden” in other sectors or “backward linkages” to other industries. Although considerable, calculating the size of these factors was beyond the scope of this analysis.

**Figure 4. Alaska Gross Product, 2001 (In Billions of Dollars)**

