The Alaska Railroad supports nearly 1,900 Alaska jobs and $83 million in payroll. As Figure 1 shows, 42 percent of those jobs are railroad jobs and 58 percent are in other Alaska businesses. Of the payroll, 53 percent goes to railroad employees and 47 percent to employees of other Alaska businesses.

Those jobs and income result from the $108 million the railroad spends in Alaska annually, to operate trains and build facilities. The spending supports jobs and income both directly and indirectly. When railroad employees spend their paychecks, they generate additional jobs and income in Alaska. Likewise, when the railroad buys supplies or services from Alaska businesses, those purchases help support jobs and income throughout the state economy.

The railroad benefits Alaska in other ways, besides spending money, but we can’t quantify those other benefits. The railroad helps—or in some cases makes possible—certain economic developments, by providing a cheaper, more efficient way to transport heavy, bulk commodities like gravel and coal.

Also, by hauling jet fuel from the refinery near Fairbanks to Anchorage, the railroad helps support the refinery and provides Anchorage’s international airport with an in-state source of fuel at competitive prices.

The railroad helps Alaska’s tourism industry, by offering another way for tourists to travel and see areas not accessible by road. Such benefits are real, but because we can’t measure them in jobs or income generated, the economic effects reported here are just the effects of railroad spending.

This summary is based on Economic Significance of the Alaska Railroad, an ISER report by Bradford Tuck and Mary Killorin (see back page). The railroad contracted with ISER to do the analysis.

**BACKGROUND**

The Alaska Railroad runs from the Kenai Peninsula—where it has terminals at the ports of Seward and Whittier—north to Anchorage and then on to Nenana and Fairbanks in the Interior.

The railroad has been a state-owned corporation since 1985, when the State of Alaska bought it from the federal government, and its operations are self-supporting. The U.S. Congress established the railroad in 1914, to boost economic development by providing a way to get gold and other minerals from the Interior to port for shipment south.
Spending for projects creates relatively more non-railroad jobs, because in many cases railroad employees don’t build new facilities or infrastructure—the railroad contracts much of that work out to Alaska businesses.

The mix of jobs created by operating or capital spending also differs. As you’d expect, a big share of the non-railroad jobs from new capital spending—nearly a third—would be in construction. By contrast, the biggest shares of non-railroad jobs supported by new operations spending would be in health care (like jobs in medical clinics) or in grocery or department stores or other retail trade places.

Figure 2 shows more detail about the economic effects of annual railroad spending, dividing the $108 million of in-state spending into $65 million of operations spending and $43 million of capital spending.

Operations spending—that is, spending to run the railroad—directly generates 677 railroad jobs, $38 million in railroad payroll, and $27 million in purchases from Alaska businesses. That spending in turn generates another 650 jobs and $21 million in Alaska payroll.

Capital spending—for building railroad facilities or infrastructure—supports 122 railroad jobs, $6.4 million in railroad payroll, and nearly $37 million in purchases from Alaska businesses. Indirectly, it supports another 450 jobs and $17.5 million in payroll for Alaska.

Those figures are based on current spending; if the railroad were to generate more revenue and therefore put more money into the economy, additional jobs and income would follow. Figure 3 shows how a $1 million increase in spending for operations or for capital projects would translate into additional Alaska jobs and income.

A $1 million increase in operations spending would create 14 new jobs—half with the railroad and half in other businesses. A $1 million increase in capital spending would create about 13 jobs—3 with the railroad and 10 in other Alaska businesses.

Figure 2. Economic Effects of Railroad Spending for Operating Costs and Capital Projects in Alaska
(Annual Average, 2001-2003)

$108 million

<table>
<thead>
<tr>
<th>Railroad Operations</th>
<th>$65 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\cdot) $27 million payroll from Alaska businesses</td>
<td></td>
</tr>
<tr>
<td>677 railroad employees*</td>
<td></td>
</tr>
<tr>
<td>(\cdot) Additional jobs and payroll</td>
<td></td>
</tr>
<tr>
<td>$21 million non-railroad payroll</td>
<td></td>
</tr>
<tr>
<td>650 non-railroad jobs</td>
<td></td>
</tr>
<tr>
<td>$59 million payroll</td>
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<tr>
<td>1,327 jobs</td>
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</table>

<table>
<thead>
<tr>
<th>Railroad Capital Projects</th>
<th>$43 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\cdot) $38 million payroll</td>
<td></td>
</tr>
<tr>
<td>122 railroad employees*</td>
<td></td>
</tr>
<tr>
<td>(\cdot) Additional jobs and payroll</td>
<td></td>
</tr>
<tr>
<td>$17.5 million non-railroad payroll</td>
<td></td>
</tr>
<tr>
<td>450 non-railroad jobs</td>
<td></td>
</tr>
<tr>
<td>$24 million payroll</td>
<td></td>
</tr>
<tr>
<td>572 jobs</td>
<td></td>
</tr>
</tbody>
</table>

*Full-time equivalent of 40-hour per week jobs, which is higher than the actual head-count of employees because of overtime hours.

Source: ISER estimates, based on Alaska Railroad data

Figure 3. Effects of Additional Railroad Spending

Each additional $1 million in spending for operations
Generates
- $630 thousand in payroll
- 14 new jobs
  - 7 railroad
  - 7 non-railroad

Restaurants 11%
Business services 14%
Retail trade 18%
Health care 20%
Other 37%

Construction 29%
Business services 17%
Retail trade 11%
Health care 8%
Other 35%

Source: ISER estimates
IN- AND OUT-OF-STATE SPENDING

As Figure 4 shows, in-state railroad spending of $108 million a year makes up around two-thirds of total railroad spending. The other one-third goes largely (1) to barge and rail services outside Alaska, for transporting rail cars and other equipment to and from Alaska, and (2) for purchasing new rail cars and other supplies and equipment not available here.

SOURCES OF REVENUE

Where does the railroad get its money? Figure 5 shows income from railroad activities, with freight accounting for 75 percent. Passenger services generate about 13 percent of the income from activities and real estate holdings another 11 percent. The railroad leases some of its land for commercial and residential uses, and it also issues permits for some uses (like fiber-optic cables) along its right-of-way.

Figure 6 shows the breakdown of freight by the share of revenue generated. Petroleum products (including jet fuel and unleaded gasoline) account for nearly half the revenue from freight. Interline freight makes up nearly a third of freight value. Such freight includes a wide range of products and commodities that either come into or go out of Alaska and travel part way on the Alaska Railroad and part way on barges, other railroads, or trucks.

Figure 7 (page 4) shows where the railroad got the money for a number of major construction projects in recent years, including a new passenger station at Anchorage’s airport. Federal grants made up 71 percent of recent capital funds. The railroad’s retained earnings—earnings beyond what the railroad needs for daily operations—made up another 26 percent, with the remaining 3 percent from borrowing.

Since 1996, federal grants have increased sharply, but the railroad doesn’t necessarily receive or spend grants the same year they’re appropriated. So the federal grant numbers in Figure 8 are mainly intended to show the magnitude of change in recent years, rather than money spent in specific periods. Some federal grants require the railroad to match funds—for example, grants from the Federal Transit Administration currently require the railroad to put up 9 cents for every dollar of federal money.
CONCLUSIONS

Our estimates of the economic effects of railroad spending in Alaska are based on annual average spending of $108 million from 2001 through 2003. If railroad spending increased, it would support more jobs and income; if spending dropped, it would cost the state jobs and income.

Also, the economic effects would change if the mix of spending for operations and for capital projects changed. Railroad operations require relatively more railroad employees, and many of the non-railroad jobs that rely on operations spending are in health care and retail trade. Capital projects create relatively more non-railroad jobs, about a third of which are in construction.

Finally, it's impossible to predict future capital spending. About 40 percent of the railroad's in-state spending in recent years was for capital projects, which it pays for almost entirely with federal grants and retained earnings. We know that federal grants can vary a lot from year to year, and that the railroad's retained earnings depend on how much money it makes on its operations and real estate holdings.

Linda Leask: Editor
Clemencia Merrill: Graphic Artist

The 45-page report summarized here, Economic Significance of the Alaska Railroad, was prepared by Bradford Tuck and Mary Killorin of ISER for the Alaska Railroad. The report is available from ISER for $4.50, plus postage if required; call 907-786-7710. It is also available on ISER's Web site at www.iser.uaa.alaska.edu.