

LEG. FINANCE - BILLS 1983 - 1984 1928

HB 512 . cont.

1928

ATTACHMENT A

Operating Budget - FY85

In Thousands (000) of Dollars

This operating budget is prorated for FY 85 except for the impacts to state agencies depicted in the 300 level. All amounts shown are in 1985 dollars. These estimates represent the total prorated FY 85 operating budget for the railroad following state acquisition. Projected revenues from the railroad's operations will serve as the main source of funds for these expenditures, with limited assistance from general fund appropriations.

<u>Category</u>	<u>Amount</u>	<u>Explanation</u>
100 Personal Services	\$24,350.0	This funding level is based upon current work force of 478 permanent full-time, 38 part-time and 64 temporary positions. Of this amount salary comprises \$19,980 and benefits comprise \$4,370. Also included in this estimate are the Board of Directors' compensation expenses.
200 Travel	300.0	This funding level is the estimate of travel funding needs, including the Board of Directors' travel expenses.
300 Contractual	4,800.0	This funding level includes coverage of the following areas: continuation of Transfer Team activities for FY 85 - \$1,750.0 (see Attachment B); Transfer Financial Audit - \$200.0; \$200.0 for initiation of the Special Report required in Section 9 of the bill; Department of Administration - \$80.0 for archives preservation and labor relations coordination; costs for the labor relations agency under Article 8 of the bill - \$35.0; Department of Natural Resources - \$35.0 for land designation activities under Article 5 of the bill. The remainder of these funds are for the railroad's general contractual needs resulting from capital improvement, operations and financial planning activities.

400 Supplies	5,200.0	This funding level is required for the day-to-day operations of the railroad, supporting all facets of operations from administration to maintenance of way.
500 Equipment	1,200.0	This item is the complement of the supply item also supporting day-to-day railroad operations.
700 Grants & Claims	1,500.0	This item provides for funds for the railroad's risk management expenses, payment of damage claims, workmen's compensation expenses and other money claims against the railroad. No grants are anticipated.
TOTAL:	<u>37,350.0</u>	

ALASKA RAILROAD TRANSFER PROJECT

FY 85 PROJECT BUDGET

The goal of the Alaska Railroad Transfer Team is to provide an orderly and informed decision-making process for possible transfer of the Alaska Railroad from federal ownership, thus ensuring continuation of essential rail services in Alaska. If a decision is reached to pursue state take-over of the railroad, then it is also the goal of the Alaska Railroad Transfer Team to organize and oversee a systematic transition from federal ownership.

This document discusses the major work components of the FY 85 budget submittal. The need to pursue some of these efforts is entirely contingent on a decision to acquire, while other work efforts are separate from that decision. Attachment A provides the FY 85 budget submittal as introduced by the Governor. Attachment B is the project budget for FY 84 and provides considerable detail regarding several work tasks, many of which are ongoing in 1985.

The following breakdown is structured on a component or agency basis, versus reiterating specific details regarding ongoing work tasks. As a result, some of this explanation should be read in conjunction with Attachment B in order to fully understand all of the scheduled work efforts.

Work Component #1 - Alaska Railroad Transfer Team Staff

As indicated in Attachment A, funding is needed to support four positions in the Office of the Commissioner, Department of Transportation and Public Facilities. These positions are as follows: a State Railroad Coordinator (Special Assistant II); a Planner IV; a Planner III; and a Correspondence Secretary III. These four individuals comprise the Transfer Team Staff with direct responsibility for performance and coordination of all team activities. This group reports directly to the Commissioner of DOT&PF in the performance of their duties. The following breakdown represents expenditures directly related to this area by object of expenditure.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Personal Services	4 Positions - DOT&PF	\$195,100
Travel	4 Positions - DOT&PF	66,000
Contractual	Printing/limited Professional Services	35,000
Supplies	Miscellaneous	8,000
	Total	\$304,100

Work Component #2 - Department of Natural Resources Assistance

An existing Reimbursable Services Agreement with the Department of Natural Resources will be continued during FY 85. Work efforts covered by this assistance include ongoing support activity by the Division of Technical Services for conveyance documents and related title review work. Additional support by DNR will be provided for coordination with the Bureau of Land Management's cadastral survey work and assistance from the Division of Land and Water Management to implement the railroad transfer. The following breakdown by object of expenditure presents the needed funding for these services.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Personal Services	4 Positions - DNR	\$191,900
Travel	4 Positions - DNR	20,000
Contractual	Miscellaneous Professional Services	30,000
Supplies	Miscellaneous	<u>8,100</u>
	Total	\$250,000

Work Component #3 - Department of Labor Assistance

Specific assistance is still needed by the Department of Labor to perform an extensive survey of the railroad's physical facilities in relation to federal and state occupational safety and health laws, regulations and standards. Although this was scheduled for performance during FY 84, insufficient funding required postponement of this work effort until FY 85. Scheduled funds during FY 84 for this effort were diverted to cover additional labor relations work by the Department of Administration and the use of an Engineer-in-Training position to assist with the engineering condition assessment. The following breakdown provides an estimate for this activity by object of expenditure.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Personal Services	2 Full-time - DOL 2 part-time	\$142,700
Travel	2 Full-time - DOL	7,300
Training	2 Full-time	5,200
Contractual	Miscellaneous Professional Services	39,800
Supplies	Miscellaneous	6,500
Equipment	Health Sampling Equipment/ Memory Typewriter	<u>12,000</u>
	Total	\$213,500

Work Component #4 - Department of Administration Assistance

Activity in the area will consist of continuing work efforts initiated during FY 84 explained under task #6 of Attachment B. Particular attention must be paid to the analysis of the five collective bargaining agreements, which will support the full scale initiation of the two-year renegotiation process in conjunction with the new entity established to operate the railroad. Another important work effort will be to conduct an orderly transition from federal to state ownership for all personnel matters and ensure that all of the specified requirements from the federal transfer legislation are properly met by the new organization established to operate the railroad. Other efforts include assistance with insurance and risk management needs. The following breakdown by object of expenditure presents the necessary funding for this area.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Personal Services	1 Full-time Position	\$105,000
	2 Part-time Positions	45,000
Travel	1 Full-time, 2 Part-time	105,000
Contractual	Liaison Assistance/ Miscellaneous	105,000
	Professional Services	
Supplies	Miscellaneous	<u>2,400</u>
	Total	\$257,400

Work Component #5 - Department of Law Assistance

Assistance from the Department of Law is needed for several tasks to be performed by existing AG staff and retained special counsel. Included are the following work efforts: (1) legal work pertaining to the 3(e) (ANCSA) claims against railroad property by native village corporations, including ongoing negotiation and staff work to support the State's position during the adjudication process; (2) legal assistance for the preparation of transfer documents and attention to related land conveyance problems; (3) resulting from the response to various court actions by third parties because the railroad transfer; (4) ongoing legal assistance with issues involving regulation by the Interstate Commerce Commission (ICC); and (5) support of efforts relating to personnel/labor relation matters. The following breakdown by object of expenditure presents the needed funding for this area.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Personal Services	Staff Attorneys	\$180,000
Travel	Staff Attorneys	20,000
Contractual	Wickwire Lewis	150,000
	David Walsh	75,000
	David Rogers	75,000
	Total	\$500,000

Work Component #6 - ICC Rate Valuation/Capital Plan Activity

Work efforts under this component will consist of the following: (1) initiation of planning work necessary to file the appropriate valuation studies before the ICC for purposes of rate-making justification; and (2) performance of ongoing capital planning analysis. This second task will be a continuation of efforts performed under task #5 in Attachment B. It will be coordinated with the initiation of the ICC valuation studies to maximize generation of a data base useful to both efforts. Funding in this area is needed for contractual assistance, which will be directly managed by the Transfer Team Staff.

<u>Object of Expenditure</u>	<u>Description</u>	<u>Amount</u>
Contractual	Consulting Assistance	\$225,000
	Total	\$225,000

ALASKA RAILROAD TRANSFER PROJECT BUDGET

PROJECT BUDGET

The following depicts the project budget by work component and amount:

	<u>Amount</u>
(1) Alaska Railroad Transfer Team Staff	\$ 304,100
(2) Department of Natural Resources Assistance	250,000
(3) Department of Labor Assistance	213,500
(4) Department of Administration Assistance	257,400
(5) Department of Law Assistance	500,000
(6) ICC Rate Valuation/Capital Plan Activity	<u>225,000</u>
Project Total	\$1,750,000

ATTACHMENT C

Capital Improvement Program - FY85

In Thousands (000) of Dollars

This CIP is prorated for FY 85. All amounts shown are in 1985 dollars. These estimates represent costs to the State, and are only part of the ARR's total capital budget. Revenues from the ARR for capital improvements will be added to State funding.

<u>Item</u>	<u>Amount</u>	
Working Capital Fund	\$ 4,900	As with all businesses, the ARR will need working capital. It is estimated that one month's worth of operating expenses will be adequate working capital for the ARR.
OSHA/Code Compliance	\$ 4,500	As a federal agency, the ARR has not been subject to many health, safety, and building code standards that would otherwise apply. These codes will apply upon transfer, and initial surveys conducted by the State have been used to determine necessary compliance levels. See Appendix C of the Alaska Railroad Acquisition Assessment for more details.
Other Capital Improvements	\$ 6,400	These expenses represent the minimal expenditure necessary for the ARR to maintain current levels of service, while initiating efforts to reverse deterioration of physical plant condition. Component priorities have been selected using the findings of the State's independent condition assessment. As indicated in the attached supplement, most capital improvements are for track and roadbed, upgrade of certain cargo handling facilities, and motive power and equipment purchases.
TOTAL	<u>\$15,800</u>	

Supplement to Item #3, Attachment C

Track & Roadbed - \$6,185,000

Ties - Install 50,000 @ \$42.00 ea.	= \$2,100,000.
Rail - Install 6 miles @ \$350,000 ea.	= \$2,100,000
Ballast - Install 85,000 yd ³ @ \$14 yd ³	= \$1,190,000
Other - (Turnouts, sledding, culverts, ditching)	= \$ 795,000

Bridges - \$883,000

Replace stringers, bents, and spans
Reset bearings, piles, and abutments

Tunnels - \$1,060,200

Line with multi-plate
Excavate rock fall areas

Docks - \$706,800

Preliminary work to rebuild barge slip #1 at Whittier

Communications - \$570,000

Complete microwave system
Remove pole lines
Acquire equipment

Motive Power & Equipment - \$4,845,000

Locomotives	= \$2,250,000
Upgrade Facilities	= \$1,845,000
Equipment	= \$ 750,000

Note: This totals \$14.25 million and is the ARR's overall FY 85 capital budget, of which \$6.4 million is covered under this fiscal note.

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TABLE IX: BALANCE SHEET
SEPTEMBER 1982-83
(Thousand dollars)

CATEGORY	1983	1982
ASSETS:		
Current Assets:		
Cash (Note 8)	\$9,646	\$14,966
Trust and Deposit Funds (Note 9)	32	7
Accounts Receivable	14,195	13,105
Materials and Supplies (Note 10)	10,143	7,040
Prepaid Expenses	<u>20</u>	<u>0</u>
	34,036	35,118
Properties:		
Land (Note 11)	265	265
Buildings	12,943	12,921
Roadway Structures & Facilities	127,215	125,000
Equipment	57,895	49,864
Non-Operating Property	<u>1,947</u>	<u>1,877</u>
Total Properties	200,265	189,927
Less Accumulated Depreciation:	<u>60,516</u>	<u>57,678</u>
Properties - Net	139,749	132,249
Additions & Betterments in Progress (Note 12)	<u>11,599</u>	<u>12,059</u>
	151,348	144,308
Other Assets and Deferred Charges	2,526	3,029
Total Assets	<u>\$187,910</u>	<u>\$182,455</u>
LIABILITIES & PROPRIETARY INTEREST OF THE U.S. GOVERNMENT:		
Current Liabilities:		
Accounts Payable	\$4,721	\$3,416
Accrued Payrolls Payable	1,320	1,056
Trust and Deposit Funds (Note 9)	<u>32</u>	<u>7</u>
	6,073	4,479
Other Liabilities and Unadjusted Credits	<u>2,209</u>	<u>3,152</u>
Total Liabilities	\$8,282	\$7,631
Proprietary Interest (Note 13):		
Net Investment	200,621	192,995
Retained Earnings from July 1, 1954	(18,171)	(23,578)
Current Year Operating Results	2,824	9,561
Extraordinary Items (Note 6)	<u>(5,646)</u>	<u>(4,154)</u>
Total Proprietary Interest (Note 13)	179,628	174,824
Total Liabilities & Proprietary Interest	<u>\$187,910</u>	<u>\$182,455</u>

Notes follow Table XI

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TABLE X: STATEMENT OF CHANGES IN FINANCIAL POSITION
FISCAL YEARS 1982-83
(Thousand dollars)

CATEGORY	1983	1982
Funds were provided by:		
Revenues and Other Receipts	\$56,438	\$58,699
Appropriations from Congress (Note 14)	<u>7,600</u>	<u>6,160</u>
Total Funds Provided	64,038	64,859
Funds were used for:		
Labor	35,579	33,221
Other	14,044	17,839
Capital Improvements & Replacements	<u>16,348</u>	<u>11,821</u>
Total Funds Used	65,971	62,881
Increase (Decrease) in Government Equity	(1,933)	1,978
Other Increases (Decreases):		
Undelivered Orders	(2,924)	3,983
Supplies and Materials	3,103	1,119
Properties	7,040	3,964
Other	<u>(482)</u>	<u>513</u>
Total, Other	6,737	9,579
Total Increase (Decrease) in Government Equity	<u>\$4,804</u>	<u>\$11,557</u>
Proprietary Interest:		
Beginning Balance	\$174,824	\$163,267
Increase (Decrease)	<u>4,804</u>	<u>11,557</u>
Ending Balance (Note 13)	\$179,628	\$174,824

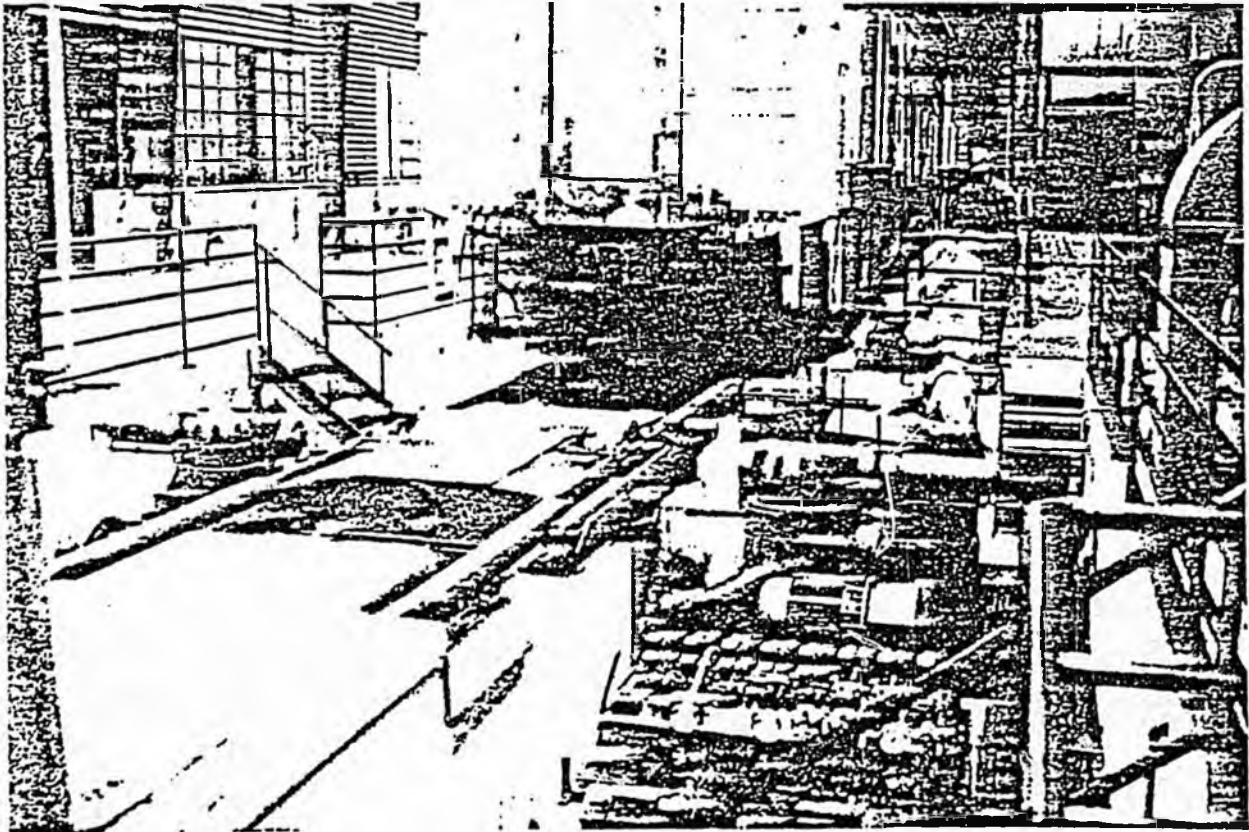
Notes follow Table XI

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TABLE XI: FIVE-YEAR CONDENSED SUMMARY OF OPERATIONS
FISCAL YEARS 1979-83
(Thousand dollars)

CATEGORY	1983	1982	1981	1980	1979
REVENUES:					
Operating	\$52,397	\$55,445	\$40,782	\$26,737	\$23,200
Non-Operating (Note 16)	<u>3,697</u>	<u>3,352</u>	<u>3,159</u>	<u>2,155</u>	<u>2,081</u>
Total Revenues	\$56,094	\$58,797	\$43,941	\$28,892	\$25,181
EXPENSES:					
Operating	\$52,993	\$48,978	\$40,358	\$34,380	\$31,285
Non-Operating (Note 17)	<u>277</u>	<u>258</u>	<u>273</u>	<u>344</u>	<u>204</u>
Total Expenses	\$53,270	\$49,236	\$40,631	\$34,724	\$31,489
NET PROFIT (LOSS)	\$2,824	\$9,561	\$3,310	(\$5,832)	(\$6,308)
Less Extraordinary Items (Note 6)	<u>(\$5,646)</u>	<u>(\$4,154)</u>	<u>(\$204)</u>	<u>(\$692)</u>	<u>(\$319)</u>
Annual Retained Earnings	(\$2,822)	\$5,407	\$3,106	(\$6,524)	(\$6,627)
Expense/Revenue Ratio	94.97%	83.74%	92.47%	120.19%	125.05%

Notes follow Table XI



A modern wheel truing machine was installed in a newly constructed shop building in 1983.

NOTES TO FINANCIAL STATEMENTS

1. SUMMARY OF ACCOUNTING POLICIES

The Alaska Railroad uses the generally accepted principles, standards, and related requirements of governmental accounting as approved by the Comptroller General of the United States. Operations are conducted in a manner consistent with related commercial enterprises and, at the same time, in conformance with the requirements incumbent upon a Government agency.

As is the customary practice of the industry, the Railroad uses betterment and retirement accounting instead of depreciation accounting for roadbed and track. Under this method, prescribed by the Interstate Commerce Commission, the cost of replacing tracks and structures--less salvage recovered--is charged to the appropriate operating expense account and only the cost of betterments is capitalized. These capitalized items are not depreciated, but upon retirement of the tracks and structures, the entire capitalized amounts--less salvage recovered--are charged to expense.

The accounting system and related procedures disclose financial condition and operating results to provide full accountability of the Government's investment in the Railroad and to afford management the necessary data to carry out its responsibility in the most efficient and economical manner.

The Railroad is financed from a revolving fund.

2. REVENUES

Revenues from rail operations are included in income on an accrual basis upon the completion of service.

3. EXPENSES

Expenses are accrued or applied or both on a basis consistent with generally accepted accounting principles.

4. MAINTENANCE OF WAY AND STRUCTURES

Maintenance of way and structures include expenses incurred by engineering (\$9,207,000) and communications (\$652,000).

5. GENERAL AND ADMINISTRATION

General and administration accounts include expenses for headquarters and staff (\$1,378,000) and the administration department (\$4,485,000).

6. EXTRAORDINARY ITEMS

Extraordinary items include the loss on excess current inventories (\$23,000), deferred outlays (\$3,760,000), prior-year adjustments (\$697,000), and costs associated with the transfer evaluation (\$1,166,000).

7. DEPRECIATION

Depreciation is computed using the straightline method and is based on estimated service lives of depreciable properties, except for the railway track and structures, which are computed using the industry betterment method. Depreciation charges are determined by using the composite or group rates applicable to various classes of property.

The following is a list of depreciation charges in FY 1983:

	(Thousand dollars)
Mechanical - equipment	\$2,807
Engineering - buildings and structures	892
Transportation - docks	438
Communications	170
Non-operating	66
Other	<u>31</u>
Total	\$4,404

8. CASH

Cash refers to the fund balance with the U.S. Treasury, which is the net amount of cash receipts, e.g., revenues, proceeds from sales, and amounts of congressional appropriations, less disbursements.

9. TRUST AND DEPOSIT FUNDS

Trust and deposit funds include special deposits and other collections not covered by the revolving fund and cleared by disbursement or transfer, as appropriate. A contra account to this asset account is reflected in the liability section.

10. MATERIALS AND SUPPLIES

Inventories, consisting of replacement or repair parts for equipment and road property, construction materials, and fuel, are valued at average cost, including freight.

11. LAND

Land includes only property purchased by the Railroad from private owners and carried at acquisition cost. The Railroad owns over 38,000 acres withdrawn from the public domain at no cost; this land is not included in the financial records.

12. ADDITIONS AND BETTERMENTS IN PROGRESS

This is a control account for authorized capital projects during the period of construction or procurement. Upon completion of the capital project, the related costs are transferred into the appropriate fixed asset property account.

13. PROPRIETARY INTEREST OF THE U.S. GOVERNMENT

The proprietary interest shows the Federal Government's net interest in The Alaska Railroad. At the end of FY 1983, it is summarized as follows:

	(Thousand dollars)
Appropriation by Congress	\$259,496
Allotments from other agencies, sales of lots, etc.	1,724
Property transferred or donated (not public domain)	19,903
Earthquake losses	(16,738)
Deficits from operations and capital losses to 6/30/54	(63,764)
Retained earnings (7/1/54 to 9/30/82)	(18,171)
FY 1983 operating results	2,824
Extraordinary Items (Note 6)	<u>(5,646)</u>
 Total proprietary interest of the U.S. Government	 \$179,628

14. CONGRESSIONAL APPROPRIATIONS

Funds appropriated by Congress were obligated within the fiscal year, as shown below:

	(Million dollars)	
	<u>FY 83</u>	<u>FY 82</u>
Congressional appropriations received	\$7.60	\$6.16
Obligated during fiscal year	<u>\$7.60</u>	<u>\$6.16</u>
 Amount unobligated at end of fiscal year	 \$0.00	 \$0.00

15. OTHER OPERATING REVENUES

Other operating revenues include those revenues that were neither freight nor passenger. Individual accounts exceeding \$90,000 in FY 1983 were:

	(Thousand dollars)
Reimbursable services	\$2,036
Sale of non-invested property	1,301
Reimbursements - real estate, utilities, and equipment	541
Whittier shuttle - vehicles	533
Wharfage and handling	148
Mail	145
Switching	116
Equipment rentals	90
All other	<u>395</u>
 Total	 \$5,305

16. NON-OPERATING REVENUES

Non-operating revenues in FY 1983 were:

(Thousand dollars)

Miscellaneous rentals	\$3,466
Interest earned	144
All other	<u>87</u>
Total	\$3,697

17. NON-OPERATING EXPENSES

Non-operating expenses in FY 1983 were:

(Thousand dollars)

Buildings	\$199
Depreciation	60
Equipment	10
All Other	<u>2</u>
Total	\$277



At a re-enactment of the original golden spike ceremony Governor Sheffield wields the same maul used by President Harding in 1923.

TRAFFIC

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FREIGHT

Table II shows freight revenue tons and freight revenue dollars by major classification of commodities for fiscal years 1983 and 1982. Total tonnage for fiscal year 1983 exceeded fiscal year 1982 by 34 percent. For the third consecutive year sand and gravel led all other commodities in percentage gains. The primary cause of the 60-percent escalation was a vigorous private and business construction year plus increases in public works projects in Anchorage. The drop in movements of iron and steel products from Seward to Fairbanks destined for the North Slope from its peak in 1982 accounted for the return of manufacturers and miscellaneous products to a lower level, but still above FY 1981.

TABLE II: FREIGHT TRAFFIC BY COMMODITY

COMMODITY	1983 FY	1982 FY	% CHANGE
REVENUE TONS CARRIED (000's)			
Sand and Gravel	4,397.7	2,753.8	+ 59.7
Coal	625.8	653.6	- 4.2
Petroleum, Oil, Lubricants	462.2	439.4	+ 5.2
Manufacturers and Misc.	323.1	449.9	- 28.2
TOFC/COFC (Piggyback)	98.0	122.4	- 19.9
Products of Forests	105.1	77.0	+ 36.5
Products of Agriculture	<u>6.1</u>	<u>6.8</u>	- 10.3
Total Tonnage	6,018.0	4,502.9	+ 33.7
REVENUE DOLLARS (000's)			
Sand & Gravel	6,647	4,556	+ 45.9
Coal	5,007	5,072	- 1.3
Petroleum, Oil, Lubricants	9,723	8,376	+ 16.1
Manufacturers and Misc.	15,704	22,512	- 30.2
TOFC/COFC (Piggyback)	3,625	4,915	- 26.2
Products of Forests	2,955	2,301	+ 28.4
Products of Agriculture	<u>126</u>	<u>145</u>	- 13.1
Total Revenue	43,787	47,877	- 8.5

PASSENGER

Aggressive and expanded advertising and marketing resulted in an overall increase of 21 percent in passenger ridership as shown in Table II. The marketing efforts included active promotion of tour packages which attracted, for the first time, nine cruise ships to stop at the Railroad's Port of Whittier, and provided over 14,000 of the special train riders.

TABLE III: PASSENGERS HANDLED

SERVICE	1983 FY	1982 FY	% CHANGE
Anchorage-Denali-Fairbanks	61,887	60,810	+ 1.8
Anchorage-Portage-Whittier (Shuttle)	117,740	95,449	+ 23.4
Specials	<u>31,732</u>	<u>18,857</u>	+ 68.3
Total Passengers Handled	211,359	175,116	+ 20.7

The number of vehicles carried on the Anchorage-Portage-Whittier (shuttle) service was 19,516, up 10 percent over FY 1982.

TARRIFS

The major rate adjustments made in FY 1983 are reflected in Table IV:

TABLE IV: FY 1983 TARIFF CHANGES

TYPE	DATE	% INCREASE
Interline	1-17-83	5
Intrastate:		
General Commodities	2-12-82	5
Gravel	4-19-83	3
Passenger:		
Anchorage - Fairbanks	1-01-83	10
Whittier Shuttle	7-01-83	10

Attachment E
3/14/84

ALASKA RAILROAD OPERATIONS SUMMARY
(Dollar Amounts in Thousands)
Fiscal Years 1973-1982*

	<u>FY 1973</u>	<u>FY 1974</u>	<u>FY 1975</u>	<u>FY 1976</u>	<u>FY 1977</u>	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Operating Revenue	\$16,996	\$20,783	\$41,411	\$52,517	\$33,376	\$27,440	\$23,100	\$26,737	\$40,782	\$55,445
Non-Operating Revenue	681	703	871	1,161	1,646	1,651	2,081	2,155	3,159	3,352
<u>Total Revenues</u>	<u>17,677</u>	<u>21,486</u>	<u>42,287</u>	<u>53,678</u>	<u>35,022</u>	<u>29,091</u>	<u>25,181</u>	<u>28,892</u>	<u>43,941</u>	<u>58,797</u>
Operating Expenses	\$20,057	\$22,389	\$35,883	\$49,387	\$35,703	\$33,301	\$31,285	\$34,380	\$40,358	\$48,978
Non-Operating Expenses	153	158	272	191	255	213	204	344	273	258
<u>Total Expenses</u>	<u>20,210</u>	<u>22,547</u>	<u>36,155</u>	<u>49,578</u>	<u>35,958</u>	<u>33,514</u>	<u>31,489</u>	<u>34,724</u>	<u>40,631</u>	<u>49,236</u>
<u>Gain (Loss)</u>										
Before depreciation - cash flow (\$ 7)	\$ 1,300	\$ 8,513	\$ 6,628	\$ 2,186	(\$ 1,227)	(\$ 3,089)	(\$ 2,306)	\$ 6,567	\$13,274	
After depreciation	(\$ 2,533)	(\$ 1,061)	\$ 6,132	\$ 4,100	(\$ 936)	(\$ 4,423)	(\$ 6,308)	(\$ 5,832)	\$ 3,310	\$ 9,561
<u>Capital Expenditures</u>	<u>\$ 1,260</u>	<u>\$ 313</u>	<u>\$ 2,772</u>	<u>\$ 8,602</u>	<u>\$ 8,316</u>	<u>\$ 5,823</u>	<u>\$ 8,181</u>	<u>\$ 6,893</u>	<u>\$11,409</u>	<u>\$11,821</u>
<u>Revenue Tons of Major Commodities</u> (in thousands of tons)										
Sand and Gravel	2	1	1	104	700	727	637	396	1,797	2,754
Bulk Petroleum	363	414	557	624	532	374	220	252	379	439
Coal	565	563	584	607	550	593	524	590	653	654
Iron & Steel Pipe & Fittings	11	15	107	174	16	28	33	37	83	165
Piggyback	48	57	95	114	100	100	89	92	113	122
Forest Products	49	56	120	124	82	68	55	109	101	77
Manufactured Iron & Steel	18	37	60	89	19	12	12	10	8	19
Cement	15	14	25	32	42	33	33	32	43	51
Machinery and Machines	12	21	60	31	47	47	24	16	28	24
Mfrs. & Misc. NOS	32	34	44	29	17	13	25	26	11	**
Other	216	165	209	260	200	183	156	181	146	198
<u>TOTAL</u>	<u>1,331</u>	<u>1,337</u>	<u>1,862</u>	<u>2,188</u>	<u>2,305</u>	<u>2,178</u>	<u>1,808</u>	<u>1,741</u>	<u>3,362</u>	<u>4,503</u>
<u>Passengers</u>	<u>74,000</u>	<u>84,000</u>	<u>81,000</u>	<u>84,500</u>	<u>103,632</u>	<u>126,277</u>	<u>151,045</u>	<u>150,678</u>	<u>161,068</u>	<u>175,116</u>

* The Federal Government changed its fiscal year from July 1-June 30 to October 1-September 30 beginning in FY 1977, resulting in a transition quarter in 1976. To avoid a 15-month fiscal year for comparisons, these statistics use July 1, 1975 through June 30, 1976 as FY 1976, and October 1, 1976 through September 30, 1977 as FY 1977, dropping the transition quarter.

**Mfrs. & Misc. NOS. (not otherwise specified) discontinued, now included in specific categories.

THE HARVARD BUSINESS SCHOOL

ALASKA RAILROAD STUDY

SPRING 1982

TEAM MEMBERS:

PETER BOWE
CHRIS NEEDHAM
ED NELSON
MEAD TREADWELL

ALASKA RAILROAD STUDY

I. INTRODUCTION

II. EXECUTIVE SUMMARY

III. OPERATIONS

IV. MARKETING

V. FINANCE

VI. ENTITY

VII. EXPANSION

INTRODUCTION

This document is the condensation of a slide presentation prepared by four Harvard Business School students on the operations, markets, finances, organizational structure and expansion opportunities of the Alaska Railroad. The eight month long study, made in fulfilling the requirements of a Master's Degree in Business Administration, attempted to answer, from a business viewpoint, two broad questions:

* What is the Alaska Railroad?

* What can it be?

While the report was written during legislative deliberations on the future of the Railroad, our purpose was to go beyond the basic jurisdictional issues in that process to examine factors relating to the Railroad as a business entity. In doing so, we reached two basic conclusions. The Railroad not only can survive as an independent entity, but to take advantage of all of the opportunities open to it, the Railroad must be independent.

EXECUTIVE SUMMARY

WHAT IS THE ALASKA RAILROAD?

- *AS IS, THE ALASKA RAILROAD'S FREIGHT OPERATION IS WORTH \$8.5 MILLION.
- *TRACK AND EQUIPMENT ARE ADEQUATE FOR THE LINE'S CURRENT LEVEL OF VOLUME, WHILE THE LEVEL OF VOLUME IS HIGH ENOUGH TO ENSURE PROFITABILITY.
- *THE NET IMPACT OF FEDERAL OWNERSHIP IS DECIDEDLY NEGATIVE.

WHAT CAN IT BE? THE ALASKA RAILROAD...

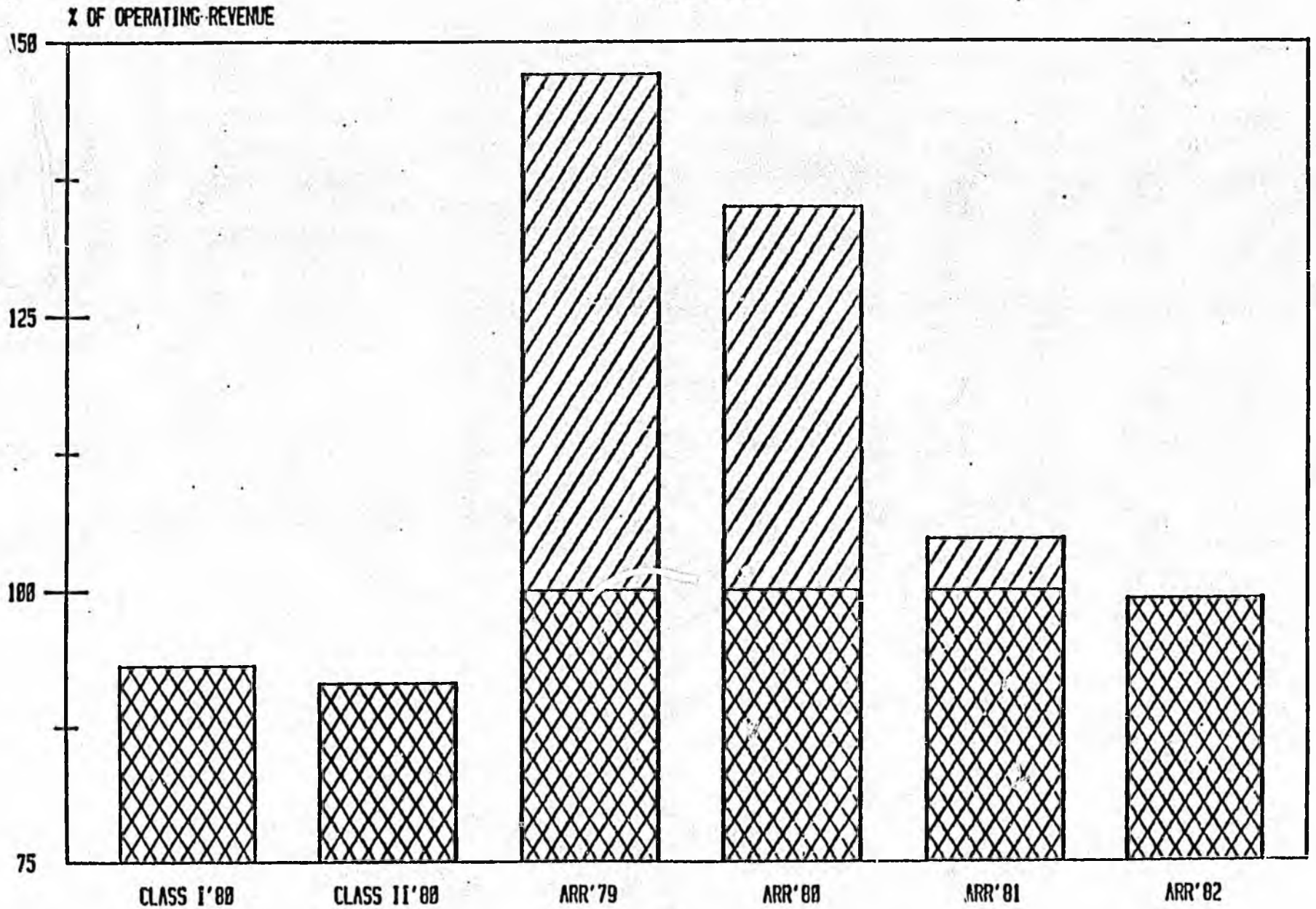
- *CAN BE A PROFITABLE PRIVATE ENTITY WITH TAX AND FINANCIAL OPPORTUNITIES WORTH \$52.5 MILLION.
- *CAN BALANCE ITS TRAFFIC FLOWS SERVING MARKET NICHEs WORTH \$12.25 MILLION.
- *CAN EXPAND TO AMBLER ECONOMICALLY IF MINE DEVELOPMENT IS COORDINATED TO AGGREGATE TONNAGES.
- *CAN DO ALL OF THESE THINGS BETTER WITH MANAGERIAL INDEPENDENCE FROM GOVERNMENT.

OPERATIONS SUMMARY

- * THE ARR'S LABOR COSTS ARE HIGH RELATIVE TO OTHER RAILROADS.
- * WORK RULES ARE COMPARABLE TO INDUSTRY NORMS.
- * THE APR'S LOCOMOTIVES AND ROLLING STOCK ARE VERY OLD. THIS AGE COUPLED WITH EXPENSIVE LABOR RESULTS IN HIGH MAINTENANCE COSTS.
- * THE TRACK IS IN GOOD SHAPE; HOWEVER, INCREASED TONNAGE COULD EXACERBATE AN IMPENDING NEED FOR A HIGHER TIE RENEWAL RATE.
- * INCREASED VOLUME HAS CAUSED A MARKED IMPROVEMENT IN MOST MEASURES OF OPERATIONAL EFFICIENCY. OVERALL, DESPITE ITS PROBLEMS, THE APR IS DOING O.K. OPERATIONALLY.

RATIO COMPARISON

OPERATING RATIO



LABOR COMPARISONS

	Class I 80	Class II 80	ARR 79	ARR 80	ARR 81
Total Labor Cost/Operating Revenue	40.1%	49.6%	91.0%	81.2%	61.2%
Cost/Employee (\$000) ¹	\$24.7	\$24.1	NA	\$36.2	\$37.0
Oper. Rev./Employee (\$000)	\$57.4	\$51.3	NA	\$44.7	\$60.4

¹ARR labor costs are high relative to other railroads. After adjusting for a 20% Alaskan COLA, the ARR exceeds the average for Class I and II railroads by \$6-7,000.

$$\begin{aligned}
 \text{Additional Labor Cost} &= \text{Total Cost} - (\text{Class I} + \text{II average} \times 1.2 \text{ COLA}) \\
 \text{for 1980} &= \$36.2 - (\$24.3 \times 1.2) \\
 &= \$7,000
 \end{aligned}$$

CORRECTION

**THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY**

OPERATIONS SUMMARY

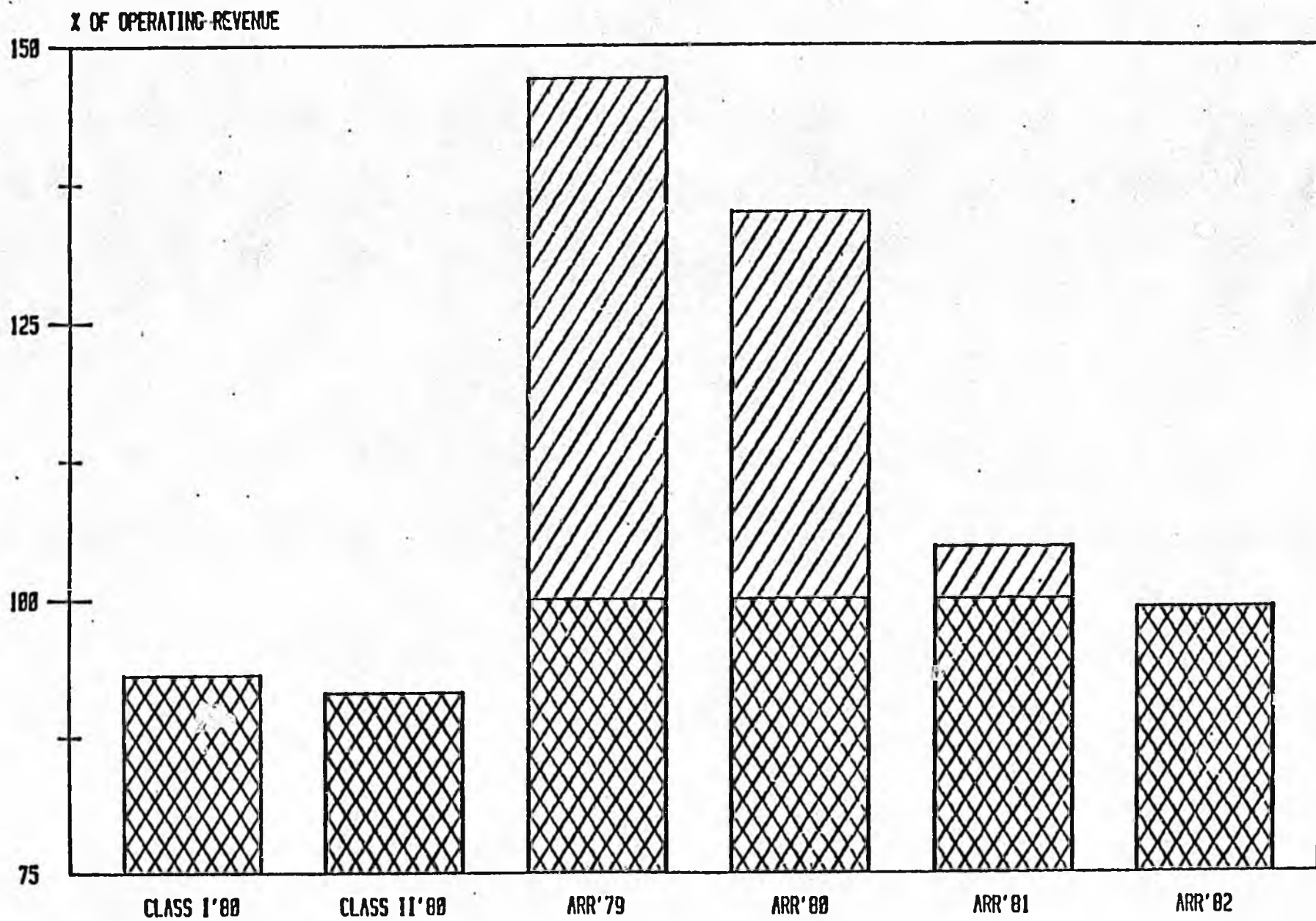
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OPERATING RATIO ANALYSIS

- * The following bar charts show a time-series comparison of the ARR's performance according to the 5 key operating ratios: MOW, MOE, T & T, G & A, and overall Operating Ratio.
- * They show dramatically how increased volume since 1980 has improved performance.
- * However, the ratio improvement masks some underlying problems or events:
 - The decline in MOW is probably too severe and is indicative of some amount of deferred maintenance
 - The 1982 upturn in MOE shows how the old equipment is straining to cope with greater volume
 - T & T has benefitted from a new crew consist agreement in 1981 which eliminated 1 brakeman from each freight train's crew

RATIO COMPARISON

OPERATING RATIO



ALASKA RAILROAD

Comparison of Operating Ratios (% of Operating Revenue)

	Class I 1980	Class I 1981	Class II 1980	ARR 1979	ARR 1980	ARR 1981	ARR 1982 YTD
MDW	17.9	17.5	18.3	32.2	32.2	25.1	21.6
MOE	22.2	22.7	16.6	36.0	33.4	23.6	24.9
T & T	44.1	45.0	45.4	61.6	52.0	43.2	40.5
G & A	8.3	8.1	9.5	17.7	17.5	12.7	12.1
OPERATING	92.5	93.3	91.4	147.0	135.0	104.6	99.2

Sources: Alaska Railroad Annual Reports
 Moodys Transportation Manual 1981
 American Association of Railroads

LABOR COMPARISONS

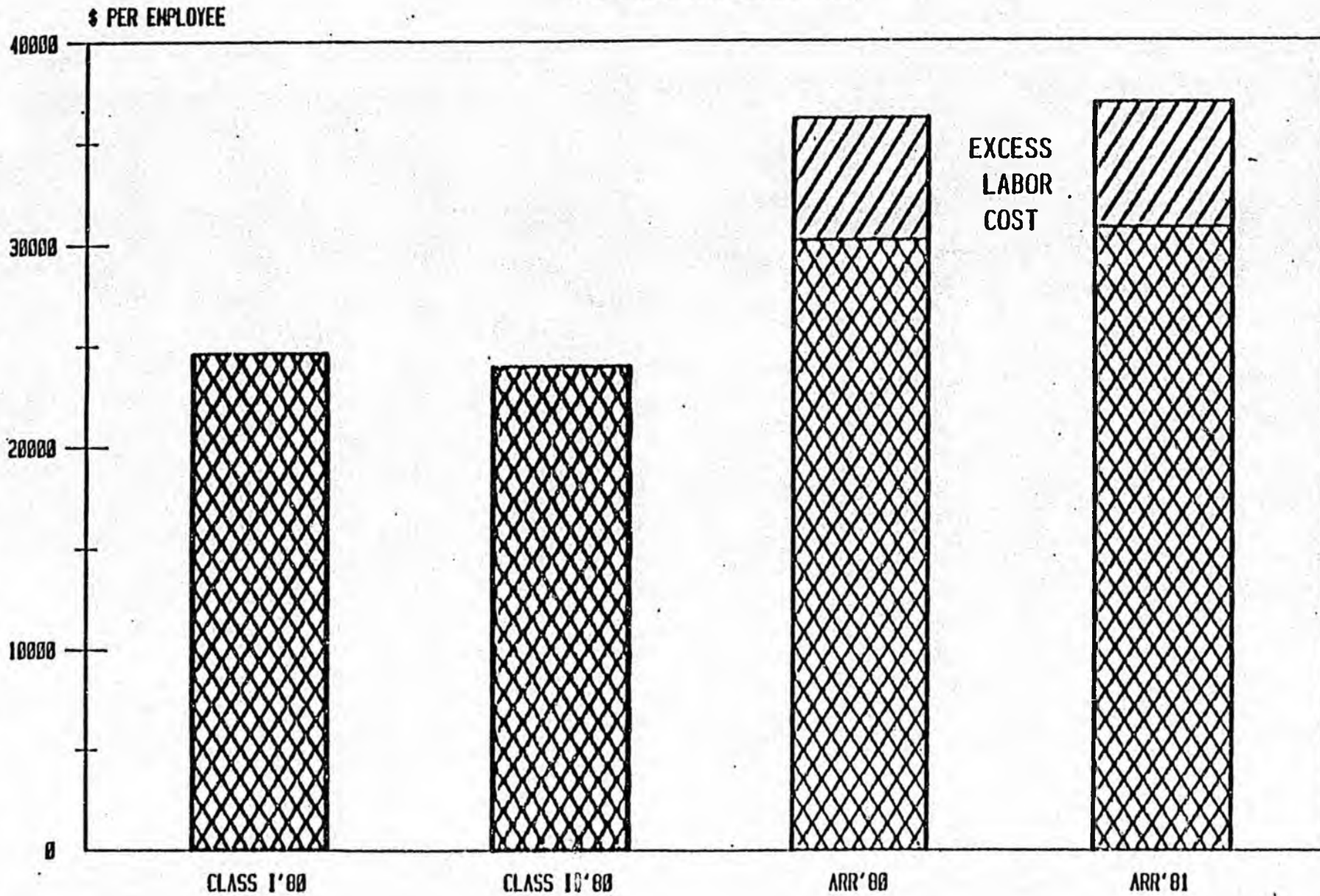
	Class I 80	Class II 80	ARR 79	ARR 80	ARR 81
Total Labor Cost/Operating Revenue	40.1%	49.6%	91.0%	81.2%	61.2%
Cost/Employee (\$000) ¹	\$24.7	\$24.1	NA	\$36.2	\$37.0
Oper. Rev./Employee (\$000)	\$57.4	\$51.3	NA	\$44.7	\$60.4

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 &= \$7,000
 \end{aligned}$$

LABOR COMPARISON

TOTAL LABOR COST PER EMPLOYEE



QUALITY OF ASSETS

A. Locomotives

- * average horsepower: 1911 HP
- * % of 3000 HP in total fleet: 25%
- * average age built -- 18.1 years
 Inc. rebuilds -- 17.0 years
 Class I average -- 10-11 years
- * 1981 average out-of-service (bad-order ratio): 16%
 Class I average: <10%

Comments

1. The ARR's tonnage and track characteristics strongly suggest a fleet of exclusively 3000 HP locomotives would be appropriate.
2. With locomotive useful economic life at approximately 18 years before rebuilds, the ARR's highest capital priority should be engine replacement.

QUALITY OF ASSETS (cont.)

B. Rolling stock

- * average age of cars: 30 years
 Class II average: 18 years
- * net book value of equipment as % of total assets: 11.3%
 Class II average: 20.7%

Comments

1. The ARR could improve its maintenance of equipment ratio (MOE/op. revs) through investment in new cars.
2. The ARR's recent agreements to buy 75 100-ton hopper cars are a good move in the right direction.

C. Road & Structure

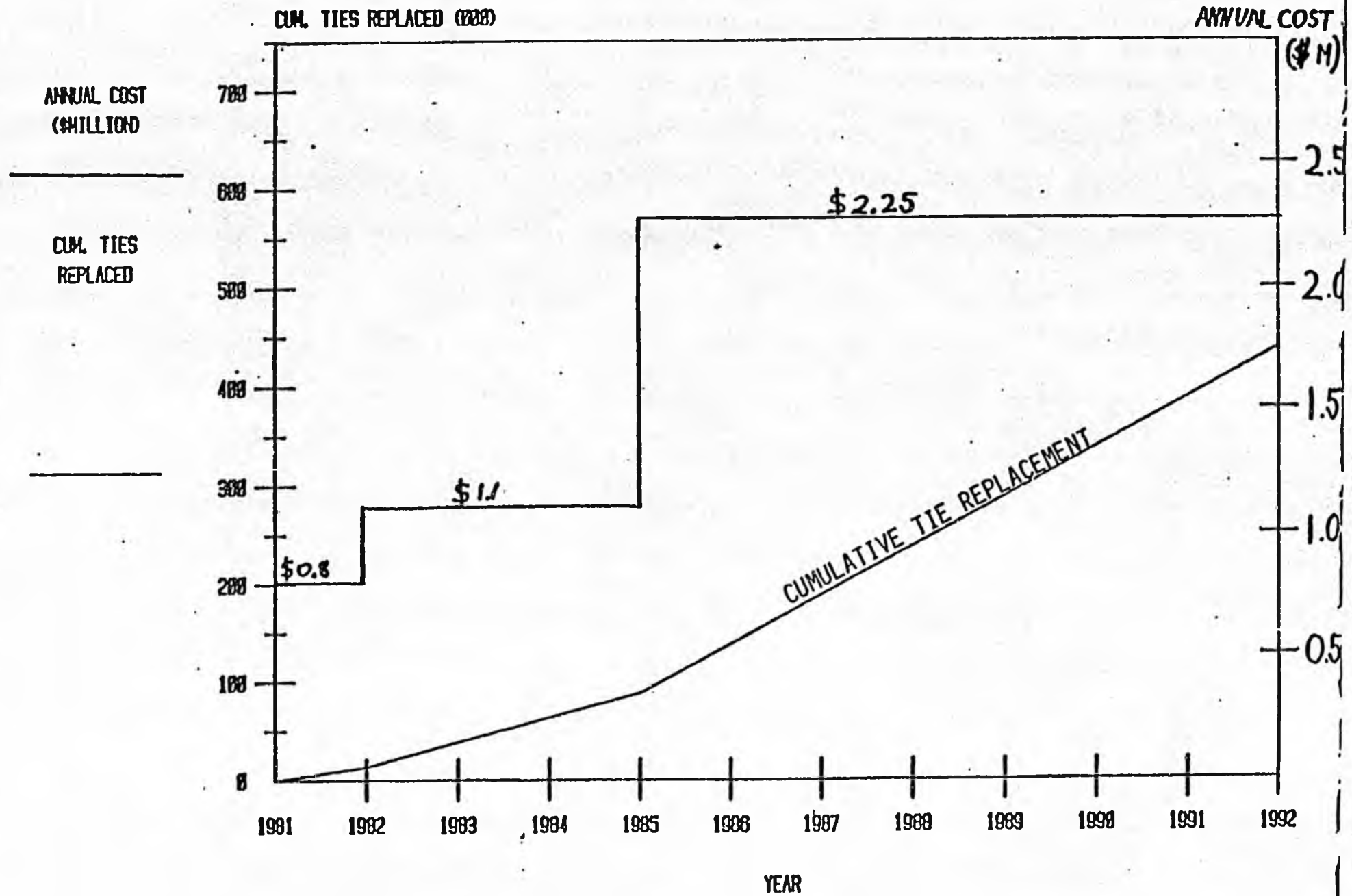
- * 40% of the track is rated Class IV (up to 45 MPH freight) by the Federal Rail Administration
- * only 5% is rated for less than 20 MPH operation
- * rail weight : 115 lb.
 Class I norm: 132 lb.
- * % of ties renewed per year: 1.2% (83-year cycle)
 Class I norm: 3.0% (33-year cycle)
- * % of road book value/total assets: 60.0%
 Class II average: 46.4%

Comments

1. The overall Class IV rating of the track is excellent.
2. At some multiple of current volume, the ARR will have to consider 132 lb. rail
3. The ARR faces a stepped-up tie renewal rate

EXPECTED FUTURE TIE REPLACEMENT & COST

1981-1992



TIE REPLACEMENT ANALYSIS

1. Total ties on ARR: 1.95 million

2. Key facts:

- i) Over 30 years ago, more than 25% (500,000+) of the ARR's ties were replaced in a single 3-year span, 1948-1950. The ARR risks a simultaneous mass deterioration of these ties.
- ii) Over the last 12 years, the ARR has replaced ties at a rate equal to an 83-year tie life expectancy.
- iii) The weighted average life of all ARR ties is about 27 years.
- iv) Most "lower 48" railroads use a 30-40 year tie life expectancy.
- v) A major savings (33%) in the tie installation labor costs results from tie renewals at rates in excess of 17,000 per year.

3. Cost per tie installed:

(1)

At replacement rate of 17,000/year or less using section crew labor

Tie	\$16.55
Shipping	3.45
Labor @ 1 hr/tie	23.00
Supervision, Machines	<u>8.50</u>
Total	\$51.50

(2)

At replacement rate of 17,000/year or more using tie gang labor

Tie	\$16.55
Shipping	3.45
Labor @ 2/3 hr/tie	15.50
Supervision, Machines	<u>8.50</u>
Total	\$44.00

4. Comparison:

In 1980, a major Class I railroad budgeted tie replacement costs as follows:

Tie	\$20.65
Labor	<u>9.55</u>
Total	\$30.15

5. The issue: What is the appropriate tie replacement cycle for the ARR, given its physical environment and light density traffic?

Factors Suggesting Shorter than Average Life

- * severe weather (effects unclear)
- * soft subgrade in many places
- * permafrost conditions
- * pit-run ballast

Factors Suggesting Longer than Average Life

- * weather
- * light traffic density

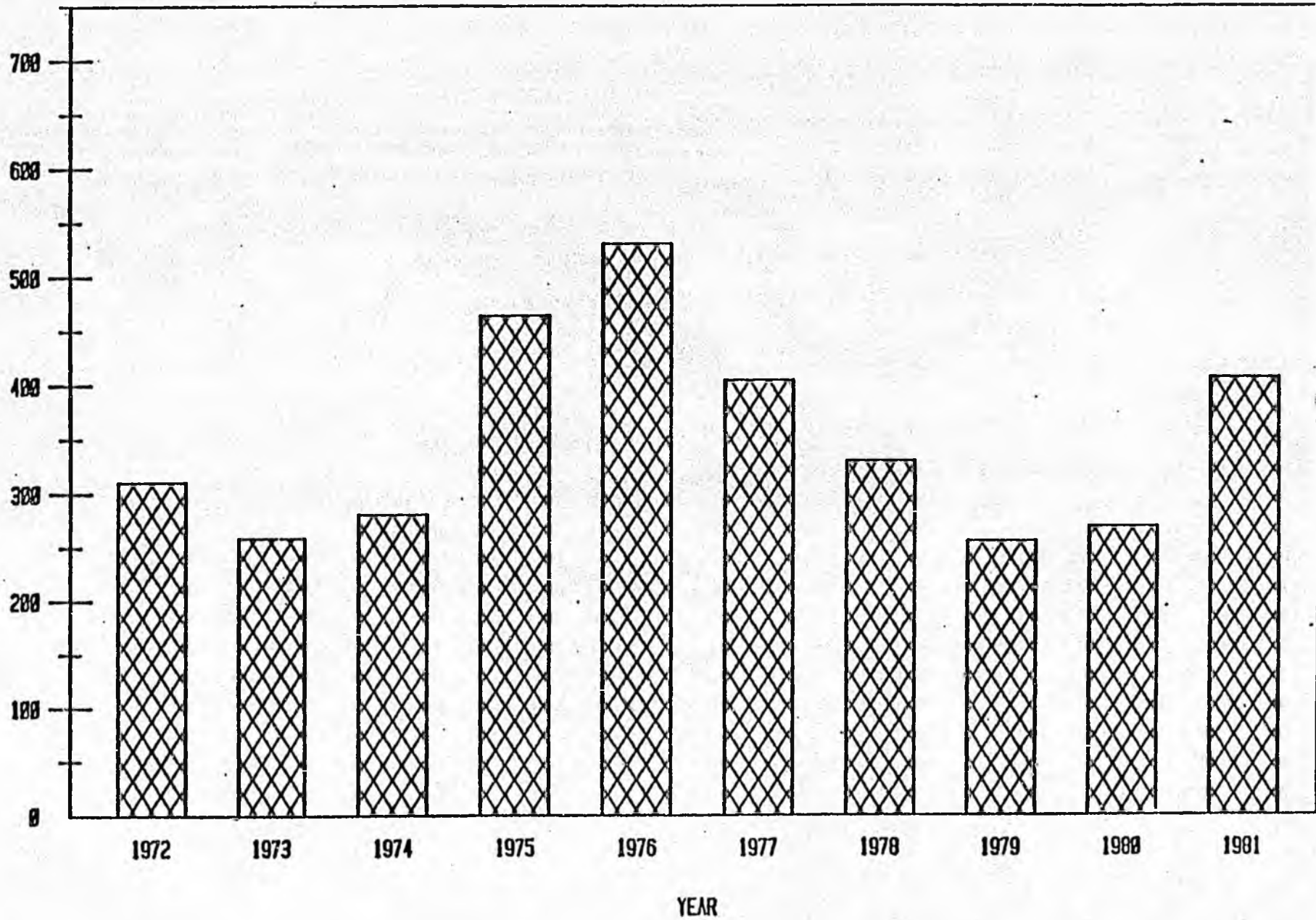
6. View of the ARR's Chief Engineer:

- i) "If tie life is 35 years, I'm in a lot of trouble."
- ii) "Within the next 5 years, we'll have to start replacing more than 50,000 ties per year."

ALASKA RAILROAD

REVENUE TON-MILES

TON-MILES (MILLIONS)



MARKETING SUMMARY

- *THE LEVEL OF ALASKA'S ECONOMIC ACTIVITY HAS REACHED THAT OF PEAK PIPELINE DAYS. THE ALASKA RAILROAD'S ONGOING VOLUME IS NOW AT A PROFITABLE LEVEL.
- *NEAR-TERM MARKET GROWTH OF GENERAL COMMODITIES PRESENTS TREMENDOUS OPPORTUNITY. IF UNREGULATED, THE RAILROAD CAN CONTINUE TO EXPLOIT ITS STRUCTURAL COST ADVANTAGE TO GAIN MARKET SHARE. ANTITRUST LAWS MAY APPLY ONCE THE RAILROAD LEAVES FEDERAL OWNERSHIP.
- *SOUTHBOUND OIL TRAFFIC, IF INTERIOR ALASKA REFINING EXPANDS ON PLAN, HAS A PRESENT VALUE OF \$8.232 MILLION. PROJECTED COAL EXPORTS TO ASIA RAISE THE RAILROAD'S PRESENT VALUE \$4.025 MILLION. BOTH COMMODITIES SOLVE A LONGTIME RAILROAD PROBLEM BY BALANCING VOLUME FLOWS WITH NORTHBOUND TRAFFIC.
- *PASSENGER TRAFFIC IS CLOSE TO PROFITABILITY ON ALL BUT LOCAL SERVICE BETWEEN ANCHORAGE AND FAIRBANKS. SELF-PROPELLED CARS, A STATE SUBSIDY, OR BOTH MAY BE NECESSARY TO CONTINUE THAT SERVICE.

COAL EXPORTS: WHAT IS IN STORE FOR THE ALASKA RAILROAD?

- * The Usibelli Mine; Healy will expand production as it is contracted for. Likelihood of high tonnages is dim, typified by slowness in getting contracts.
- * Mobil-held leases in the Yentana field, if developed, could mean substantial new tonnages for the railroad.
- * Railroad right-of-way is preserved to Jonesville Mine, closed mid-1960's. Development unlikely soon as mine is underground.
- * Off-system proposed development, such as Beluga and Bering River, may require rail service. Alaska Railroad should pursue the opportunity to service these areas and recognize fuller use of equipment.

ALASKA COAL EXPORTS: WHAT WILL MAKE THEM HAPPEN?

Markets

- * Total demand for steam coal in Japan, Korea, and Taiwan was 24.3 million tons in 1981. It is estimated demand will double by 1985; again by 1990.
- * Alaska, 1000 miles closer to Asian ports, has cost advantage over Western U.S.
- * Backhaul of coal south will help Alaska railroad keep prices down.
- * Central Alaska's low Btu/high moisture coal requires dedicated plants or a blending or coking process to raise coal value.

WHAT'S BEHIND NORTH POLE'S ADVANTAGE IN SERVING THE ANCHORAGE MARKET?

BY RAIL		BY TANKER AND PIPELINE	
Prudhoe-North Pole.....	\$3.72/bbl.	Prudhoe-Valdez.....	\$6.10/bbl.
Railroad to Anchorage...	2.66	Tanker to NIKISKI.....	50
Unloading charges.....	<u>.08</u>	Pipeline to Anchorage...	<u>.69</u>
TOTAL	\$6.46CUSTOMER SAVES .83.....	\$7.29

FOUR REASONS:

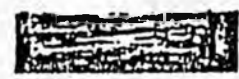
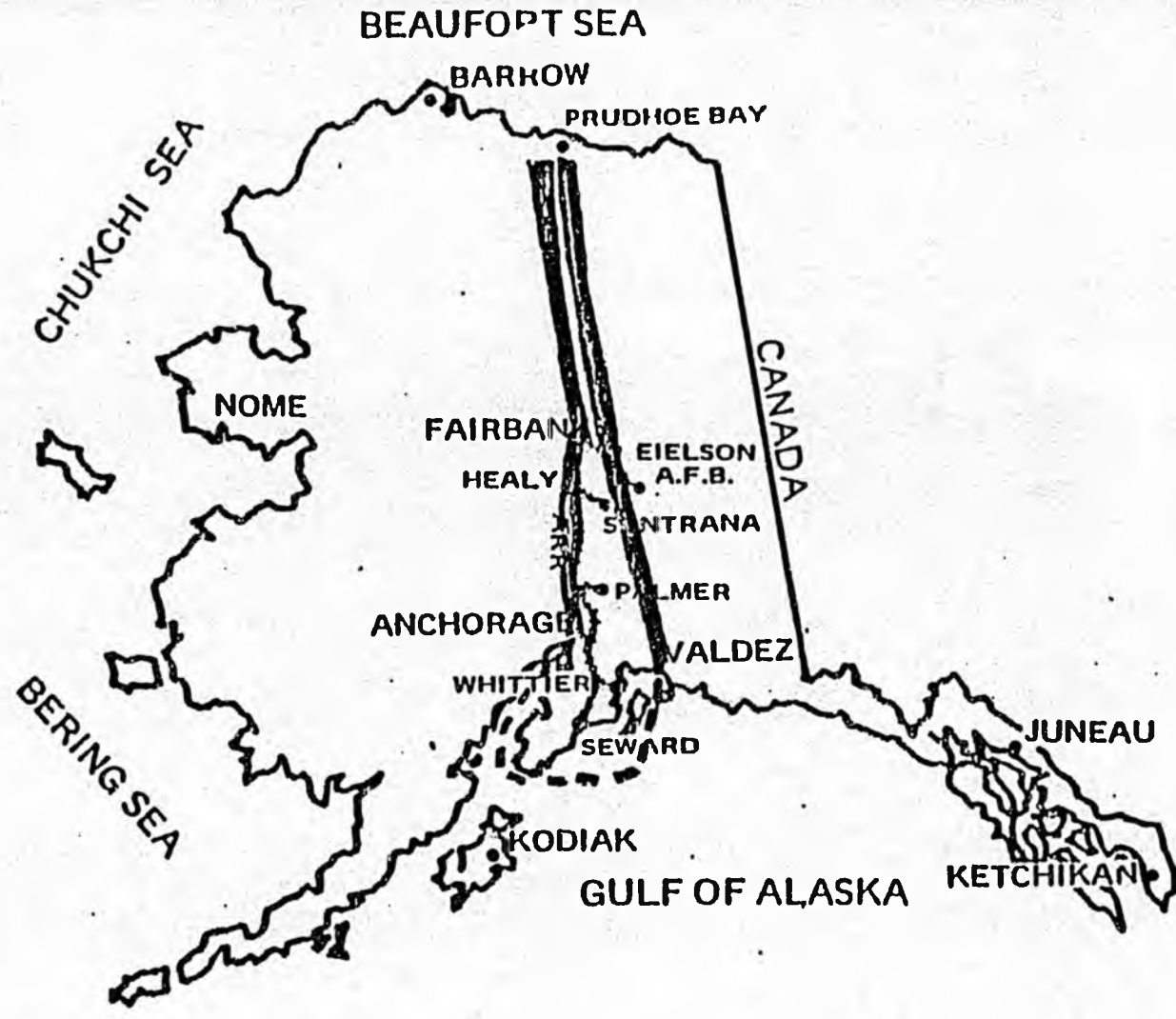
A. COOK INLET REFINERIES USE MORE NORTH SLOPE CRUDE

*Chevron retrofitted in 1981 to 100% production using ANS crude.
Tesoro is now operating on 15% ANS production.

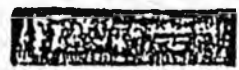
B. FERC DIFFERENTIATES BETWEEN INTRASTATE AND INTERSTATE IN TAPS PRICING.

C. INTERIOR REFINERIES INJECT RESIDUALS INTO THE PIPELINE.

D. ALASKA RAILROAD RATES STAY UNDER THE VALDEZ-NIKISKI "PRICE UMBRELLA."



RAIL ROUTE:
PRUDHOE-NORTH POLE-
ANCHORAGE



PIPE AND WATER
ROUTE: PRUDHOE-
VALDEZ-KENAI-
ANCHORAGE

OIL "PRICE UMBRELLA"

PRUDHOE-VALDEZ-KENAI-ANCHORAGE.....	\$7.29/ barrel
PRUDHOE-NORTH POLE-ANCHORAGE.....	<u>6.46</u>
<u>COST SAVINGS</u>	\$.83/barrel

PROJECTED INCREASE IN PETROLEUM TRAFFIC

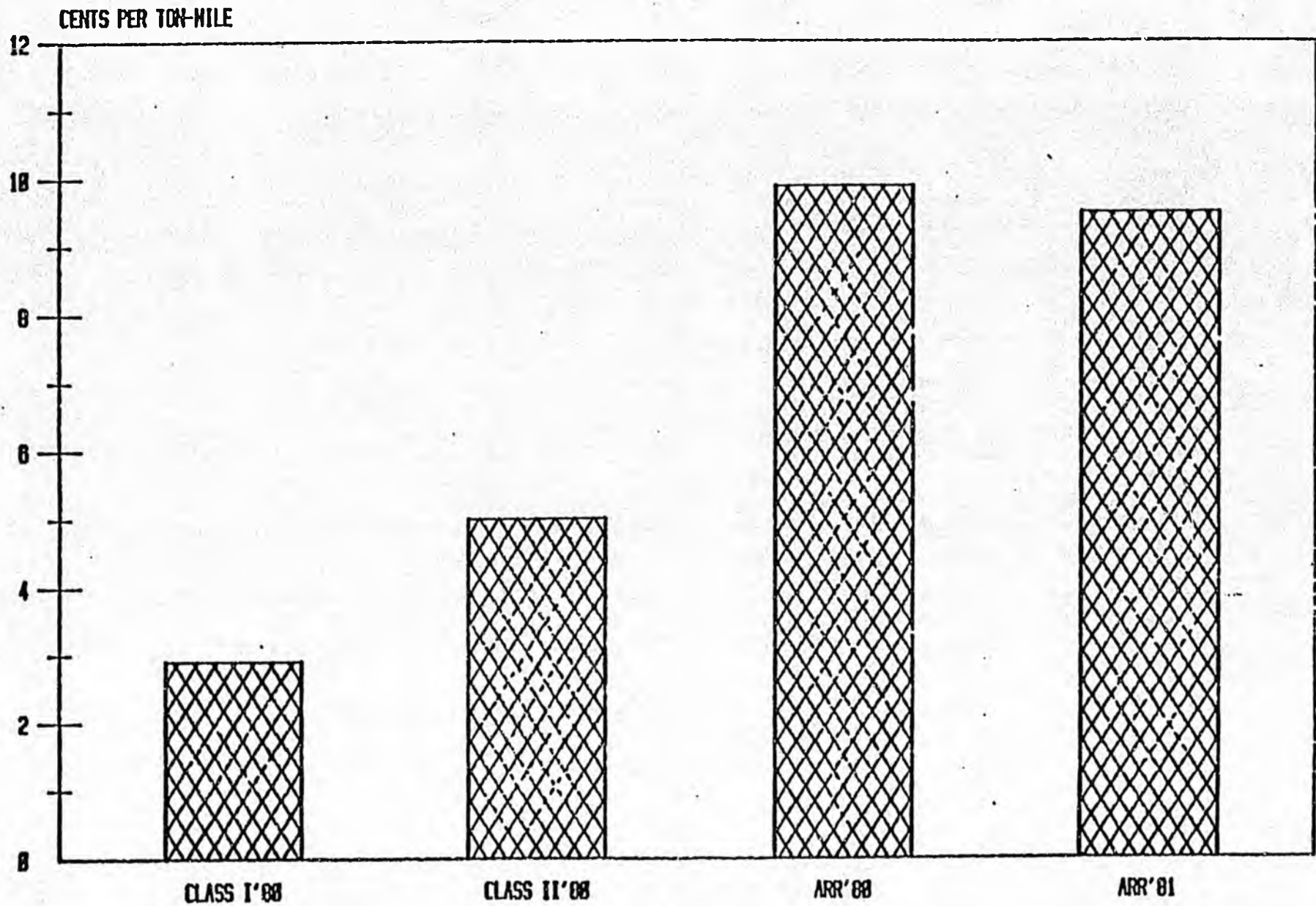
ASSUME:

- *BASE CASE OF 1300 CARLOADS OF OIL AND PRODUCT SHIPPED THROUGH 1992.
- *DEMAND ASSUMPTIONS ARE BASED ON NEAR TERM INCREASED CAPACITY AT NORTH POLE.
- *FURTHER, NORTHBOUND GASOLINE TRAFFIC FALLS OFF AS AN INTERIOR REFINERY ADDS THAT CAPACITY IN THE MIDDLE 1980'S.
- *EVENTUAL INCREASES IN SOUTHBOUND SHIPPING OF PRODUCTS FROM THE NEW REFINERY.
- *DOYON LTD., A NATIVE CORPORATION, RECENTLY SHELVED PLANS TO BUILD A REFINERY BECAUSE OF THE OIL GLUT. MAPCO IS CONSIDERING EXPANSION AT NORTH POLE, THE ONLY EXISTING INTERIOR FACILITY.

VALUE OF THIS TRAFFIC, BASED ON RAILROAD PROJECTIONS:

\$8.232 MILLION, discounted at 5% real return

FREIGHT REVENUE PER TON-MILE COMPARISON



ALASKA RAILROAD PRICING

- At about 10 cents per revenue ton-mile the Alaska Railroad charges almost twice what other Class II railroads charge.
- Clearly the differences in the costs of operation in Alaska are the major cause of higher prices since the Railroad is barely profitable with the current price structure.
- Volume gains have dramatic effects on costs per ton-mile. As volume benefits from market growth and increased market share, there will be an umbrella created between prices and costs.
- This umbrella may be used by the Railroad to either increase profitability or reduce prices and gain market share (which would result in even lower costs).
- Sea/Land and Tote appear to be very vulnerable to aggressive pricing by the Railroad and Alaska Hydrotrain. One railcar can carry three containerloads. Containers and trailers have higher per-ton variable cost than railcars.
- This cost advantage is greatest when a full 60-ton carload or more can be received by the shipper at one time. For such shippers the Railroad has begun using "contract rates" in which the shipper gets a lower price in return for guaranteed minimum tonnages and full-carload loading. For example, in lumber and plywood delivered to Anchorage in 1981 the Railroad had below average price increases to its shippers while receiving much greater revenues per carload.
- Contract rates permit the Railroad to be competitive for delivery not only to Fairbanks (a long haul) but to Anchorage (a short haul).

ESTIMATED MARKET SHARE IN THE RAILBELT

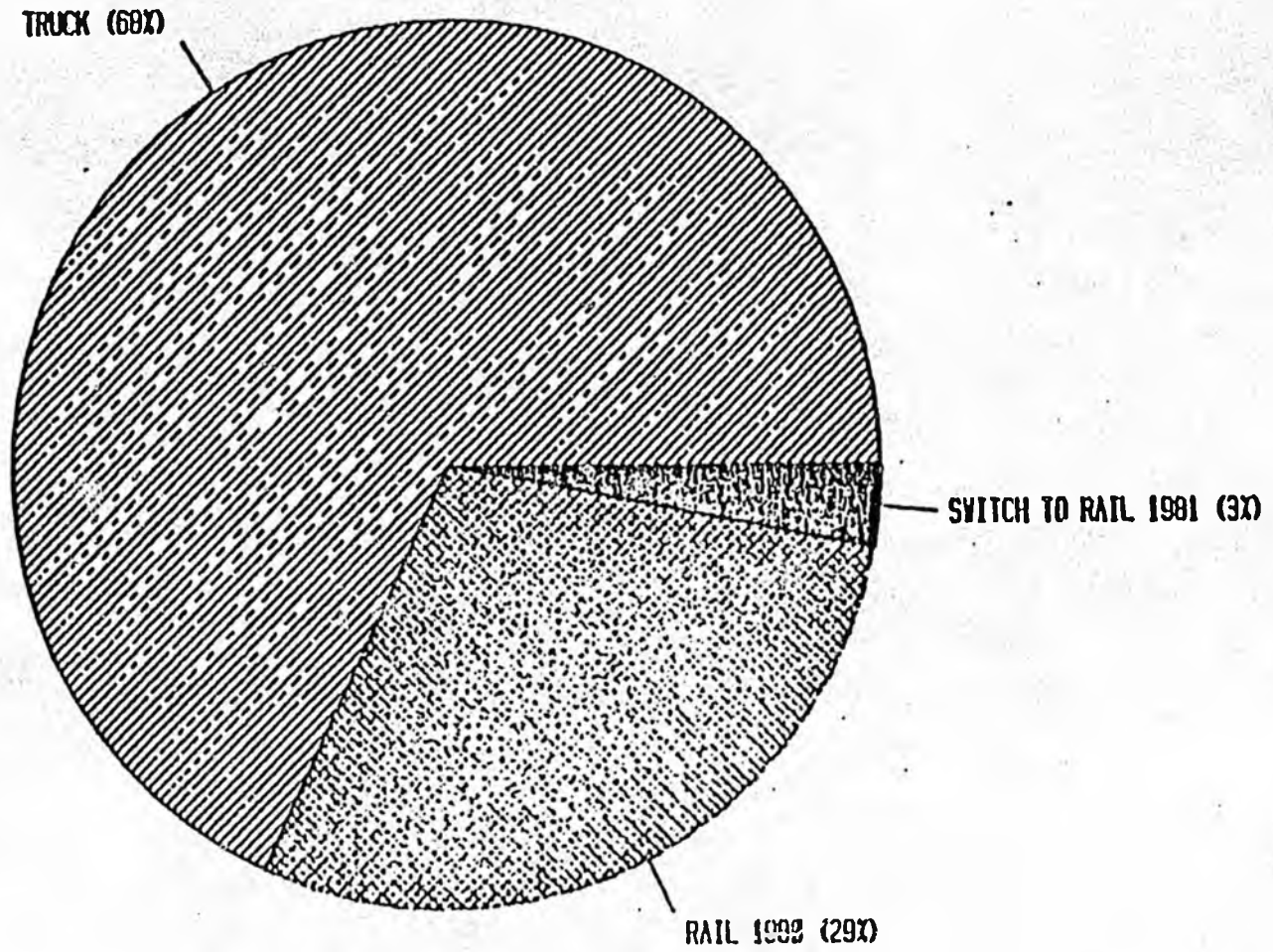
Railroad and Truck
1980 and 1981

	1980		1981	
	<u>1000's Tons</u>	<u>Share %</u>	<u>1000's Tons</u>	<u>Share %</u>
<u>Alaska Railroad</u> ¹				
Port of Whittier	219.9		271.0	
Port of Seward	7.8		22.5	
Port of Anchorage -- Bulk	44.1		70.7	
Port of Anchorage -- Piggyback to Fairbanks	<u>91.0</u>	<u> </u>	<u>102.4</u>	<u> </u>
Total Alaska Railroad	362.8	29	466.6	32
<u>Truck</u>				
Port of Anchorage -- Bulk	50.8		35.4	
Port of Anchorage -- Trailer and Container	<u>841.6</u>	<u> </u>	<u>955.3</u>	<u> </u>
Total Truck	892.4	71	990.7	68
Total Railbelt	1255.2	100	1457.3	100

¹ Alaska Railroad data are for years ended September 30th while Port of Anchorage data is for periods ended December 31st. The last three months of the year are slow periods so the ARR fiscal data is a good approximation of the traffic in the calendar year.

ESTIMATED RAILBELT MARKET SHARE (TONS)

RAIL AND TRUCK 1988 & 1981



MARKET SHARE

- The Alaska Railroad picked up a 3% gain in share of total tons delivered to the railbelt between 1980 and 1981 through aggressive sales, contract rates, etc.
- This gain resulted in a 10.3% gain in general commodity tonnage for the railroad itself. As the graph shows, the modest 3% gain is large relative to the 29% share held by the railroad in 1980.
- The Port of Anchorage's share of total tonnage delivered to the railbelt fell 2%. While the total market grew 16% the Port grew only 13%.
- Sea/Land and Tote's total share of tonnages also dropped from 74.3% in 1980 to 72.6% in 1981 as the Railroad's contract rates shifted traffic to the Port of Whittier via rail barge.
- Railbarge share rose from 17.5% in 1980 to 18.6% in 1981.
- Due to the high fixed cost of railroads, containerships, railbarges, and ports, small shifts in volume have dramatic effects on profitability. This is why organizations such as Sea/Land, Tote, and the Port of Anchorage respond so vocally to the more aggressive stance of the Alaska Railroad.
- Pricing will also have dramatic effects on profitability. As marketing becomes more aggressive, profitability may decline for all parties except when volume gains outweigh price cuts as occurred for the Alaska Railroad in 1981.

FORECAST GENERAL COMMODITY¹ REVENUES & REVENUE TON MILES

(4% ANNUAL GROWTH, CONSTANT RAILROAD MARKET SHARE)

	<u>1980</u>	<u>1981</u>	<u>1990</u>	<u>2000</u>
Revenues ('000)	\$16,072	\$20,447	\$31,711	\$51,669
Revenue Ton-Miles (Millions)	133 M	184 M	285 M	465 M

Source: U.S. Army Corps of Engineers
Alaska Railroad

¹Excludes Gravel, Petroleum, and Coal.

REVENUE TON-MILES¹ BY COMMODITY GROUP

1980 and 1981

(In Millions)

	<u>1980</u>	<u>1981</u>	
Coal			
In State	59	64	+ 8.5%
Export	--	7	
Petroleum In Tank Cars			
Out of State	56	50	- 10.8%
North Pole	8	25	+312.5%
Gravel	15	77	+513.3%
Piggyback	39	40	+ 2.6%
Merchandise			
In State Origin	35	13	- 62.9%
Out of State Origin	<u>59</u>	<u>131</u>	+222.0%
	271	407	

Source: Alaska Railroad
Internal Data

1. A REVENUE TON-MILE IS ONE TON OF REVENUE-PRODUCING CARGO CARRIED ONE MILE.

TRAFFIC ANALYSIS

Causes of 50% Growth in Revenue Ton-Miles 1980-1981

Sources of Growth

- Oil - As Cook Inlet refineries have begun to use North Slope crude, the North Pole refinery has exploited a transportation cost advantage. The Railroad has accordingly carried more jet fuel south to Anchorage.
- Gravel - The Railroad has aggressively expanded its gravel haul business between Palmer and Anchorage with the construction boom in Anchorage.
- Merchandise - The Railroad has participated in the 16% growth in tonnages delivered to the Alaska Railbelt between 1980 and 1981 plus it gained about 3% in share of that market through contract rates and aggressive sales.
- Drilling Pipe - Only about 25% of growth in merchandise has been related to North Slope activity.

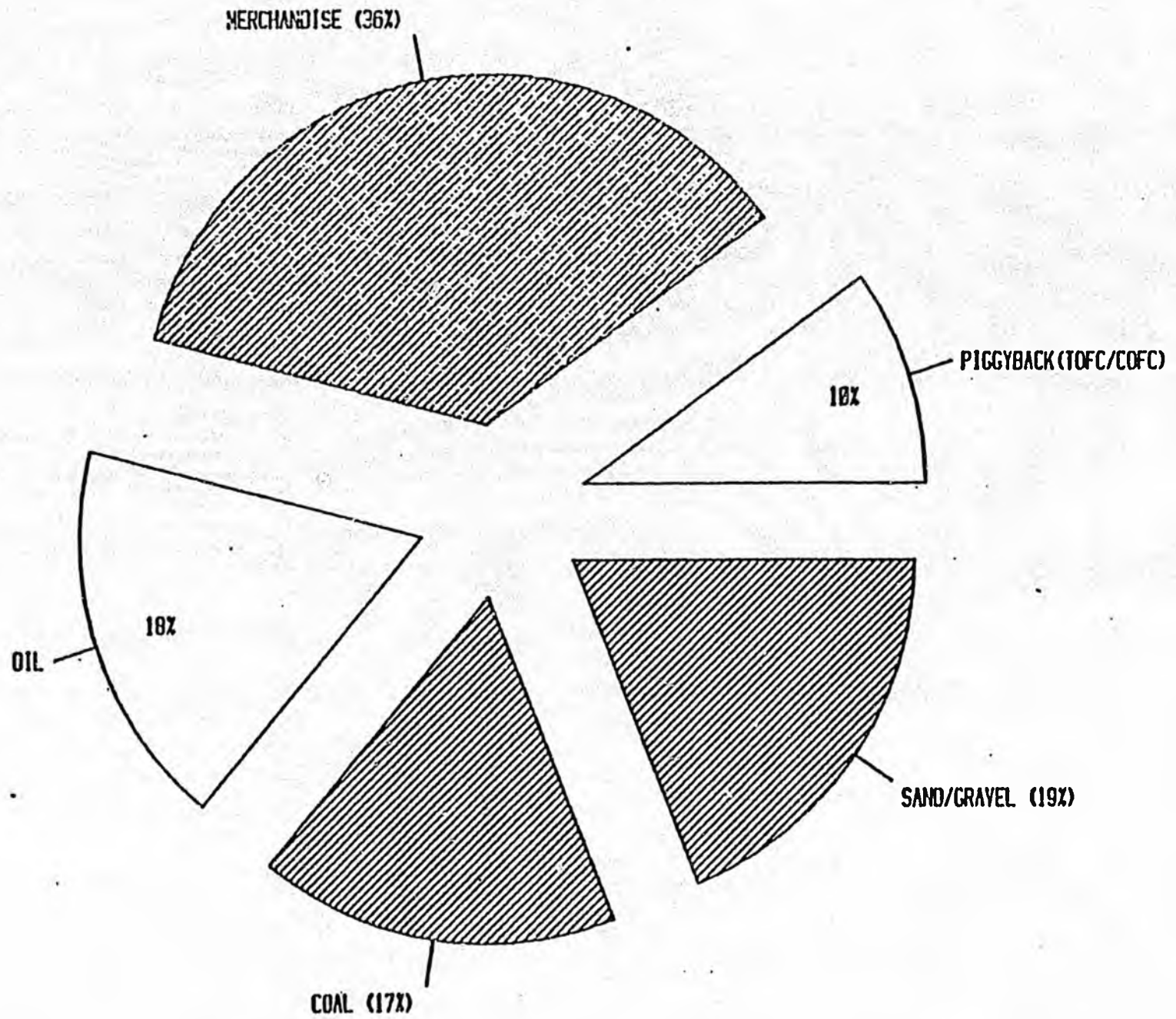
Declining Business

- Logs - Almost all the decline in in-state merchandise came from the closing of the chipping mill at Seward due to a court ruling on in-state timber primary processing. The Railroad no longer delivers logs from Nenana to Seward.

Conclusions:

- The Railroad's traffic volume, which has almost reached the level of pipeline-construction years, is based on a solid mix of business that does not rely on any one project or contingency. It is a result of the general growth and strength of the Alaska economy.

REVENUE TON-MILES BY GROUP 1981



MARKET STRUCTURE

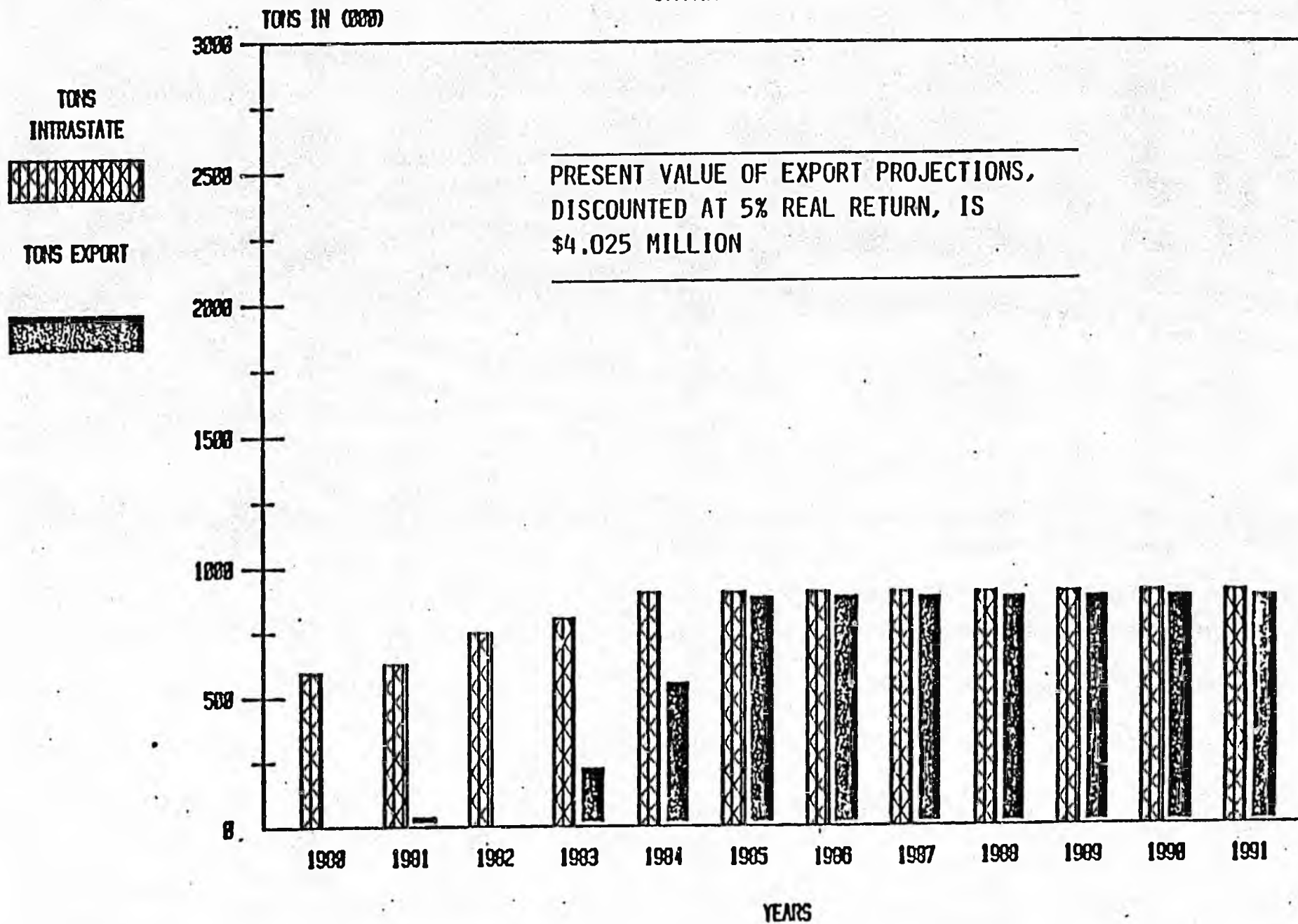
The Alaska Railroad's primary competitors in overland transportation are truckers. The Railroad dominates the Fairbanks market with deliveries from the Ports of Seward, Whittier, and Anchorage while truck delivery from the Port of Anchorage dominates the Anchorage market.

The Railroad receives piggyback traffic bound for Fairbanks from the container-ship firms, Sea/Land and Tote, but it also indirectly competes with these firms with rail deliveries to Anchorage via railbarge from the Port of Whittier. Thus the Railroad is a major player in the competition between containerships and railbarges for sea delivery from the lower-48 United States and Canada.

Similarly the Alaska Railroad has a major impact on which port handles deliveries to the Railbelt markets of Anchorage and Fairbanks. Drilling pipe delivered by the Railroad from Seward to Fairbanks bypasses the Port of Anchorage, for example. Lumber and plywood delivered by the Railroad to Anchorage under contract rates via the Port of Whittier also bypasses the Port of Anchorage even though Anchorage is the destination of the cargo.

COAL TRAFFIC PROJECTIONS

INTRASTATE & EXPORT



ANCHORAGE - FAIRBANKS PASSENGER SERVICE

DESCRIPTION:

The Alaska Railroad operates daily express passenger service northbound and southbound, with stops at Anchorage, Talkeetna, Denali National Park (Mt. McKinley), and Fairbanks in summer. It is a major means of tourist transport for the south-central region of Alaska. The trip from Anchorage to Fairbanks is 356 miles.

The Railroad also operates local passenger service in summer between Anchorage and Fairbanks twice each way each week. These trains service a remote region of homesteads between Talkeetna and Curry with flag stops. They also connect the major cities of Anchorage and Fairbanks.

In winter, a mixed freight and passenger train is operated northbound on Saturday and Southbound on Sunday. Up to 25 freight cars are added to the train to help offset passenger losses. Transportation and maintenance costs are then allocated to freight service. Real savings are minimal since an extra locomotive is usually added to the northbound mixed train. Regular winter freight trains during weekdays have extra capacity to handle the 25 cars during the week. Some savings may be realized in per diem expenses due to quicker turnaround of offline-origin cars.

A. Statistics

	<u>1980-1981 change</u>
* Ridership	+ .2%
* Revenues	+26.6%
* Fare Increase	+25.0%

B. Analysis and Conclusions

- * Consistent increases in fares have not damaged summer ridership.
- * Winter ridership has fallen due to higher fares and service cuts. Service has fallen from 3 trains per week to 1 train per week each way in winter.
- * The railroad is no longer an important intercity passenger link. Its fare is 65% of airfare and the trip takes 11 hours longer. Less than 30 passengers per week ride in winter from Anchorage to Fairbanks.
- * Tourist ridership in summer is less sensitive to higher fares and may rise over time.
 - Costs are fixed and load factor is only 54%.
 - Up to 30-40% additional ridership on express trains would incur no additional costs except traffic and promotion.

ANCHORAGE TO FAIRBANKS PASSENGER SERVICE

1980 TO 1982

	1980		1981			1982 (ESTIMATED)		
	<u>ALL</u>	<u>LOCAL</u>	<u>EXPRESS</u>	<u>LOCAL</u>	<u>TOTAL</u>	<u>EXPRESS</u>	<u>LOCAL</u>	<u>TOTAL</u>
GROSS REVENUE	1,305 ¹		1,386 ³	358 ¹	1,744 ²			
COMMISSIONS ⁴	(56)		(65)	(6)	(71)			
NET REVENUE	1,149		1,321	352	1,673	1,671	352	2,062
EXPENSES ⁵	(3,233)		(1,590)	(1,234)	(2,824)	(1,749)	(1,018)	(2,767)
	(1,984)		(269)	(882)	(1,151)	(78)	(666)	(744)

SOURCES: ALASKA RAIL AND DATA AND STUDY ESTIMATES

¹INCLUDES MAIL REVENUES OF \$111,000 IN 1980 AND \$137,000 IN 1981.

²THERE WAS A 25% FARE INCREASE IN 1981 WITH ALMOST NO LOSS IN RIDERSHIP.

³INCLUDES SPECIAL TRAIN REVENUE.

⁴TRAVEL AGENT COMMISSIONS ESTIMATED BASED ON ONE HALF OF SUMMER TICKETS AND 10% COMMISSION.

⁵ALLOCATED BASED ON # LOCAL AND EXPRESS TRAINS FOR 1981. NO ALLOCATION OF ADMINISTRATIVE OVERHEAD OTHER THAN AN ESTIMATED \$50,000 OF DIRECT TRAFFIC EXPENSES ARE INCLUDED.

THE WHITTIER SHUTTLE

DESCRIPTION:

The Whittier shuttle is a passenger train from Anchorage to Portage (50 miles), and a passenger train with flat cars added for automobile transport, from Portage to Whittier. A ferry to Valdez lands at Whittier.

Trains operate three days per week in winter and daily in summer. There are also two extra trains operated each week in summer.

STATE CONTRACT AND SUBSIDY:

The Whittier Shuttle is operated under contract to the State of Alaska. Currently the State guarantees minimum average revenues of \$3,300 per train-day and \$2,100 per train-day for summer extra trains.

At current service levels the guarantee amounts to \$803,400 annually. If passenger and auto revenues fall below that level for the year, the State will make up the difference. Revenues in excess of the minimum accrue to the Railroad.

WHITTIER SHUTTLE GAIN (LOSS)
((\$'000))

	<u>1980</u>	<u>1981</u>
Revenues	\$711	\$881
Subsidy	<u>50</u>	<u>881</u>
Total	761	881
Expenses	<u>(764)</u>	<u>(840)</u>
	(\$ 3)	\$ 41

1980 Subsidy Minimum:
Train-Days Subsidy

225 x \$3125	\$703,125
29 x \$2000	<u>58,000</u>
	\$761,125

1981 Subsidy Minimum:
Train-Days Subsidy

225 x \$3300	\$742,500
29 x \$2100	<u>60,900</u>
	\$803,400

Source: Alaska Railroad

FINANCE SUMMARY

- * Adjusting the ARR's accounting practices to conform to industry standards changes the 1981 reported profit to a loss. Even so, the trend is very favorable and 1982 will be profitable.
- * The ARR's freight operations are worth \$8.5M as is. This valuation will increase dramatically if performance continues to exceed projections.
- * Revenue-producing real estate could be mortgaged for \$15.3M.
- * As a corporation, the ARR could have raised \$11.6M in 1981 by leasing equipment and track. The present value of those leases would be \$5.3M.
- * As a corporation, the ARR could depreciate its \$82M "Frozen Asset Base" under the Reagan Tax Law. The present value of the tax savings would be \$31.9M.
- * ARR management is weak in the use of financial analysis tools.

VALUATION RECAP

(\$ MILLION)

1. FREIGHT OPERATIONS	\$ 8.5
2. REAL ESTATE	15.3
3. LEASING	5.3
4. FROZEN ASSET BASE TAX BENEFITS	<u>31.9</u>
TOTAL	\$61.0

PROJECTED FREE CASH FLOW FROM FREIGHT OPERATIONS ASSUMING CONSTANT 1982 LEVEL PERFORMANCE

Free Cash Flow

\$5.3 million	Net income as projected
+3.3	Depreciation
+2.57	Improvement in 1982 income to date over projections
-2.44	Major maintenance
-2.5	Imputed income tax
-5.0	Ongoing capital expenditures
<u>1.23</u>	Net after-tax free cash flow
\$8.49 million	Net present value

Notes:

- A. Fiscal year 1982 income of \$5.3 million is the amount projected by the Alaska Railroad. Passenger services, which are assumed to have a negative contribution of \$500,000, and non-operating accounts, are excluded.
- B. Depreciation source: ARR projections
- C. Year-to-date figures include the first five months of FY'82. Cash flow does not assume any improvement over original ARR projections for remainder of the year.
- D. Major maintenance is based on HBS study allocation.
- E. Ongoing capital expenditures are based on historical average, adjusted to exclude passenger capital expenditures and major maintenance.
- F. NPV assumes a 15-year cash flow with a 5% discount factor, and assumes tie replacement costs rise by \$0.62 million after tax in 1985.

REAL ESTATE FINANCE OPPORTUNITY

A. KEY FACTS:

*The Alaska Railroad's real estate rentals from land have risen over 20% per year for the last six years.

*The Railroad now holds no mortgages of any kind on its real property.

B. FINANCIAL IMPLICATIONS:

1982 Rental cash flow available for debt service: \$2.96 million

Loanable amount:¹ \$15.3 million

C. If we assume real estate cash flow rises just 15% per year and that the Alaska Railroad uses this income each year to borrow more money, the Railroad can raise capital according to the following schedule.¹

<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
\$2.3 million	\$2.64 million	\$3.04 million	\$3.49 million	\$4.01 million

1. Assumes 15% interest, 10 year term, and monthly repayments. Assumes bank lends 100% of the amount of the debt the cash flow can sustain.

LEASING AS A FINANCE OPPORTUNITY

- A. In 1981, the Alaska Railroad could have financed \$11.6 M of capital expenditures through lease transactions had it been a corporation.

- B. Three types of leases were available (\$ financeable):
 - (1) New Equipment Lease (\$3.4 million)
 - (2) Used Equipment Sale-Leaseback (\$6.6 million)
 - (3) Safe-Harbor Leasing of Track under ERTA of 1981 (\$1.6 million)

- C. The weighted average pre-tax cost of this money would have been 10.3%.

- D. The after-tax net present value of entering into such leases would have been \$5.3 million.

SUPPLEMENTAL INFORMATION ON LEASES

1. The primary purpose of leases is to transfer tax benefits -- principally ~~depreciation~~ and investment tax credits.
2. Only property owned or used by private, for-profit corporations, or exempted public corporations is eligible for tax benefits. See §48(a)5 of the IRS Code which says:
"Property used by the United States, any State or political subdivision thereof . . ., or any agency or instrumentality of any of the foregoing shall not be treated as §38 property."
(i.e. property eligible for tax credits.)
3. The economy Recovery Tax Act of 1981 (ERTA) changed railroad leasing in three fundamental ways:
 - * Reduced rolling stock depreciable life from 12 to 5 years
 - * Eliminated FMV purchase requirement for the residual asset value; the new so-called "safe-harbor" leasing allows a put/call agreement on the residual asset for 25-30% of book value
 - * Allowed the sale of excess tax benefits by one corporation to another
4. Senator Dole has proposed eliminating the third and possibly the second of these changes by ERTA. Some rescission appears likely.
5. Lessors can offer lower lease rates through the use of "leveraged lease" transactions in which the lessor generally borrows 70% of the asset's purchase cost. All the tax benefits then accrue to the lessor for just 30% of the asset's cost.
6. Lease terms are generally limited only by the asset's remaining useful economic life.
7. At the conclusion of the lease, the lessee has the option to renew the lease (generally for 10-year increments for rolling stock or locomotives) or to purchase the asset (under a put/call agreement). In the case of the Alaska Railroad, its bargaining position as lessee would be extremely strong because:
 - (1) the equipment would be in Alaska
 - (2) having served its useful economic life, the equipment would probably need an expensive overhaul
 - (3) the equipment would have a book value of zero
 - (4) the lessor would have already achieved his desired rate of return
8. Other than its relatively new GP-40's, book value of the Alaska Railroad's locomotive fleet is \$6.1M spread over 40 locomotives. This amount could theoretically be realized in a sale-leaseback transaction. However, the age and diversity of the equipment makes such a lease improbable.
9. Safe-harbor leasing of trackwork is possible through a non-recourse loan by the railroad to the leasing company which uses the loan to buy the track. The leasing company then leases the trackwork back to the railroad with lease payments equal to the debt service; hence the only net cash flow occurs in year zero.

"FROZEN ASSET BASE" TAX BENEFITS

1. Key Facts:

- i) The rails' use of betterment accounting (as opposed to ratable depreciation) for investment in track and structures has resulted in a large undepreciated "frozen asset base" on their balance sheets.
- ii) ERTA allows rails to write this base off over 5 to 50 years.
- iii) The ARR has an \$82 million "frozen asset base."

Track & Structures	\$75.0M
Tunnels	<u>7.0M</u>
	\$82.0M

**2. Tax Benefits
(using 5-year accelerated schedule)**

	<u>Amount</u>	<u>Writeoff</u>	<u>Tax Rate</u>	<u>After-Tax Cash Flow Benefit</u>
Yr. 1	\$82M	x 40%	x 46%	= \$ 15.1M
Yr. 2	82M	x 24%	46%	= 9.1M
Yr. 3	82M	x 18%	46%	= 6.8M
Yr. 4	82M	x 12%	46%	= 4.5M
Yr. 5	82M	x 6%	46%	= 2.3M

**3. Net Present Value (discounted at after-tax equivalent of 15% pretax)
\$31.9 million**

- 4. This tax benefit will be limited by that portion of the purchase price which is assigned to the fixed asset accounts.

ALASKA RAILROAD

Balance Sheet as of February 28, 1982

(\$000,000)

ASSETS

Current Assets	\$ 34.1
Fixed Assets	
Land	0.3
Net Buildings	5.6
Structure	113.9
Gross Equipment	46.7
less depreciation	27.1
Sub-Total, Fixed Assets	<u>139.4</u>
Other Assets	2.5
Total Assets	\$176.0

LIABILITIES & SHAREHOLDER'S EQUITY

Current Liabilities	\$ 5.4
Other Liabilities	2.1
Shareholder's Equity	
Paid-In Capital	273.5
Retained Earnings	<u>(105.0)</u>
Sub-Total,	
Shareholder's Equity	168.5
Total	\$176.0

COMMENTS ON BALANCE SHEET

ASSETS

- * The book value of land, almost all of which was given to the ARR by the Federal Government, is obviously an understatement of market value.
- * The high equipment depreciation is another indication of its age. Because of this factor and the fact that much of the equipment was government surplus donated to the ARR, we cannot assume book value even approximates market value.

EQUITY

- * The high equity/liabilities percentage is unusual. The ARR's 0% D/E ratio compares with a 30% average for our Class II sample. Based on this capitalization comparison, the ARR could support a significant amount of bank debt.

ENTITY SUMMARY

*PRIVATE OWNERSHIP AND OPERATION OF THE ALASKA RAILROAD, AS IT EXISTS TODAY, IS NOT A PRACTICAL QUESTION: IT IS PHILOSOPHICAL.

*HOWEVER A SUCCESSOR ENTITY IS ORGANIZED, IT MUST HAVE FREEDOM FROM --AND EQUAL LEGAL STANDING WITH-- GOVERNMENT TO TAKE ADVANTAGE OF MANAGEMENT AND MARKET OPPORTUNITY.

*UNNECESSARY COSTS OF DUREAUCRATIC ATTACHMENT ARE DIFFICULT TO MEASURE, BUT THEY ARE VERY SUSTANSIAL.

PHILOSOPHY

- * Railroads are traditionally private sector activity.
- * Management performs better with profit responsibility.
- * Governments fail to exploit entrepreneurial opportunities.
- * Once a railroad is profitable, governmental participation is unnecessary.
- * "Federal ownership of the [Alaska] Railroad now conflicts with or limits actions needed to improve its profitability."

--General Accounting Office Report to Congress,
February 25, 1982

PROFILE OF GOVERNMENT INVOLVEMENT IN RAILROADS

1. Ownership

The U.S. federal government, 11 states and 16 municipalities own or operate some type of rail property for approximately 30 railroads.

2. Organization

Either single or in combination,

- Commissions
- Authorities
- Departments of Transportation
- Or public benefit corporations

are organizational forms used.

ADVANTAGES

- * a government agency has strong negotiating position with labor
- * possibility of public funding, especially for expansion and natural disasters
- * lower cost of capital
- * tax-exempt status
- * probable exemption from anti-trust

DISADVANTAGES

- * lack of autonomy: bureaucratic control reduces managerial discretion and efficiency in every functional area
- * governmental personnel policies inhibit railroads' business needs
- * competing transportation modes consider publicly funded railroad as unfair competition
- * railroad has no legal standing against regulation
- * employees can benefit from both Civil Service and union representation
- * no possibility of creative financing; lack of tax benefits increases cost of equipment
- * inability to compensate management at competitive incentive rates, but Civil Service leads to top-heavy management
- * greater exit barriers for markets and services

SUPPLEMENTAL INFORMATION ON GOVERNMENT INVOLVEMENT IN RAILROADS

A. Size

* Of 30 publicly-owned or operated railroads, all but 3 are Class III railroads with revenues generally less than \$2M per year.

<u>Class I</u>	<u>Owner</u>
Conrail	USA (82%)
Long Island Railroad	State of New York (100%)

Class II

Alaska Railroad USA (100%)

States Involved in Class III Railroads

Alabama	Michigan	South Dakota
Georgia	New Hampshire	Vermont
Iowa	South Carolina	West Virginia
		Wisconsin

B. Profitability

* The LIRR has never been profitable since New York State bought it in 1965.

* Government-owned Class III railroads have an average Return on Equity of 3.4% including public financial support as revenue.

* Conrail became profitable in late 1981.

C. State-Owned Assets

* About 50% own track and right-of-way only

* About 50% own rolling stock as well

D. Control and Operating

* Only 3 states use state employees for railroad operations.

* 8 states lease railroad assets to private operators.

E. Financing Options

* Because of §48(a) of tax code, leasing capital equipment on favorable terms is not possible for publicly-owned railroads.

F. Exception for Corporate Entity

* Because of a specific clause in the 3R Act of 1976 and its charter as a private, for-profit corporation, Conrail has all the financing flexibility of a private corporation.

* Long Island Railroad's case: When the LIRR switched from a stock corporation to a "public benefit corporation" in 1981, it forfeited all access to private financing or tax-aided schemes.