

SERVICE IMPACTS OF ALTERNATIVE
FY82 FUNDING LEVELS FOR AMTRAK

Budget Memorandum

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I. INTRODUCTION

The President's budget proposal for fiscal year 1982 (FY82) requests \$613 million in federal funds for Amtrak to fund operating losses, capital expenses, labor protection payments, and interest costs on outstanding loan obligations. The President has not specified how the funds should be spent but rather has proposed that Amtrak determine the allocation of funds among its various financing needs.

Faced with this reduced budget, Amtrak will undoubtedly be compelled to discontinue or reduce service along many routes. There is substantial disagreement between Amtrak and the Department of Transportation (DOT) concerning the likely extent of these service reductions. DOT estimates that the President's FY82 budget would support the Northeast Corridor (NEC) route system and provide substantial funding (approximately \$150 million) for services outside the Northeast Corridor, while enabling Amtrak to meet such financial obligations as interest payments and taxes. 1/ Amtrak maintains that all service outside the Northeast Corridor would be terminated under the President's budget proposal, but that given an additional \$240 million (for a total of \$853 million), virtually all current services could be retained.

This paper reviews the cost of retaining the current national Amtrak system and estimates the likely service impacts under three alternative FY82 funding levels: \$613 million, \$713 million, and \$813 million. The next section reviews the cost of maintaining the current national network of rail passenger service and compares this estimate with Amtrak's proposed FY82 funding level. The third section reviews Amtrak's estimated cost of a Northeast Corridor-only system and provides an assessment of the funds available to support services outside the Corridor given the President's proposed funding level. The fourth section estimates the likely service impacts associated with different FY82 funding levels, including \$613 million, \$713 million, and \$813 million. The final section summarizes the conclusions.

II. ESTIMATED FY82 COST OF THE CURRENT NATIONAL NETWORK

Assuming no operating or network changes, the current Amtrak system is estimated to require an FY82 funding level of about \$1,075 million--\$845 million for operations (including operating subsidies, interest

1/ Senate Committee on Commerce, Science, and Transportation, Report on Amtrak Improvement Act of 1981. Report No. 97-96, p. 18.

payments, and state and local taxes), \$224 million for capital, 2/ and \$6 million for labor protection payments. Amtrak has stated, however, that an FY82 funding level of \$853 million would preserve the current national network in essentially its present form. Amtrak is requesting relief from \$82 million in interest obligations 3/ and \$6 million in state and local taxes. 4/ Moreover, Amtrak does not include an estimated \$6 million in labor protection costs within its FY82 budget request. Amtrak's \$853 million estimate also assumes FY82 savings of \$42 million stemming from several minor route reductions, 5/ \$42 million from negotiated reductions in labor costs, and \$44 million from improved operating efficiency and increased revenues--a total projected savings of \$128 million. (See Table 1.)

TABLE 1. FEDERAL COST OF CURRENT AMTRAK SYSTEM IN FY82 (In millions of dollars)

		Federal Cost
Current System, total		\$1,075
Items Excluded From Amtrak's Budget Request:		
Interest Cost	(82.0)	
State and Local Taxes	(6.0)	
Labor Protection Payments	<u>(6.0)</u>	
Subtotal	(94.0)	981
Savings Assumed Under Amtrak's Budget Request:		
Route Reductions	(42.0)	
Labor Cost Reductions	(42.0)	
Improved Operating Efficiency	<u>(44.0)</u>	
Subtotal	(128.0)	853

2/ Assumes same capital funding level as FY81.

3/ Amtrak proposes that Congress create a new class of non-voting and non-convertible preferred stock which Amtrak would issue to the Federal Financing Bank to pay off Amtrak's \$850 million debt.

4/ Amtrak proposes that Congress exempt it from state and local tax increases that result from publicly-financed capital improvements.

5/ These network changes include: terminating the Cardinal between Chicago-Washington and the Shenandoah between Washington-Cincinnati; rerouting the Broadway Limited serving Chicago-New York/Washington; restructuring the Inter-American serving Chicago-Texas; eliminating three trains on the Northeast Corridor; and terminating Amtrak funding for commuter service.

Savings from Route Reductions. The \$42 million in FY82 savings resulting from route reductions appears achievable. This savings estimate includes \$11 million from terminating the Shenandoah and Cardinal and rerouting the Broadway Limited. Together, the Shenandoah and the Cardinal accounted for almost \$8 million of Amtrak's avoidable losses in FY80 (based on Amtrak's estimates), while the Broadway Limited accounted for more than \$10 million in FY80 avoidable losses. Thus, Amtrak's estimated FY82 savings of \$11 million appears reasonable.

Amtrak also projects \$12 million in FY82 savings from restructuring the Inter-American. This savings estimate appears somewhat ambitious. The Inter-American accounted for only \$12 million of Amtrak's short-term avoidable FY80 loss (based on Amtrak's estimates). This loss could increase to about \$14 million in FY82 (assuming annual increases of 12 percent in costs and 15 percent in revenues). Thus, Amtrak is assuming a substantial reduction in the short-term avoidable federal loss on this route to about \$2.0 million in FY82. This is not altogether unlikely, however, since the Chicago-New Orleans route (a comparable route to the restructured Inter-American) incurred avoidable federal losses of \$2.4 million in FY80.

Finally, Amtrak estimates FY82 savings of \$9 million from reduced Northeast Corridor trains and \$10 million from discontinued Amtrak support of commuter services. These estimates appear reasonable although, again, it is difficult to verify the cost savings.

Labor Cost Savings. The \$42 million labor cost savings would be realized through negotiated reductions in train and engine crew costs. Total labor costs currently account for about 60 percent of Amtrak's operating costs. Amtrak's total FY82 labor costs (assuming no operating changes) would therefore be about \$800 million. Thus, Amtrak is assuming about a 5 percent reduction in labor costs. Although this appears to be a reasonable goal, there are clearly substantial uncertainties involved in any labor negotiation. Amtrak has underscored this uncertainty by stating that it would seek a supplemental appropriation during FY82 if these negotiations are not successful. 6/

Improved Operating Efficiency. The \$44 million in savings projected by Amtrak as a result of improved operating efficiency would stem from reduced manning levels, better equipment utilization, increases in food and beverage prices, and selected fare increases. Amtrak does not disaggregate the \$44 million to show cost reductions versus revenue increases. The

6/ Letter from Alan S. Boyd, President of Amtrak, to Congressman James J. Florio, March 16, 1981.

\$44 million represents about 3 percent of projected FY82 operating costs (assuming no changes in operations) and therefore appears achievable. On the other hand, the \$44 million is 7 percent of Amtrak's projected \$624 million in FY82 revenues. The \$624 million revenue estimate already assumes a substantial rate of revenue increase for the slightly reduced route system--19.6 percent annually from FY80 to FY82 compared with 18.1 percent annually from FY78 to FY80. Nevertheless, the fact that certain trains are booked to capacity during the peak summer season indicates that fare increases could be realized along some routes without suffering a significant loss in ridership.

Federal Cost. Assuming that Amtrak can successfully realize all of the cost savings discussed above, the total federal costs of maintaining a slightly modified form of the current network while meeting the financial obligations required under current law would approach \$950 million in FY82. Amtrak's budget request of \$853 million underestimates Amtrak's total financial obligations. Additional obligations of \$94 million (\$82 million in interest payments, \$6 million in state and local taxes, and \$6 million in labor protection payments) are not included within the \$853 million request. (Amtrak assumes that the Congress will provide relief from the \$82 million in interest payments and \$6 million in state and local taxes.) ^{7/} Moreover, Amtrak has stated that it may still request a \$42 million supplemental appropriation in FY82. If this is interpreted as a measure of potential liabilities stemming from incomplete realization of projected cost savings and other contingencies, then the total federal cost of the current Amtrak system (with a few route modifications) could climb to \$1 billion in FY82.

^{7/} Similarly, the authorizing legislation reported by the House Committee on Energy and Commerce provides an FY82 funding level of \$735 million (\$625 million for operating subsidies, \$100 million for capital, and \$10 million for labor protection) but exempts Amtrak from interest payments and all state and local taxes (estimated at up to \$20 million in FY82). These exemptions provide Amtrak relief from about \$100 million of its current financial obligations. Moreover, the bill authorizes \$30 million in new loans from the Federal Financing Bank. Thus, the House bill would provide Amtrak with the funding equivalent of \$865 million in FY82, \$252 million (or 41 percent) more than that proposed by the President.

III. THE PRESIDENT'S FY82 BUDGET PROPOSAL

The President's FY82 budget proposes \$613 million to fund all of Amtrak's costs including operating losses, capital expenses, labor protection payments, and interest on outstanding loans. Amtrak contends that this funding level would necessitate termination of all service outside the Northeast Corridor: the Corridor would consume all available funds--\$136 million for irreducible capital commitments, \$250 million for fixed infrastructure costs associated with a Northeast Corridor-only operation, \$10 million for Northeast Corridor operating subsidies, \$200 million for labor protection payments to terminated employees, and \$25 million for system shut-down costs. Given these costs, no funds would be available to support operations outside the Northeast Corridor. Moreover, Amtrak excludes the \$82 million in interest payments and \$6 million in state and local taxes on improved properties.

Several factors suggest that the President's proposed budget could support more than just the Northeast Corridor (NEC) service, however. First, Amtrak's \$853 million full-system cost estimate includes cost savings that are not accounted for under the \$613 million estimate and that, if realizable under a full-system, could also be realized (at least in part) under an NEC-only operation. A more consistent accounting of potential FY82 savings suggests that Amtrak has overestimated the cost of an NEC-only operation. Second, Amtrak's estimate is based on several questionable assumptions that should be revised. Finally, the President is proposing legislative changes that would reduce Amtrak's financial obligations substantially. These potential savings are reviewed briefly below.

Capital. Amtrak estimates that \$136 million of the proposed \$613 million budget will be needed to fund irreducible capital commitments in FY82. However, \$33 million from Amtrak's FY81 appropriation remain unobligated and these funds could be reprogrammed to cover a portion of these commitments. This would free \$33 million in FY82 appropriations. This savings is not included in Amtrak's FY82 estimate.

NEC Operating Costs. Under the President's budget, Amtrak assumes "business-as-usual" NEC operations--an assumption that is not consistent with the operating plans under their requested budget. Amtrak's \$853 million full-system cost estimate includes the elimination of three trains in the Northeast Corridor for a total FY82 savings of \$9 million. However, this savings is not included in Amtrak's NEC-only cost estimate.

Labor Cost Reductions. Amtrak's full-system cost estimate assumes FY82 savings of \$42 million resulting from train and engine crew cost reductions. Amtrak's NEC cost estimate does not account for any labor cost

reductions. However, Amtrak has requested congressional relief from Section 504 (f) of the 3R Act, which restricts their ability to negotiate with the train and engine crew brotherhoods in the Northeast Corridor. Congressional approval of this request should enable Amtrak to gain a portion of the \$42 million in labor cost savings on NEC operations. Amtrak has stated that this change would allow a maximum of \$8 to \$9 million (or 20 percent of the \$42 million) in savings under an NEC-only operation. This appears to be a conservative estimate since the NEC routes account for about a third of Amtrak's train miles and about half of its trains. Moreover, Conrail is negotiating labor cost reductions with its freight employees that could eventually be applied to Conrail employees operating Amtrak trains, thereby yielding substantial cost savings for Amtrak.

NEC Operation Subsidy. Amtrak's \$853 million full-system cost estimate assumes \$44 million in savings resulting from higher food and beverage prices, reduced manning levels, selected fare hikes, and more efficient utilization of equipment. None of these savings are included in Amtrak's estimate of NEC operating costs. While most of these savings are likely to be realized outside the NEC on long-distance operations, some portion would probably be available under an NEC-only operation. The Northeast Corridor accounts for about half the number of total system trains, more than half the passengers carried, about 30 percent of passenger miles, and about 15 percent of total onboard service costs. Thus, roughly 10 to 15 percent (or \$4 to \$6 million) of the \$44 million in estimated savings could probably be realized under an NEC-only operation.

NEC Fixed Costs. Amtrak estimates that cutting service back to the NEC alone would reduce fixed costs by about 30 percent, from \$407 million to \$280 million. Greater savings are probable for two reasons:

- Restricting service to the NEC would result in a sharply reduced system. Train miles and passenger miles would be reduced by about 70 percent, passengers by almost half, trains by more than half, and stations by almost 90 percent. Overhead savings of 30 percent seem disproportionately small alongside these statistics. Moreover, the remaining service would be concentrated in a small geographic area which should facilitate greater cost economies than if the service were more dispersed.
- The \$407 million estimate of system-wide fixed costs probably overstates Amtrak's fixed costs. Costs that are fixed for purposes of minor system adjustments would be avoidable under major system reconfigurations. In addition, Amtrak has interpreted current law to require that individual route performance be evaluated on the basis of avoidable costs per passenger mile. Given

this interpretation, there is an incentive for Amtrak to understate avoidable costs and thereby overstate fixed costs. Thus, the \$407 million total fixed cost estimate is probably an overestimate.

Given these two factors, it is assumed here that Amtrak's fixed costs might be reduced by 35 to 45 percent under an NEC-only operation (a less than proportional reduction with regards to service levels). Taken against the \$407 million estimate, this would bring NEC fixed costs to \$224 million to \$265 million in FY82, an additional savings of \$15 million to \$56 million.

Labor Protection Costs. Amtrak estimates that labor protection expenses will require \$200 million of the President's recommended \$613 million budget. Although the \$200 million estimate appears reasonable given Amtrak's assumptions under current law, two factors could reduce labor protection costs substantially:

- Revised Labor Protection Provisions. Recent legislation reported by the Senate Commerce Committee empowers Amtrak's Board of Directors to opt for less costly labor protection provisions. These revised provisions could save Amtrak as much as \$100 million in labor protection costs during FY82, assuming all services outside the Northeast Corridor are terminated.
- Maintenance of Passenger Services Outside the Corridor. For reasons discussed above, Amtrak may have overestimated the cost of an NEC-only operation. Adjustments to correct this overestimate suggest that funds may be available for use in retaining passenger service outside the NEC, which in turn would reduce labor protection costs. For each dollar spent on services outside the NEC, direct labor protection costs could be reduced by about 24 cents under the revised labor protection provisions. (Under current labor protection provisions, each dollar spent on services outside the NEC reduces labor protection costs by about 48 cents.) Thus, if Amtrak were able to apply the \$174 million to \$225 million in NEC cost savings to operations, labor protection costs could be reduced by about \$42 million to \$54 million. Using these additional labor protection savings to maintain service would reduce labor protection expenses even more.

System Shut-Down Costs. Amtrak estimates that the elimination of all services outside the NEC would result in system shut-down costs of \$25 million. As in the case of labor protection costs, maintenance of service outside the NEC would reduce estimated shut-down costs.

In summary, the potential cost reductions described above (and summarized in Table 2) would provide Amtrak with total savings of about \$209 to \$272 million, of which \$120 million to \$185 million could be used to support services outside the NEC and \$88 million could be used to meet anticipated interest and tax obligations.

IV. SERVICE IMPACTS OF ALTERNATIVE FUNDING LEVELS

Based upon the preceeding section, it appears that the President's proposed funding level would enable Amtrak to provide about \$120 million to \$185 million in subsidies for services outside the Northeast Corridor. The number of routes that could be retained would be limited, however, since any substantial network expansion outside the Northeast would be accompanied by increased infrastructure costs. Moreover, it is not clear how Amtrak would allocate these funds across uses (capital versus operations) and routes. Nonetheless, this section presents an illustration of the non-Northeast Corridor routes that could probably be retained under the President's \$613 million funding proposal and examines the increases in rail services that might be obtained by providing an additional \$100 million and \$200 million, respectively.

For the purpose of this exercise, it is assumed that Amtrak would use the \$120 million to \$185 million to subsidize operations and would fund routes exhibiting the highest rate of cost recovery--that is, the routes with the highest percent of costs recovered by revenues. This cost-recovery criterion was proposed by the Administration and set out in Amtrak's authorizing legislation by the Senate Commerce Committee. It is further assumed that Amtrak will not use the available funds to provide additional services in the Northeast (even though some non-corridor northeast services rank relatively high in terms of cost recovery--i.e., Niagara Falls-New York City) but instead will seek to provide a broader network of service.

The avoidable federal loss is one cost component associated with retaining services outside the Corridor. The avoidable federal loss (avoidable cost minus revenues) is the direct subsidy required to maintain service along a given route. The FY82 longterm avoidable federal loss for each route was projected on the basis of FY80 avoidable costs and revenues, as reported by Amtrak. The FY80 avoidable cost for each route was inflated at a 12 percent annual rate while revenues were assumed to increase at a 15 percent annual rate. There are clearly some problems with this estimating procedure. For example, avoidable costs may be overestimated since the cost estimates do not account for potential FY82 savings resulting from labor cost reductions and improved operating efficiency. On the other hand, revenues may be overstated on particular routes since there is no

TABLE 2. SUMMARY OF POTENTIAL FY82 SAVINGS NOT INCLUDED IN AMTRAK'S NORTHEAST CORRIDOR-ONLY COST ESTIMATE

Source	Description	Potential FY82 Savings (In millions)
Savings Under Northeast Corridor-Only Operation:		
Capital	Reprogram unobligated FY81 funds.	\$33
NEC operating costs	Reduce NEC service frequency.	\$9
Labor cost reductions	Relief from Section 504(f) enabling Amtrak to negotiate with NEC train and engine crews. Cost savings could also result from Conrail labor negotiations.	\$13 to \$21
NEC operating subsidy	Improved operating efficiency, food and beverage price increases, and higher fares.	\$4 to \$6
NEC fixed costs	Achieve up to an additional 5 to 15 percent reduction in fixed costs--a total reduction of 35 to 45 percent in fixed costs.	\$15 to \$56
Labor protection	Revise labor protection provisions. CBO estimates show first order savings up to about \$100 million.	\$100
Subtotal		\$174 to \$225
Less Interest Payments and State and Local Taxes		(\$88)
Total Savings to Support Operations Outside NEC		\$86 to \$137
Savings from Supporting Non-Northeast Corridor Services:		
Labor protection	Reduce layoffs--provide \$86 million to \$137 million in federal subsidies outside the NEC.	\$20 to \$32
System shutdown	Reduce system shutdown costs--provide \$86 million to \$137 million in federal subsidies outside the NEC.	\$15
Total Funds Available to Support Services Outside the NEC.		\$121 to \$184
Total Savings		\$209 to \$272

consideration of lost revenues due to service termination on connecting routes. Nevertheless, these estimates provide a reasonable basis for projecting Amtrak's future subsidy needs. The estimated FY82 long-term avoidable federal loss (or subsidy) for each route is presented in Table 3.

Amtrak would also incur additional infrastructure (or overhead) costs if services were retained outside the Corridor. Amtrak estimates that the total system infrastructure costs would be \$407 million in FY82 given the current national network and \$280 million under an NEC-only operation. Based on the foregoing analysis, however, the infrastructure costs of an NEC-only operation are assumed to range from an estimated \$224 million to \$265 million. Thus, the infrastructure costs associated with all non-NEC services are estimated at about \$142 million to \$183 million. For the sake of simplicity, the infrastructure costs of retaining all services outside the Northeast are assumed to total \$162 million in FY82. These infrastructure costs are then allocated across routes outside the Northeast on the basis of FY80 train miles in order to estimate the infrastructure costs associated with a particular set of services. Although this is a simplistic means of allocating costs, the resulting estimates appear reasonable. For example, under this methodology, the addition of thirteen routes outside the Northeast Corridor would result in additional FY82 infrastructure costs of \$65 million (or 51 percent of Amtrak's estimated non-NEC infrastructure costs.)

Table 4 illustrates the individual routes that might be retained under each of three funding levels--\$613 million, \$713 million, and \$813 million. Under the \$613 million funding level, Amtrak could probably retain service on about thirteen routes outside the northeastern part of the country. Nine of these routes are short-distance routes supported in part by local subsidies under the Section 403(b) program. The remaining four routes are long-distance routes, three of which connect Chicago with the Gulf (Chicago-New Orleans), the east coast (Chicago-New York/Boston), and the west (Chicago-Seattle). The fourth long-distance route serves the west coast (Los Angeles-Seattle). Together, these thirteen routes carried 16 percent of Amtrak's passengers in FY80.

The \$713 million funding level (an increase of \$100 million over the President's proposal) would extend service to six additional routes outside the Northeast. Three of these routes are short-distance routes supported by local 403(b) subsidies. The remaining three are long-distance routes, two of which connect Chicago with the west (Chicago-Los Angeles) and the east (Chicago-New York/Washington). The third long-distance route serves the upper northwest (Seattle-Salt Lake City). These six additional routes accounted for 7 percent of Amtrak's total FY80 passengers.

TABLE 3. SUMMARY OF PROJECTED FEDERAL FY82 LONG-TERM AVOIDABLE LOSS BY ROUTE (Based on Amtrak's FY80 Estimates)

Route	FY80		CBO's Projected FY82 b/		
	Ranking on Basis of Cost Recovery	Percent of Costs Recovered by Revenue <u>a/</u>	Long-Term Avoidable Costs	Revenues	Long-Term Avoidable Federal Profit/(Loss) <u>c/</u>
Metroliner <u>d/</u>	1	59.7	55,274	53,472	(1,802)
Boston-Newport News <u>e/</u>	2	57.7	14,799	15,574	775
Chicago-Quincy	3	52.8	3,558	2,862	(696)
Chicago-Dubuque	4	50.9	2,151	1,417	(734)
New York-Savannah <u>e/</u>	5	50.5	15,794	13,374	(2,420)
New York-Montreal <u>f/</u>	6	50.4	6,751	4,694	(2,057)
NEC Conventionals <u>d/</u>	7	49.5	95,097	91,262	(3,835)
Chicago-New Orleans	8	47.8	16,500	11,242	(5,258)
Los Angeles-San Diego	9	46.7	17,142	12,292	(4,850)
Chicago-Port Huron	10	44.8	5,731	3,961	(1,770)
Washington-Montreal <u>e/</u>	11	43.7	17,688	12,086	(5,602)
Chicago-St. Louis	12	43.4	4,152	2,829	(1,323)
Chicago-Carbondale	13/14	43.0	5,351	3,648	(1,703)
New York-Harrisburg <u>d/</u>	13/14	43.0	2,532	2,059	(473)
New York-Philadelphia <u>d/</u>	15	40.8	11,850	10,392	(1,458)
Niagara Falls-New York <u>f/</u>	16	39.5	28,354	16,576	(11,778)
Chicago-New York/Boston	17	36.8	34,246	17,925	(16,321)
Los Angeles-Seattle	18	35.7	51,847	26,699	(25,148)
Chicago-Seattle	19	35.6	38,788	18,874	(19,914)
Chicago-Peoria	20	35.1	314	165	(149)
Chicago-Kansas City	21	34.7	6,904	3,595	(3,309)
Pittsburg-Philadelphia <u>e/</u>	22	34.5	1,872	983	(889)
Chicago-Duluth	23	34.4	8,786	4,296	(4,490)
Chicago-Toledo	24	33.8	16,371	8,132	(8,239)
Chicago-Los Angeles	25	33.2	68,707	32,190	(36,517)
Chicago-Oakland/Los Angeles	26	32.7	83,198	38,027	(45,171)
Oakland-Bakersfield	27	32.3	8,043	3,294	(4,749)
Seattle-Salt Lake City	28	32.0	15,902	6,870	(9,032)
Chicago-NYC/Washington	29	31.8	37,062	18,642	(18,420)
Chicago-Washington <u>g/</u>	30	30.8	14,391	6,140	(8,251)
New York City-Florida	31	30.6	113,099	54,174	(58,925)
Philadelphia-Harrisburg <u>d/</u>	32	29.9	10,306	5,737	(4,569)
Washington-Martinsburg <u>f/</u>	33	29.4	1,752	929	(823)
New York City-New Orleans	34	29.2	42,146	18,895	(23,251)
Portland-Eugene	35	28.7	726	290	(436)
Los Angeles-New Orleans	36	27.5	24,009	9,253	(14,756)
Chicago-Milwaukee	37	27.3	6,042	3,096	(2,946)
Chicago-Texas	38	27.0	30,751	11,171	(19,580)
Chicago-Valparaiso	39	25.6	1,078	456	(622)
Portland-Vancouver	40	25.2	5,415	2,118	(3,297)
New Haven-Springfield <u>d/</u>	41	22.5	3,945	1,806	(2,139)
Washington-Cincinnati <u>g/</u>	42	21.4	6,274	1,734	(4,540)
Total	---	38.2	934,698	553,231	(381,467)

SOURCE: Based on Amtrak's Route-by-Route Profit and Loss Statement for FY80.

a/ Percent of fully allocated costs recovered by non-federal revenues, including passenger revenues and 403(b) subsidies from local governments.

b/ Long-term avoidable costs are projected by inflating FY80 long-term avoidable costs by 12 percent annually. Revenues are projected by inflating FY80 revenues by 15 percent annually.

c/ Long-term avoidable federal profit/(loss) equals the long-term avoidable costs minus revenues.

d/ Northeast Corridor routes included under Amtrak's NEC cost estimate.

e/ Northeast Corridor segment of these routes included under Amtrak's NEC cost estimate.

f/ Considered in this analysis to be non-corridor Northeastern routes.

g/ Amtrak's \$853 million budget request assumes termination of this route.

TABLE 4. POSSIBLE NON-NEC SERVICES RETAINED UNDER ALTERNATIVE FY82 FUNDING LEVELS

FY82 Funding Level	Routes Retained	Projected FY82 Costs		
		Fixed Infra- structure	Long- Term Avoidable	Total
\$613 Million	Chicago-Quincy	2.1	.7	2.8
	Chicago-Dubuque	1.4	.7	2.1
	Chicago-New Orleans	7.2	5.3	12.5
	Los Angeles-San Diego	5.9	4.9	10.8
	Chicago-Port Huron	2.5	1.8	4.3
	Chicago-St. Louis	2.3	1.3	3.6
	Chicago-Carbondale	3.4	1.7	5.1
	Chicago-New York/ Boston	9.3	16.3	25.6
	Los Angeles-Seattle	10.8	25.1	35.9
	Chicago-Seattle	10.9	19.9	30.8
	Chicago-Peoria	.2	.1	.3
	Chicago-Kansas City	4.5	3.3	7.8
	Chicago-Duluth	4.5	4.5	9.0
Subtotal		65.0	85.6	150.6
Additional \$100 Million (or \$713 Million)	Chicago-Toledo	7.1	8.2	15.3
	Chicago-Los Angeles	17.7	36.5	54.2
	Oakland-Bakersfield	4.3	4.7	9.0
	Seattle-Salt Lake City	8.5	9.0	17.5
	Chicago-New York/ Washington	9.0	16.4	25.4
	Portland-Eugene	.3	.4	.7
Subtotal		46.9	75.2	122.1 a/
Cumulative Total		111.9	160.8	272.7
Additional \$100 Million (or \$813 Million)	Chicago-Oakland/ Los Angeles	24.8	45.2	70.0
	New York City-Florida	---	58.9	58.9
	Subtotal	24.8	104.1	128.9 a/
Cumulative Total		136.7	264.9	401.6

a/ Each \$100 million in subsidies would reduce labor protection costs by \$24 million, thereby providing a total \$124 million for operating subsidies.

The \$813 million funding level would enable the addition of two more routes, both long-distance. One route would, again, connect Chicago with the west coast (Chicago-Oakland/Los Angeles) and the second would serve the southeastern part of the country (New York City-Florida). In FY80, these two routes carried 6 percent of Amtrak's passengers.

Each successive \$100 million funding increment buys fewer services (in terms of the number of routes retained.) This reflects the fact that the long-distance routes are generally the most costly. Thus, as funding is extended to support long-distance services, fewer routes can be retained for each funding increment.

These estimates illustrate potential Amtrak networks under various funding proposals, contingent upon several basic assumptions. First, it is assumed that all additional funds will be used to support operations. If Amtrak were to use some portion of these funds to support an expanded capital program, fewer routes could be supported. Second, it is assumed that Amtrak will allocate funds across routes essentially on the basis of cost-recovery performance. The network could look substantially different, however, if Amtrak were to adopt different funding criteria for routes. Third, these estimates assume that Amtrak will not be relieved of its current financial obligations, specifically interest payments on outstanding debt and state and local taxes on improved properties. Finally and perhaps most important, these estimates are based on the assumption that Congress will ensure Amtrak's adoption of the revised labor protection provisions contained in the authorizing legislation reported by the Senate Commerce Committee. If the Congress does not ensure the adoption of revised labor protection provisions, the number of routes that could be supported under each funding level would be fewer. (Appendix C illustrates the impact of labor protection provisions on Amtrak's ability to provide services outside the Northeast Corridor.)

V. CONCLUSION

Including all federal obligations, such as interest and labor protection, the federal cost of maintaining the current Amtrak system is estimated to be about \$950 million in FY82 (assuming a few minor route reductions coupled with labor cost reductions and improved operating efficiencies) and could climb as high as \$1 billion. Amtrak's \$853 million budget request does not include \$82 million in interest payments on outstanding loans, \$6 million in state and local taxes on improved properties, and \$6 million in labor protection costs. Moreover, Amtrak states that it may request an additional \$42 million supplemental appropriation in FY82.

Given the President's proposed funding level of \$613 million, however, Amtrak could probably support more than just the Northeast Corridor. Allowing for some operating savings, it appears that the President's proposed budget would provide about \$120 to \$185 million in subsidies to support services outside the Northeast Corridor and enable Amtrak to meet all of its current interest and tax obligations. Under the President's budget, it appears that Amtrak could continue service on about a third of its non-NEC routes. Although most of these routes would be short-distance, corridor-type services, Amtrak could probably support several long-distance routes which would link the several regions of the country.

Providing an additional \$100 million (for a total FY82 funding level of \$713 million) would enable Amtrak to extend service to six more routes--three short-distance corridor-type services and three long-distance services. A further budget increase to \$813 million would enable Amtrak to provide service on only two additional long-distance routes. Thus, each \$100 million increment provides successively fewer services, at least in terms of the numbers of routes retained.

APPENDIXES

APPENDIX A. ALLOCATION OF FY82 FIXED COSTS OUTSIDE THE
NORTHEAST

Routes Outside the Northeast	FY80 Train Miles	Percent of Total Non- Northeast Train Miles, FY80	Allocated FY80 Fixed Cost (In millions)
Chicago-Quincy	192	1.3	2.1
Chicago-Dubuque	131	.9	1.4
Chicago-New Orleans	673	4.5	7.2
Los Angeles-San Diego	547	3.6	5.9
Chicago-Port Huron	234	1.6	2.5
Chicago-St. Louis	210	1.4	2.3
Chicago-Carbondale	318	2.1	3.4
Chicago-New York/Boston	863	5.7	9.3
Los Angeles-Seattle	1,002	6.7	10.8
Chicago-Seattle	1,012	6.7	10.9
Chicago-Peoria	15	.1	.2
Chicago-Kansas City	414	2.7	4.5
Chicago-Duluth	414	2.7	4.5
Chicago-Toledo	657	4.4	7.1
Chicago-Los Angeles	1,642	10.9	17.7
Chicago-Oakland/Los Angeles	2,304	15.3	24.8
Oakland-Bakersfield	399	2.6	4.3
Seattle-Salt Lake City	792	5.3	8.5
Chicago-NYC/Washington	837	5.6	9.0
Portland-Eugene	30	.2	.3
Los Angeles-New Orleans	638	4.2	6.9
Chicago-Milwaukee	239	1.6	2.6
Chicago-Texas	1,201	8.0	12.9
Chicago-Valparaiso	44	.3	.5
Portland-Vancouver	253	1.7	2.7
Total	15,061	100.0	162.3

APPENDIX B. ALLOCATION OF FUNDS ASSUMED BY CBO

	FY82 Funding Level (In millions)		
	\$613 <u>a/</u>	\$713	\$813
Capital	103	103	103
Labor Protection	68 to 80	45 to 57	22 to 34
Total Operations	<u>319 to 330</u>	<u>441 to 452</u>	<u>570 to 581</u> <u>b/</u>
NEC	<u>168 to 179</u>	<u>168 to 179</u>	<u>168 to 179</u>
Non-NEC	151	273	402
Interest	82	82	82
State and Local Taxes	6	6	6
System Shutdown <u>c/</u>	<u>10</u>	<u>10</u>	<u>10</u>
Total	588 to 611	687 to 710	793 to 816

a/ Comparable to authorizing legislation reported by the Senate Commerce Committee.

b/ The authorizing legislation reported by the House Committee on Energy and Commerce provides FY82 operating funds of \$625 million and exempts Amtrak from an estimated \$20 million in state and local taxes. Thus, the House legislation would enable Amtrak to support a greater number of routes than estimated under the \$813 million funding level.

c/ System shutdown costs will vary with the number of routes terminated.

APPENDIX C. IMPACT OF CURRENT LABOR PROTECTION PROVISIONS
AND SERVICES RETAINED UNDER THE PRESIDENT'S
BUDGET PROPOSAL

The foregoing analysis assumes that Congress will act to ensure that Amtrak adopts the less costly labor protection provisions proposed by the President. If Congress fails to do so, labor protection costs under an NEC-only system would be \$100 million higher than projected. Thus, under the President's proposed budget, Amtrak would only have \$74 million to \$125 million available to support services outside the Northeast Corridor and to meet interest and tax obligations. The maximum funds available to support non-NEC services would therefore be about \$80 million (assuming that \$80 million in subsidies would reduce shutdown costs by \$5 million and labor protection costs by \$38 million. In turn, this \$43 million plus the remaining \$45 million could be used to fund interest and tax obligations.) Thus, Amtrak would be able to support only limited service outside the Northeast Corridor under the current labor protection provisions. Table C-1 illustrates the maximum potential services which could be retained outside the Northeast Corridor under the current labor protection provisions.

TABLE C-1. MAXIMUM POTENTIAL SERVICES RETAINED OUTSIDE THE NORTHEAST CORRIDOR UNDER CURRENT LABOR PROTECTION PROVISIONS

FY82 Funding Level	Routes Retained	Projected FY82 Costs		
		Fixed Infra- structure	Long- Term Avoidable	Total
\$613 Million	Chicago-Quincy	2.1	.7	2.8
	Chicago-Dubuque	1.4	.7	2.1
	Chicago-New Orleans	7.2	5.3	12.5
	Los Angeles-San Diego	5.9	4.9	10.8
	Chicago-Port Huron	2.5	1.8	4.3
	Chicago-St. Louis	2.3	1.3	3.6
	Chicago-Carbondale	3.4	1.7	5.1
	Chicago-New York/ Boston	9.3	16.3	25.6
	Chicago-Peoria	.2	.1	.3
	Chicago-Kansas City	4.5	3.3	7.8
	Chicago-Duluth	<u>4.5</u>	<u>4.5</u>	<u>9.0</u>
	Subtotal		43.3	40.6
Additional \$100 Million (or \$713 Million)	Los Angeles-Seattle	10.8	25.1	35.9
	Chicago-Seattle	10.9	19.9	30.8
	Chicago-Toledo	7.1	8.2	15.3
	Chicago-Los Angeles	17.7	36.5	54.2
	Oakland-Bakersfield	<u>4.3</u>	<u>4.7</u>	<u>9.0</u>
Subtotal		50.8	94.4	145.2 <u>a/</u>
Cumulative Total		94.1	135.0	229.1
Additional \$100 Million (or \$813 Million)	Chicago-Oakland/ Los Angeles	24.8	45.2	70.0
	Seattle-Salt Lake City	8.5	9.0	17.5
	Chicago-New York/ Washington	9.0	16.4	25.4
	New York City-New Orleans	23.3	---	23.3
	Portland-Eugene	<u>.3</u>	<u>.4</u>	<u>.7</u>
	Subtotal		65.9	71.0
Cumulative Total		160.0	206.0	366.0

a/ Each \$100 million in subsidies would reduce labor protection costs by \$48 million, thereby providing a total \$148 million for operating subsidies.