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AMTRAK

Information on Subsidies in Thruway Bus Operations



**Resources, Community, and
Economic Development Division**

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The Honorable Mark O. Hatfield
Chairman
The Honorable Frank R. Lautenberg
Ranking Minority Member
Subcommittee on Transportation and Related Agencies
Committee on Appropriations
United States Senate

Since 1976, the National Rail Passenger Corporation (Amtrak) has contracted with bus companies to provide connecting feeder bus service to its network of intercity passenger trains. This feeder bus service, referred to as Amtrak Thruway Bus, operates on 44 routes in 23 states, carries about three-quarters of a million passengers annually, and generates about 3.5 percent of the nearly \$1 billion in revenues that Amtrak takes in each year from intercity passenger services.

Because Amtrak does not generate enough revenues to cover the costs of its rail passenger service, it receives a federal operating grant to help offset its losses. As requested in the Senate report (103-150) supporting the Department of Transportation's appropriations legislation for fiscal year 1994, we reviewed whether and to what extent Amtrak might be using its federal operating grant to subsidize its Thruway Bus services.¹ We also compared the contribution of Thruway Bus passengers to covering the costs of their train trip with that of other Amtrak passengers. Our review included the 30 Thruway Bus routes operated under charter agreements that present an opportunity for subsidization. We did not review the remaining 14 routes because they are operated under marketing agreements that preclude subsidization. (App. I contains a more detailed discussion of our scope and methodology.)

Results in Brief

No federal funds are used to subsidize Amtrak's Thruway Bus operations. Fifteen of the 30 Thruway Bus charter routes are part of a state-supported system in California. All but one of these bus routes operated at a loss, but the state of California—not Amtrak—offset these losses. Thirteen other Thruway Bus routes outside the California-supported system earned more than enough to cover both the full costs of the bus contract and the estimated marginal costs of carrying the additional bus passengers on the

¹See Intercity Passenger Rail: Financial and Operating Conditions Threaten Amtrak's Long-Term Viability (GAO/RCED-95-71, Feb. 6, 1995).

train. Therefore, the bus portion of these routes required no subsidy; in fact, the surplus revenue from the bus passengers helped reduce the need for subsidy on the rail portion of these routes—which, like all Amtrak train routes, operated at a loss.² Data were not available to assess the financial performance of the two remaining Thruway Bus routes that are operated under charter agreements.

All of Amtrak's Thruway Bus passengers benefited, as all of Amtrak's passengers do, from the federal operating grant supporting the rail portion of their trip. For the bus routes outside the California-supported system, the Thruway Bus passengers paid, on average, about as much per mile for the train portion of their trip as the passengers who rode the train only. Hence, the Thruway Bus passengers did not benefit more than other passengers from the federal grant supporting Amtrak's train operations. However, for several routes, the Thruway Bus passengers paid slightly less per mile for the train portion of their trip than the other rail passengers and therefore benefited slightly more from the federal grant. Nevertheless, because these bus passengers supply net revenue to Amtrak, Amtrak would require a larger federal grant if these bus routes were eliminated and the revenues from them were lost.

Background

Amtrak's Thruway Bus services began in 1976 when the Congress authorized Amtrak, in the Rail Transportation Improvement Act of 1976 (P.L. 94-555), to establish routes and joint fares with bus operators. The Congress determined that establishing these links between rail and bus services was consistent with the public interest and national transportation policy, and it encouraged Amtrak to enter into such arrangements. Amtrak contracted with charter and regular-route bus operators to connect the intercity rail route network to low-volume markets and to places no longer served by passenger trains.

Amtrak's Federal Grants

Although Amtrak was created by the Congress as a for-profit corporation in 1970, it has always operated at a loss. Since it began operating in 1971, it has received over \$13 billion in federal operating and capital grants to help support its intercity passenger rail service.

²The surplus revenue from bus passengers is not a profit because it is not sufficient to cover the bus passengers' portion of the full train costs.

Amtrak's Thruway Bus Routes

Amtrak operates Thruway Bus services on 44 routes, 15 of which are part of a system operated at the request of the state of California. These California routes connect with state-supported 403(b) Amtrak trains.³ Under the agreement between California and Amtrak, Amtrak credits a portion of each bus passenger's fare toward the costs of the bus service. If the revenues from the bus passengers are not sufficient to cover the costs of the bus contract, the state finances the shortfall. One additional route in California, from San Francisco to Oakland, is operated separately from the other California routes and is designed primarily to connect San Francisco to Amtrak's regular-system trains.

Outside California, Amtrak operates Thruway Bus services most extensively in Florida (four routes), Virginia (three routes), Michigan (three routes), and Washington State (three routes). Fifteen other routes operate in 18 additional states.⁴

Amtrak's Thruway Bus Service Agreements

Amtrak operates Thruway Bus services under two types of financial agreements with bus operators: marketing agreements and charter agreements. The charter agreement is the only type of agreement that creates an opportunity for Amtrak to subsidize its Thruway Bus services.

Marketing agreements allow Amtrak passengers to connect with regularly scheduled buses.⁵ Under these agreements, Amtrak pays the bus company a negotiated fare on a per-passenger basis for the bus portion of the route. Marketing agreements create no opportunity for subsidization because they limit Amtrak's responsibility to collecting the bus fare and forwarding the fare to the bus operator. Amtrak operates 14 bus routes under marketing agreements.

Under charter agreements, Amtrak negotiates a fixed fee per bus trip with the operator of the charter bus service. This fee is independent of the number of passengers per trip. Only Amtrak passengers with railroad tickets are eligible to ride the bus. Amtrak retains all revenues paid by passengers for travel on the combined bus and rail ticket, bus and rail

³Section 403(b) of the Rail Passenger Service Act allows Amtrak to operate intercity rail service that is financially supported by state agencies. The California 403(b) system includes a number of trains in three corridors: San Diegos from Santa Barbara to San Diego; San Joaquins from Oakland to Bakersfield; and Capitols from San Jose to Roseville.

⁴The other states with Thruway Bus services are Arizona, Idaho, Illinois, Indiana, Kansas, Louisiana, Massachusetts, Minnesota, Missouri, Nebraska, Nevada, New York, Ohio, Texas, Utah, Vermont, Wisconsin, and Wyoming. Buses also operate to Vancouver, British Columbia.

⁵Two routes operating under marketing agreements are dedicated to Amtrak passengers.

schedules are coordinated, and connections are guaranteed. Under these agreements, Amtrak is responsible for any shortfall between revenues from the charter bus service and its costs. In the event of a shortfall, Amtrak would have to offset the loss from other revenues or from the federal operating grant.

At the time of our review, Amtrak operated 30 routes under charter agreements. Sixteen of these routes were in California (15 of which were in the state system); the remainder were in Florida, Illinois, Indiana, Michigan, Ohio, Utah, Vermont,⁶ Virginia, and Wyoming.

In California, the State Subsidizes Amtrak's Thruway Bus Services

Although all but 1 of the 15 Thruway Bus routes in the California system operated at a loss, Amtrak did not use the federal operating grant to cover the shortfall. Instead, the state, under the terms of its agreement with Amtrak, paid the necessary subsidy, which amounted to \$5.9 million in fiscal year 1993. Revenues covered costs only on the Santa Barbara to San Luis Obispo route. On the remaining 14 routes, the losses ranged from \$153,642 on the Tulare County route to \$1,465,093 on the Los Angeles Basin route. Appendix II shows the revenues, costs, and required subsidies for Thruway Bus services on the 15 routes in the California system.⁷

California's Thruway Bus system fed 353,367 passengers into the Amtrak rail system and generated nearly \$9 million in revenues to Amtrak—a sum that greatly exceeds the estimated marginal costs of carrying these additional passengers on the train. (See the next section for more information about marginal costs.)

Amtrak's Thruway Bus Services Supply Additional Revenues for Train Operations

For 13 of the 15 Thruway Bus routes that operated under charter agreements outside the California-supported system, the revenues from bus passengers connecting to Amtrak trains were more than sufficient to cover the costs of the bus service. Therefore, Amtrak did not subsidize these bus routes. Data were not available to assess the financial performance of the two remaining routes that operated under charter agreements.

⁶In 1995, Amtrak began to operate its route from Burlington, Vermont, to Springfield, Massachusetts, under a marketing agreement rather than a charter agreement.

⁷These data for the California system are for California's 1993 fiscal year ending June 30, 1993, the latest year for which data were available when we conducted our analysis. The data for Amtrak's rail and other Thruway Bus routes are for Amtrak's 1992 fiscal year ending September 30, 1992, the latest year for which detailed bus route data are available.

To determine whether Amtrak's Thruway Bus services were subsidized, we concluded that there would be no subsidy for the bus passengers if, for each route, the revenues from these passengers were sufficient to cover the full costs of the charter bus contract and the marginal costs of adding the bus passengers to the train.⁸ Amtrak estimates these marginal costs at between \$2 and \$7 per passenger. For the purposes of our analysis, we used a cost of \$5 per passenger.⁹

Thruway Bus services on the 13 charter routes for which data were available outside the California system did not require any subsidy. In fact, the revenues from the bus passengers on all 13 routes exceeded both the full charter bus costs and the marginal rail costs. This surplus revenue contributed to covering the costs of Amtrak's train operations and lowered the amount of the federal grant needed to offset the operating deficit that Amtrak incurs on its train routes.

Table 1 shows the extent to which revenues from the sale of tickets to Thruway Bus passengers contributed to covering the costs of the rail segment of their trip. We calculated this contribution (the net rail revenue) by subtracting the full costs of the charter bus contract and the marginal costs of carrying additional passengers on the train (\$5 per person) from the ticket revenues supplied by the Thruway bus passengers for each route. For each route, the net rail revenue was positive; for all of the routes, it totaled \$14.2 million.

⁸The marginal costs of train passengers are the train costs that change with the addition of a single passenger. In this case, they are likely to be confined to the costs of handling reservations and ticketing. It is assumed that the additional passengers do not require additional capacity (i.e., another car); if they did, their marginal costs would be higher.

⁹The results of the analysis would not change for any route if the marginal costs were assumed to be \$10, or even \$20, per passenger; both figures are well above Amtrak's estimate of these costs.

Table 1: Thruway Bus Passenger Revenue and Cost Data, Fiscal Year 1992

Bus route	Ticket revenues	Charter bus costs^a	Marginal rail costs	Net rail revenue^a
Tampa-Clearwater, Sarasota, and Treasure Island, FL	\$3,549,216	\$481,780	\$212,380	\$2,855,056
Tampa-Winter Haven, FL	365,926	108,318	52,765	204,843
Charlottesville-Richmond, VA	292,214	33,052	24,320	234,842
Roanoke-Clifton Forge, VA	183,825	50,700	14,440	118,685
Newport News-Norfolk, VA	1,574,252	138,494	182,580	1,253,178
Ft. Wayne-Waterloo and Garrett, IN	518,940	149,550	67,135	302,255
Springfield, MA-Burlington, VT	574,672	263,684	68,080	242,908
Ogden-Salt Lake City, UT	559,772	109,500	83,255	367,017
Borie-Cheyenne, WY	478,532	115,840	40,070	322,622
Oakland-San Francisco, CA	9,715,712	368,112	1,029,045	8,318,555
Total without CA route	\$8,097,349	\$1,450,918	\$745,025	\$5,901,406
Total with CA route	\$17,813,061	\$1,819,029	\$1,774,070	\$14,219,962

^aTotals may not add because of rounding.

Note: Marginal rail costs are calculated at \$5 per passenger on each route. Net rail revenue equals ticket revenues minus charter bus costs minus marginal rail costs. Table 1 covers 13, rather than 15, routes because no data were available for two routes, from Galesburg to Springfield, IL, and from Toledo, OH, to Detroit, MI. Furthermore, three Florida routes, from Clearwater, Sarasota, and Treasure Island to Tampa, are operated under one bus contract, and two Indiana routes, from Waterloo and Garrett to Ft. Wayne, are operated under one bus contract as well. Therefore, the data for these routes are combined, producing the 10 routes shown.

Source: GAO's presentation of data from Amtrak.

Although the revenues from Amtrak's Thruway Bus passengers on these 13 charter routes were more than sufficient to cover the full costs of the bus trip, they were not sufficient to cover the full costs of the combined bus and rail trip. The net rail revenue lowered the need for Amtrak to subsidize the rail portion of the routes to which the bus passengers connected but was not sufficient to make any of these rail routes profitable. Therefore, Amtrak's Thruway Bus passengers benefited, as Amtrak's other rail passengers did, from the federal subsidy supporting Amtrak's train operations.

Thruway Bus Passengers Did Not Benefit More Than Other Rail Passengers From Amtrak’s Federal Subsidy

We calculated the average rail yields for the Thruway Bus passengers and for the other Amtrak passengers who rode the train only (the all-rail passengers) to gauge whether the Thruway Bus passengers covered the costs of their rail trip to the same extent as the all-rail passengers. Rail yield is defined as the average revenue from a passenger for each mile traveled on the train. We compared the rail yields for the passengers on each bus route with the yields for the all-rail passengers on the train to which that bus route connected. Table 2 shows the results of our calculations.

Table 2: Yields for All-Rail and Thruway Bus Passengers, Fiscal Year 1992

Bus route	All-rail	Bus (net)	Bus (gross)
Ogden-Salt Lake City, UT	\$0.08	\$0.15	\$0.16
Tampa-Winter Haven, FL	0.10	0.13	0.14
Roanoke-Clifton Forge, VA	0.11	0.11	0.13
Charlottesville-Richmond, VA	0.11	0.10	0.10
Oakland-San Francisco, CA	0.11	0.10	0.10
Borie-Cheyenne, WY	0.08	0.06	0.08
Tampa-Clearwater, Sarasota, and Treasure Island, FL	0.11	0.08	0.09
Ft. Wayne-Waterloo and Garrett, IN	0.12	0.09	0.12
Newport News-Norfolk, VA	0.18	0.13	0.13
Springfield, MA-Burlington, VT	0.17	0.08	0.10
Average	\$0.11	\$0.10	\$0.10

Note: Yield is defined as revenue per passenger mile.

Source: GAO’s presentation of data from Amtrak.

The second column in table 2 (All-rail) lists the average yields for the all-rail passengers; it shows their contribution to covering the costs of the train. The third column (Bus [net]) shows the contribution of the Thruway bus passengers to covering the costs of the train. We calculated the rail yields in this column by (1) subtracting the costs of the charter bus service from the ticket revenues paid by the Thruway Bus passengers and (2) dividing this result by the number of miles that the Thruway Bus passengers rode on the train.

A comparison of the rail yields in the two columns shows that the Thruway Bus passengers contributed as much as or more than the all-rail passengers to covering the costs of the train on three routes, slightly less than the all-rail passengers on five routes, and significantly less than the

all-rail passengers on two routes (from Newport News to Norfolk and from Springfield to Burlington). These differences in yield depend, in part, on the relative length of the average rail trip taken on each route by the Thruway Bus passengers and by the all-rail passengers. Appendix III compares the average distance traveled on the train by the two groups of passengers for the routes shown in table 2.¹⁰

The fourth column in table 2 (Bus [gross]) shows the overall yields for the Thruway Bus passengers. These yields, which include both the bus and the rail portion of the trip, are calculated without subtracting the costs of the charter bus. Fares on these routes are such that the Thruway Bus passengers pay as much as or more than the all-rail passengers per mile of travel on five of the routes, slightly less than the all-rail passengers on three routes, and significantly less than the all-rail passengers on two routes (from Newport News to Norfolk and from Springfield to Burlington—28 and 41 percent less, respectively).

For the routes where the Thruway Bus passengers paid less than the all-rail passengers for the rail portion of their trip, the bus passengers could be characterized as having benefited slightly more than the all-rail passengers from the federal subsidy. However, the revenues supplied by the bus passengers actually reduced the amount of the federal operating grant that Amtrak needed.

Agency Comments

We discussed this report with the East and West Coast Strategic Business Managers in Amtrak's Marketing Department and with Amtrak's Vice President for Government and Public Affairs; they agreed that it accurately presented the facts.

We conducted our review between February 1994 and March 1995 in accordance with generally accepted government auditing standards.

¹⁰Rail yields are affected by the average length of the rail trip and tend to be higher for shorter distances. The average length of the rail trip for Thruway Bus passengers is comparable to that for all-rail passengers except on two routes (from Ogden to Salt Lake City, Utah, and from Tampa to Winter Haven, Florida). On these routes, the average length of the rail trip for the bus passengers is much shorter (see app. III), and, as expected, the rail yields are higher for these passengers than for the all-rail passengers (see table 2.)

We appreciate the opportunity to provide you with information on this issue. Major contributors to this report are listed in appendix IV. If you have any questions, please contact me at (202) 512-2834.

A handwritten signature in cursive script that reads "Kenneth M. Mead".

Kenneth M. Mead
Director, Transportation
Issues

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Objectives, Scope, and Methodology

Our assignment objectives were to determine whether and to what extent Amtrak's Thruway Bus services might be federally subsidized. We focused on Amtrak's Thruway Bus charter routes because Amtrak is committed to paying the cost of service on these routes regardless of how many rail passengers ride the bus. This arrangement creates a potential for federal subsidy if the total revenue from travelers using the bus to connect to the train is less than the cost of the bus service. Amtrak provides Thruway Bus services under charter agreements on 16 routes in California and on 14 other routes nationwide.

To determine whether Amtrak's Thruway Bus services are subsidized, we concluded that there would be no bus passenger subsidy if, for each route, the revenues earned from the bus-rail passengers were sufficient to cover (1) the full costs of the charter bus contract and (2) any additional rail costs created by adding the bus-rail passengers to the train they ride.

We also calculated the rail revenue per passenger mile, or the rail yield, from Thruway Bus passengers on the rail portion of their combined bus-rail trip and compared this yield with the yield from all-rail passengers. We performed this calculation for each route to measure the degree to which the bus passengers contribute to covering the costs of the train relative to the all-rail passengers.

To conduct our analysis, we obtained financial and operating data from Amtrak and from CALTRANS for the California Thruway Bus service. The most recent year for which consistent data on Amtrak's rail and bus operations were available was 1992. We also obtained operating data from Greyhound Lines, Inc., and Vermont Transit, Inc., Greyhound's Vermont subsidiary. To help us more fully understand the Thruway Bus service subsidy issue, we also interviewed Amtrak officials and officials representing Greyhound and Vermont Transit. Mark R. Dayton, a rail transportation consultant, helped us develop our methodology and collect and analyze the data.

California Thruway Bus Revenue and Cost Data, by Corridor, Fiscal Year 1993

Bus route	Ticket revenues	Rail revenues	Bus revenues	Charter bus costs	Net bus revenue
#1 Los Angeles Basin	\$5,093,269	\$3,815,596	\$1,277,673	\$2,742,766	(\$1,465,093)
#2 Tulare County	101,599	90,230	11,369	165,011	(153,642)
#3 Sacramento	1,947,904	1,526,622	421,282	1,061,854	(640,572)
#4 Los Angeles-Santa Barbara	652,220	413,502	238,718	545,345	(306,627)
#5 San Jose	439,738	361,251	78,487	299,862	(221,375)
#7 North Bay	472,068	407,878	64,190	758,519	(694,329)
#9 Las Vegas	225,303	132,201	93,102	403,395	(310,293)
#10 Bakersfield-Santa Barbara	454,272	328,972	125,300	354,026	(228,726)
#12 Bakersfield-Antelope	119,998	99,095	20,903	235,575	(214,672)
#14 Los Angeles-Antelope	43,839	31,964	11,875	196,597	(184,722)
#17 San Luis Obispo-South	819,194	440,477	378,717	265,325	113,392
#18 San Luis Obispo-North	67,958	43,573	24,385	250,401	(226,016)
#19 Inland Empire	984,858	671,408	313,450	784,385	(470,935)
#20 Reno-Sparks	604,730	443,174	161,556	785,990	(624,434)
#21 Monterey	207,413	163,458	43,955	268,387	(224,432)
Total	\$12,234,363	\$8,969,401	\$3,264,962	\$9,117,438	(\$5,852,476)

Source: GAO's presentation of data from CALTRANS.

Average Length of Rail Trip for All-Rail Passengers and Thruway Bus Passengers, Fiscal Year 1992

Length of rail trip in miles		
Bus route	All-rail passengers	Bus passengers
Ogden-Salt Lake City, UT	804	180
Tampa-Winter Haven, FL	858	189
Roanoke-Clifton Forge, VA	459	439
Charlottesville-Richmond, VA	459	543
Oakland- San Francisco, CA	441	443
Borie-Cheyenne, WY	804	746
Tampa-Clearwater, Sarasota, and Treasure Island, FL	713	881
Ft. Wayne-Waterloo and Garrett, IN	547	296
Newport News-Norfolk, VA	211	311
Springfield, MA-Burlington, VT	188	292

Source: GAO's presentation of data from Amtrak.

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