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## The Economics of Passenger Train Food \& Beverage Service

Food \& beverage (F\&B) service on passenger trains is an integral part of the service that passengers buy when they purchase tickets. It is just one of many elements - like toilets, air conditioning, lighting, clean well-maintained equipment, a smooth ride and on time performance - that are important in selling the volume of tickets needed to achieve economic operation.

Generating sufficient volume depends on offering a service that will attract a large number of people who have other transportation options - "discretionary" travelers. Minimalist, low quality service designed only to meet the basic needs of those who have no other transportation options will not generate the volume and revenue required to achieve reasonable fare box recovery levels - or serve the broader public purpose of encouraging people to leave their cars at home.

Studies claiming that Amtrak's lounge and dining car services "lose" money make the mistake of analyzing them as restaurants. That's the wrong business model. The correct model can be found in the hospitality industry - bed and breakfast operations and that part of the hotel industry that has followed their lead. Operators provide food and beverages free of charge. While this strategy would put any restaurant out of business quickly, it makes economic sense in the hospitality industry because food \& beverage service helps sell something of greater value - rooms. Similarly, in the passenger train business, lounge and dining car service helps sell something of greater value - tickets.

- Amtrak provides food \& beverage service on all but four short distance routes. Its F\&B services range from full dining car and lounge service on overnight trains to lounge, café, dinette or snack cart service on day trains - including ten that are shorter than 200 miles.
- Amtrak's annual "net cost" of providing this service (the portion of total cost not covered by sales revenue) was approximately $\$ 109$ million in both FY 2004 and FY 2005. For perspective, this "net cost" represented less than 4\% of the total cost of operating Amtrak's national passenger train system. (Table 1.)
- Ticket revenue in FY 2005 exceeded the net cost of food \& beverage service by more than 11 times. If the availability of food and beverage service caused just $9 \%$ of passengers to choose the train instead of driving or flying, then the additional ticket revenue generated by food \& beverage paid for its "net cost." Alternatively, if the elimination of food \& beverage service caused $9 \%$ or more passengers not to buy train tickets but use other modes, the revenue lost would more than offset any savings that would be gained by eliminating this important amenity. The result: fare-box recovery would fall and the taxpayer cost of providing the service would rise - even though the system was carrying fewer passengers. Spending more to accomplish less is a bad outcome.
- Moreover, the longer passengers spend on the train, the more important lounge and dining car service become to them. Even the US DOT Inspector General, in his controversial critique of Amtrak's food \& beverage operations, acknowledged that "... passengers traveling on long distance trains for 10 to 12 hours or longer clearly need a means to access food during the trip..." The inescapable conclusion is that the elimination - or downgrading - of food \& beverage service would have a disproportionately negative impact on Amtrak's highest value customers - those paying higher fares to make longer trips.
- When analyzed in terms of its impact on ticket revenue - not as a stand alone profit center - food and beverage service on most if not all trains generates more in revenue than it costs to provide. In other words, food \& beverage service is incrementally profitable. It satisfies the two requirements that the US DOT Inspector General set forth in his report: that food \& beverage service be provided "at no net cost to the taxpayer" and have "a positive effective on net cash flow."
- The importance of this amenity to the high value customer is confirmed by the fact that F\&B sales per passenger increases with trip length. When comparing F\&B sales per passenger with average distance traveled for each of Amtrak's routes, we found that, on average, F\&B sales per passenger increased by approx $\$ 2.00$ for each 100 miles trip length increased.

In addition to trip length, two other factors contribute to increased F\&B sales.

- One is including food in the ticket price. Auto Train includes food for all passengers in the ticket price and has the highest F\&B sales both per passenger and per passenger mile. The NEC High Speed service (Acela and Metroliner) includes food in the fare for first class passengers and has the second highest F\&B sales per passenger mile.
- A second factor is the amount of emphasis on F\&B service and the promotional effort put behind it. On the West Coast corridor services - where states influence service standards and emphasize food \& beverage service as an important amenity - F\&B sales per passenger mile are 2.2 times higher than they are on the NEC regional trains.

While essential for longer trips, F\&B service is also an important tool in selling tickets for shorter trips.

- On Acela - the premium high-speed service between Washington, New York and Boston - F\&B sales per passenger mile (which adjusts for differences in trip length) are almost three times greater than on the NEC Regional trains, despite the fact that the average trip on Acela is only 176 miles long and the train is fast. Acela also had the largest F\&B "net cost" in absolute dollars of any Amtrak route in FY 2004 (the most recent year when Acela operated for a full 12 months). The "net cost" of food \& beverage service on Acela - although large in terms of total dollars - represented only 4\% of ticket revenue.
- On the West Coast, the Capitol Corridor service between San Jose, Oakland, Sacramento and Auburn, California has the shortest average trip of any Amtrak route: 68 miles. Eugene Skoropowski, Managing Director of the Capitol Corridor Joint Powers Authority, says, "The availability of food and beverages is one of the reasons our trains are attracting a growing number of riders. That's why we offer this service on every train we operate along the 170 mile Capitol Corridor." Pleasing passengers sells tickets. Patronage on the Capitol Corridor trains has tripled in the last six years and continues growing, catapulting it to the nation's third busiest Amtrak route. Although food service costs roughly $\$ 1.6$ million more to provide than it takes in each year, Skoropowski considers it as a cost of doing business, just like well-maintained equipment, on-time performance and clean bathrooms. "Our objective is to give passengers the services they want. We strive to control the net cost of food and beverage service, not to make a profit. Last year, the 'net cost' of food and beverage service amounted to only about $5 \%$ of the total cost of the service. Ticket sales would drop more than that if we eliminated the food and beverage service. Financially we're better off with food service than without it. In terms of its impact on our overall fare box recovery, food and beverage service is a major, positive contributing factor."

There are three important ways to control the "net cost" of passenger train food \& beverage service.

- Increase sales volume. Higher sales will drive positive economies of scale. In FY 2005, F\&B revenue exceeded the cost of goods sold by $\$ 45$ million, generating a $57 \%$ gross profit. Increasing sales volume will increase this gross profit and help cover a larger portion of the fixed costs of the commissary and labor. The fact that F\&B sales per passenger mile on West Coast corridor trains are more than double the level on NEC regional trains suggests the potential that expanded service hours, adequate stocking and aggressive marketing - initiatives Amtrak is currently pursuing - have to increase sales volume and reduce the "net cost" of the service.
- Offer competitive pricing. Pressure to eliminate F\&B "losses" has caused Amtrak to push prices to levels that discourage sales. When food is included in the fare, prices are not important to either passengers or Amtrak. For passengers, higher prices don't cause any additional out of pocket expense. For Amtrak, they simply result a larger portion of ticket revenue being allocated to F\&B service - an accounting transfer that has no impact on the bottom line. It's when food is not included in the fare that prices become important both to the passenger and to Amtrak. For the passenger, food and drink represent extra out of pocket expense. Customer knowledge of what is "normal" in the market creates expectations of what is "reasonable" and limits Amtrak's ability to raise prices without creating ill will. "Price gouging" is not only inconsistent with increasing F\&B sales, it negatively affects customer satisfaction, repeat business and favorable word-of-mouth advertising. For Amtrak, these cash sales represent additional revenue, $57 \%$ of which drops through to the bottom line. The goal in setting prices should not be to extort the maximum amount possible but to encourage purchases by more people more often. Prices that are "in line" with passengers' expectations will support strategies designed to increase sales with aggressive promotion and expanded service hours.
- Increase labor productivity. Labor is the largest cost factor in providing food and beverage service. It accounted for $61 \%$ of total F\&B cost in FY 2005. Increasing labor productivity is a critical part of controlling the "net cost" of F\&B service. Amtrak is implementing significant changes in its food operations that should increase sales per labor hour significantly.


## Conclusion

The provision of food and beverage service on intercity passenger trains is an essential and integral component of attracting passengers and selling tickets. While charging passengers additional amounts for food and beverages can defray part of the cost of providing this service, food and beverage service is not a stand alone profit center - any more than toilets and other on-board amenities are. It is just one of many costs of operating passenger trains.

We have cited the hospitality industry as one example where rational businessmen deliberately "lose" money providing food to their customers in order to sell a product of higher value. We could just as easily have cited hospitals, nursing homes, cruise ships or airlines operating long distance flights where food and drink are included in the base price of the service - without any extra charges to defray the cost.

It is never possible to get the right answer when you ask the wrong question. Critics who argue that food and beverage service on passenger trains should be a profit center are asking the wrong question and getting the wrong answer. Their "answers" are forcing Amtrak to take measures that are counterproductive and which will ultimately degrade - not improve - Amtrak's economic performance and fare box recovery rate. The right question is how to manage the "net cost" of the service. The right answer is by increasing sales volume and improving labor productivity. The focus should be on actions that sell more tickets, raise total revenue and improve Amtrak's economic efficiency and fare box recovery.

Table \#1

## Amtrak Food \& Beverage Services Cost Structure \& Cost Recovery

|  | FY 2004 | FY 2005 | Change |
| :---: | :---: | :---: | :---: |
| Food \& Beverage Costs |  |  |  |
| Dining Car Labor | \$105,799,238 | \$114,598,775 | \$8,799,537 |
| Food | \$36,764,427 | \$30,237,417 | -\$6,527,010 |
| On Train Food Condemnage | \$175,636 | \$222,920 | \$47,284 |
| Liquor \& Tobacco | \$4,019,976 | \$3,395,625 | -\$624,351 |
| Non-Consumables | \$7,442,592 | \$7,424,926 | -\$17,666 |
| Linens and Laundry | \$5,510,831 | \$3,581,441 | -\$1,929,390 |
| On Board Entertainment | \$879,855 | \$449,659 | -\$430,196 |
| Commissary Support | \$28,529,787 | \$28,324,298 | -\$205,489 |
| Total Food \& Beverage Cost | \$189,122,342 | \$188,235,062 | -\$887,280 |
| F\&B Costs Defrayed by Sales |  |  |  |
| Included in Ticket Price | \$33,370,647 | \$32,139,709 | -\$1,230,938 |
| Cash Sales | \$47,010,087 | \$46,789,890 | -\$220,197 |
| Total Revenue | \$80,380,733 | \$78,929,599 | -\$1,451,135 |
| \% of F\&B Revenue Included in Ticket Price | 42\% | 41\% | -1\% |
| Net Cost of Food \& Beverage Service | \$108,741,609 | \$109,305,463 | \$563,854 |
| \% of Total Cost Defrayed by Sales | 43\% | 42\% | -1\% |
| Ticket Revenue (all sources) | \$1,228,289,568 | \$1,222,069,841 | -\$6,219,727 |
| Surplus of Ticket Revenue Over "Net Cost" of \$1,22,289,568 \$1,222,069,841 \$6,219,727 |  |  |  |
| Food \& Beverage Service | \$1,119,547,959 | \$1,112,764,378 | -\$6,783,582 |
| Ticket Revenue Per F\&B "Net Cost" Dollar | \$11.30 | \$11.18 | -\$. 12 |
| F\&B "Net Cost" as \% of Ticket Revenue | 9\% | 9\% | 0\% |

## Table \#2

## Food \& Beverage Sales By Service Category Ranked by Average Trip Length (FY 2005)

|  |  |  |  | Average <br> Trip | F\&B Sales <br> per |
| :--- | ---: | ---: | ---: | ---: | ---: |
| (miles) |  |  |  |  |  | (Passenger

Table \#3
Food \& Beverage Sales
By Service Category
Ranked by Sales per Passenger Mile (FY 2005)

|  | Average <br> Trip <br> (miles) | F\&B Sales per <br> Passenger | F\&B Sales per <br> 1,000 <br> Passenger <br> Miles |
| :--- | ---: | ---: | ---: |
| Auto Train | 861 | $\$ 28.84$ | $\$ 33.49$ |
| NEC High Speed Service | 172 | $\$ 3.46$ | $\$ 20.11$ |
| Superliner Long Distance | 713 | $\$ 14.20$ | $\$ 19.92$ |
| West Coast Corridors | 96 | $\$ 1.44$ | $\$ 15.05$ |
| Single Level Long Distance | 550 | $\$ 7.89$ | $\$ 14.33$ |
| Central Corridors | 163 | $\$ 1.70$ | $\$ 10.48$ |
| Other Eastern Corridors | 152 | $\$ 1.12$ | $\$ 7.34$ |
| NEC Conventional | 133 | $\$ 0.93$ | $\$ 6.97$ |
| Miscellaneous | 401 | $\$ 1.05$ | $\$ 2.62$ |
| System Total | $\mathbf{2 1 4}$ | $\$ 3.11$ | $\$ 14.56$ |

## Table \#4

## Sources of F\&B Revenue

## Cash Sales vs. Meals Included In Ticket Price By Category of Service

|  | Included in <br> Ticket |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Price |  |  |  |  | | Cash Sales |
| ---: | ---: | ---: | ---: |
| Cales $\%$ |

## Chart \#1

## Impact of Trip Length On Passenger F\&B Purchases

Relationship between
F \& B Sales per Passenger
and Trip Length


Table \#5
Amtrak F\&B Sales per Passenger Ranked by Average Trip Length of Route (FY 2005)

|  | Note | F\&B Sales | Passengers | Average Trip | Sales Per Passenger |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capitol Corridor | X | \$955,426 | 1,260,249 | 68 | \$0.76 |
| Pacific Surfliner | A | \$2,969,115 | 2,520,444 | 80 | \$1.18 |
| Hiawatha Service | X | \$149,794 | 525,239 | 81 | \$0.29 |
| Cascades | A | \$1,880,712 | 623,255 | 146 | \$3.02 |
| Ethan Allen Express | A | \$71,911 | 111,621 | 147 | \$0.64 |
| Regional/Federal | A | \$7,971,761 | 7,024,021 | 152 | \$1.13 |
| San Joaquins | X | \$1,639,173 | 755,851 | 153 | \$2.17 |
| Pere Marquette | X | \$133,104 | 96,471 | 154 | \$1.38 |
| Metroliner | B | \$1,590,173 | 697,805 | 162 | \$2.28 |
| Heartland Flyer | X | \$137,976 | 66,968 | 163 | \$2.06 |
| Empire/Maple Leaf | A | \$1,697,593 | 1,088,052 | 167 | \$1.56 |
| Illinois Zephyr | A | \$201,115 | 118,493 | 174 | \$1.70 |
| Acela Express | B | \$6,887,174 | 1,755,097 | 176 | \$3.92 |
| Vermonter | A | \$484,011 | 264,082 | 178 | \$1.83 |
| Chicago-St Louis | A | \$405,119 | 242,144 | 184 | \$1.67 |
| Illini | A | \$272,898 | 127,808 | 200 | \$2.14 |
| Blue Water | C | \$266,123 | 111,630 | 200 | \$2.38 |
| Kansas City-St Louis | A | \$518,841 | 136,701 | 203 | \$3.80 |
| Wolverines | A | \$1,069,405 | 406,499 | 217 | \$2.63 |
| Adirondack | X | \$392,693 | 125,165 | 237 | \$3.14 |
| Carolinian | A | \$711,637 | 275,057 | 275 | \$2.59 |
| Pennsylvanian | A | \$512,508 | 213,413 | 280 | \$2.40 |
| Cardinal | C | \$494,543 | 90,542 | 415 | \$5.46 |
| City of New Orleans | C | \$1,344,283 | 183,237 | 468 | \$7.34 |
| Capitol Limited | C | \$1,798,911 | 195,051 | 492 | \$9.22 |
| Lake Shore Limited | C | \$2,047,979 | 312,779 | 499 | \$6.55 |
| Crescent | C | \$2,397,465 | 263,080 | 538 | \$9.11 |
| Coast Starlight | C | \$6,218,845 | 372,304 | 574 | \$16.70 |
| Silver Service | E | \$5,986,744 | 718,835 | 594 | \$8.33 |
| Texas Eagle | C | \$2,506,821 | 239,276 | 617 | \$10.48 |
| Empire Builder | C | \$6,247,662 | 476,531 | 754 | \$13.11 |
| California Zephyr | C | \$5,688,373 | 347,856 | 795 | \$16.35 |
| Auto Train | D | \$5,889,017 | 204,203 | 861 | \$28.84 |
| Southwest Chief | C | \$4,759,517 | 295,515 | 997 | \$16.11 |
| Sunset Limited | C | \$2,549,628 | 81,348 | 1,094 | \$31.34 |

Note A: Non alcoholic beverage included in ticket price for business class passengers; other amenities vary by route.
Note B: Full meal \& beverage included in ticket price for first class passengers.
Note C: Meals included in ticket for sleeping car passengers.
Note D: Meals included in ticket price for both sleeper and coach passengers.
Note E: On Meteor and Star, meals included in ticket price for sleeping car passengers;
On Palmetto, non-alcoholic beverages included in ticket price for business class.
Note X: No F\&B service included in ticket price.

## Table \#6

## Food \& Beverage Gross Profit (FY 2005)

| F\&B Sales | $\$ \mathbf{7 8 , 9 2 9 , 5 9 9}$ |
| :--- | ---: |
| Food | $\$ 30,237,417$ |
| On Train Food Condemnage | $\$ 222,920$ |
| Liquor \& Tobacco | $\$ 3,395,625$ |
| Total Cost of Goods Sold | $\$ 33,855,963$ |
| Gross Profit | $\$ 45,073,636$ |
| \% Gross Profit | $57 \%$ |

