

Amtrak

Office of Inspector General

EVALUATION REPORT E-08-02

Public Funding Levels of
European Passenger Railroads

April 22, 2008



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EXECUTIVE SUMMARY

There have been numerous claims made about the relative financial performance of European Passenger Train Operations and the amount of Public Funding they require to remain operationally viable. This review examines the Public Subsidies that have been provided for European Passenger Train Operations and then compares these funding levels to that of Amtrak.

Overall Conclusions

After examining a representative sample of European Passenger Train Operations over a multi-year period, we found that:

- a) When all revenues and expenses for the entire passenger train system are taken into consideration, European Passenger Train Operations operate at a financial loss and consequently require significant Public Subsidies, and
- b) The average annual subsidies for European Passenger Train Operations are much higher than those for comparable Amtrak services.

Individual Findings

The review of Public Funding for European Passenger Train Operations provided the following findings.

1. European Passenger Train Operations are typically organized into two separate business entities (operating companies and infrastructure managers) whose financial performance and public funding are closely intertwined with each other.
2. In addition to direct funding, some of the Passenger Train Operations receive public funding that did not show up on the company's balance sheet and therefore does not show up in the company's financial statements.
3. Although some Train Operating Companies may report a "profit", this profit is generated through a large amount of public funding provide by the European countries.

The comparison of the level of Public Funding for European Passenger Railroads to that of Amtrak provided the following findings.

4. For the time period studied (1995 to 2003), most European countries spent significantly higher levels of public funding on Passenger Train Operations than the U.S.
5. The average subsidy provided to maintain and operate the infrastructure for European Passenger Train Operations is well above the subsidy level provided to Amtrak.
6. Compared to the average subsidy for European Train Operating Companies, Amtrak's State Corridor Services received higher subsidy levels while its NEC produced a positive cash flow.
7. When the relative network sizes are taken into consideration, the annual subsidies for the European Passenger Train Operations are much higher than those for comparable Amtrak services.

INTRODUCTION

Purpose

The purpose of this review was to examine the Public Subsidies provided to European Passenger Train Operations and then compare these funding levels to that of Amtrak.

Background

There have been numerous claims made about the relative financial performance of European Passenger Train Operations and the amount of Public Funding these operations require to remain financially viable. A prime example of this recently occurred in the February 28, 2008 edition of *The Economist* when it was stated that the French TGV “lifted the railway (SNCF) to a profit of 695 million euros in 2006.” Similar claims of European Passenger Train profitability have been made during Congressional hearings related to Amtrak’s funding levels.

Methodology

To examine the validity of these claims, we contracted with the European-based BSL Management Consultants to complete an objective, comprehensive assessment of the Public Funding provided for European Passenger Train Operations. BSL is an internationally experienced consultancy in the areas of public transportation, local rail transportation, and railway infrastructures. BSL has extensive experience working with passenger railroads from around the world, including European Passenger Train Operations, to benchmark their relative financial and operating performance. Their knowledge of the unique characteristics of the organizational structures and sources of data for each passenger operation enabled BSL to prepare objective comparisons (i.e. “apples to apples”) of the Public Funding levels provided to support passenger railroad operations in different countries.

Scope

Data was collected on the Public Funding provided for European Passenger Train Operations during the 1995 to 2006 time period from public available National Economics Research Associates studies on European railroad funding for the European Union as well as other public available sources. This data was used to complete a detailed analysis of the Public Funding provided to a representative sample of European Passenger Train Operations, which includes the major part of the Western European Passenger Rail network and several passenger train operators that boast of operational profitability. Public Funding includes all types of funding, both “on-balance sheet” and “off-balance sheet” funding, for the operations of passenger trains and the maintenance and ownership of the related infrastructure.

FINDINGS:

Finding No. 1 - European Passenger Train Operations are typically organized into two separate business entities (operating companies and infrastructure managers) whose financial performance and public funding are closely intertwined with each other.

Discussion:

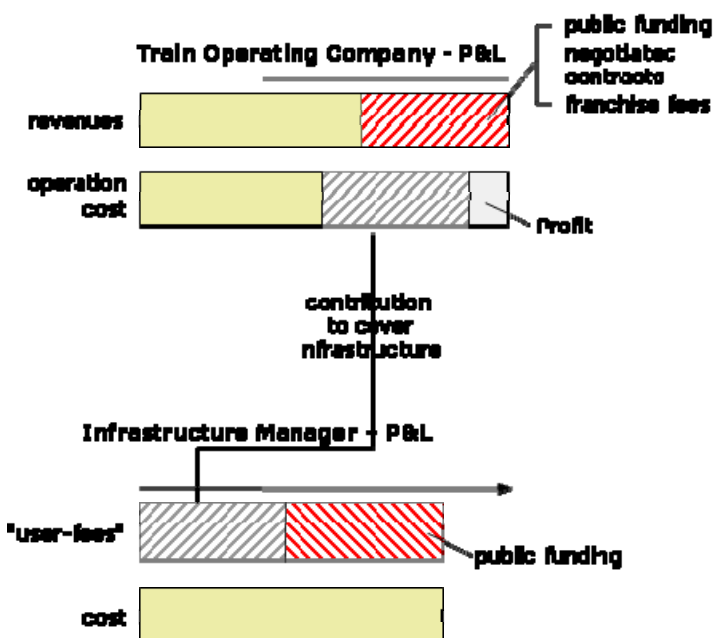
The methods used to provide Public Funding for European Passenger Train Operations are, in large part, based upon the organizational structure of these railroads. In contrast to Amtrak, European Passenger Train Operations are typically organized as two separate corporate entities:

1. a passenger train operator (i.e. "above the rail" train operations), and
2. an infrastructure maintainer (i.e. maintenance and operation of tracks, facilities, etc.).

The methods and levels of Public Funding have a direct impact on the profitability reported for each of these corporate entities.

As illustrated in the following exhibit, the Public Funding and financial performance of these two corporate entities are closely inter-related. This exhibit also illustrates how the combination of this business model and the methods of Public Funding support can lead to a misinterpretation of financial

Scheme for illustration purposes



reports. For example, the financial performance of the Train Operating Company is a function of not only its direct operating expenses and transportation related revenues, but also the public funding levels it receives and the "user fees" it is charged by the infrastructure manager. Consequently, a train operating company is able to report a profit even when its total operating expenses, which include full infrastructure costs, exceeds its transportation

(i.e. passenger, freight, etc.) related revenue. Profits by the Train Operating Companies can sometimes be grossly overstated because:

- Public Funding to the Train Operating Companies may be accounted for as revenue, and
- Public Funding to the Infrastructure Managers enables them to charge “user fees” to the Train Operating Companies that may be significantly lower than the actual infrastructure maintenance expenses.

A valid assessment of European Passenger Train profitability must take into consideration the levels of Public Funding that are being provided to both the Train Operating Company and the Infrastructure Manager.

Finding No. 2 - In addition to direct funding, some of the Passenger Train Operations receive public funding that did not show up on the company's balance sheet and therefore does not show up in the company's financial statements.

Discussion:

BSL completed a detailed analysis of funding levels for six European Passenger Train Operations (see Appendix I). The analysis revealed that four of the six European Passenger Train Operations that they studied had received both "on-balance sheet" and "off-balance sheet" public funding. Typically, the "on-balance sheet" funding is provided for transport services, infrastructure operations, and capital investments in rolling stock and infrastructure assets. The "off-balance sheet" funding is typically provided for staff and pension obligations, debt service, restructuring, and past capital investments. As illustrated in the following table, from 1996 to 2006, the six European nations in this study spent, on average, a combined total of \$42 billion annually (\$26.1 billion – on-balance sheet funding; \$15.8 billion – off balance sheet funding) on their national railroads.

Country	Network Size	Average Annual Public Funding ¹	
	['000 main track-miles]	on-balance sheet [billion US\$]	off-balance sheet [billion US\$]
Germany	36,3	11,6	11,2
France	30,5	5,5	4,4
United Kingdom	19,3	4,6	-
Spain	9,2	1,6	0,1
Denmark	2,1	0,9	-
Austria	4,7	1,9	0,1
Total	102,1	26,1	15,8

1) average of 1996-2006

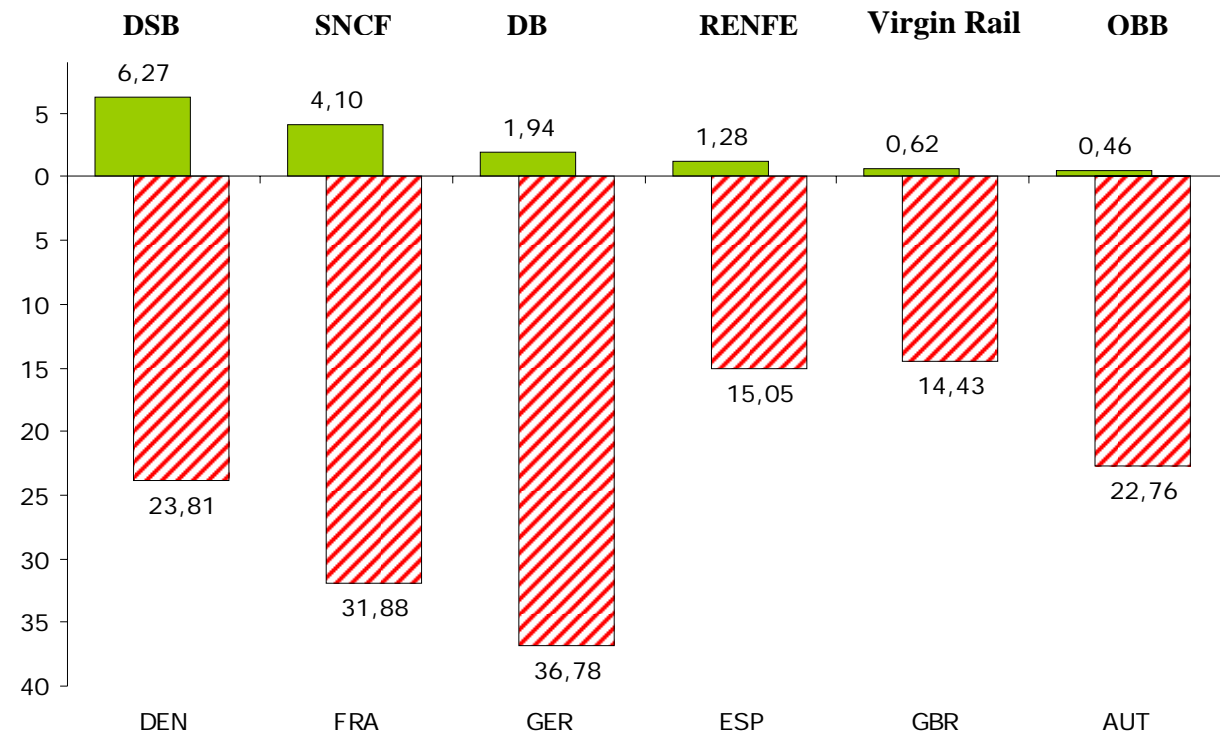
Finding No. 3 - Although some European Train Operating Companies may report a “profit”, this profit is generated through a large amount of public funding provided by the European countries.

Discussion:

BSL developed the following chart that illustrates the operating profits of several European Train Operating Companies and the total public funding provided for European Passenger Train Operations in each country on a dollar per train mile basis. This financial presentation identifies the financial profit reported by the train operating companies in 2006 and the average annual public funding, including both on- and off- balance sheet funding, provided to railroads during 1996 to 2006.

Operating profit
2006, Train Operating Companies (TOCs)

US\$
train-mile

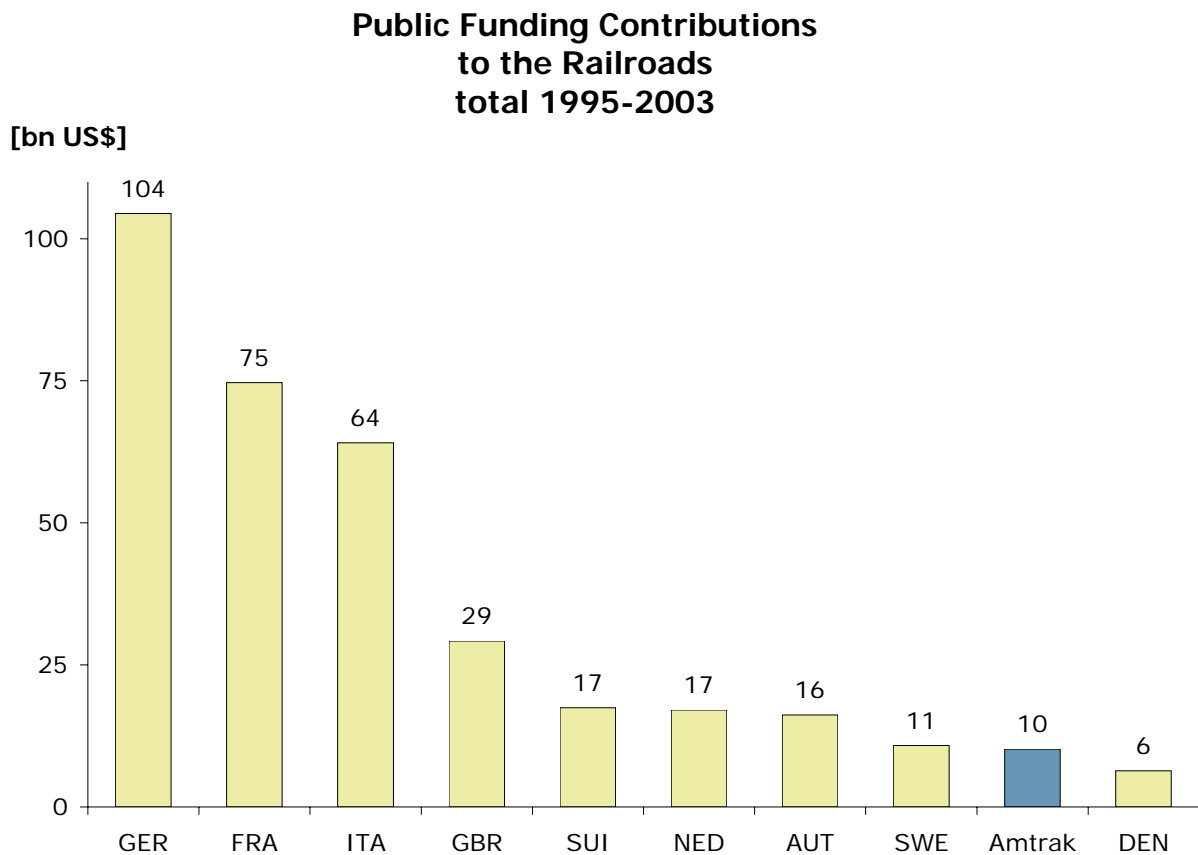


Note: Virgin Rail chosen as one example of about 20 different passenger train operators in the UK (there are also several rolling stock companies and freight train Operators.)
Countries: DEN-Denmark, FRA-France, GER-Germany, ESP-Spain, GBR-Great Britain, AUT-Austria

This chart illustrates that the reported profits of the European Train Operating Companies are generated by and dependent upon the much higher public subsidies. For example, DB reports profits of about \$1.94 per train mile while the railroad is receiving \$36.78 in public funding. When public funding is taken into consideration, DB Train Operations actually cost the German government \$34.88 per train mile. Similarly, passenger rail operations in the other five European countries cost their governments between \$13.77 to \$27.78 per train mile.

Finding No. 4 - For the time period studied (1995-2003), most European countries spent significantly higher levels of public funding on Passenger Train Operations than the U.S.

To obtain an overall perspective of the relative levels of public funding that has been provided to rail passenger systems, the following chart compares the total public funding provided to Amtrak with that provided to the various European rail passenger systems over the nine year period from 1995 to 2003. A nine year period was used for the comparison to avoid any disparities that would arise from abnormally high or low funding that could occur in any given budget period. The public funding includes both on-balance sheet and off-balance sheet public funding and has been adjusted for the average currency exchange rates for that time period (i.e. 1 Euro = \$1.13 US).

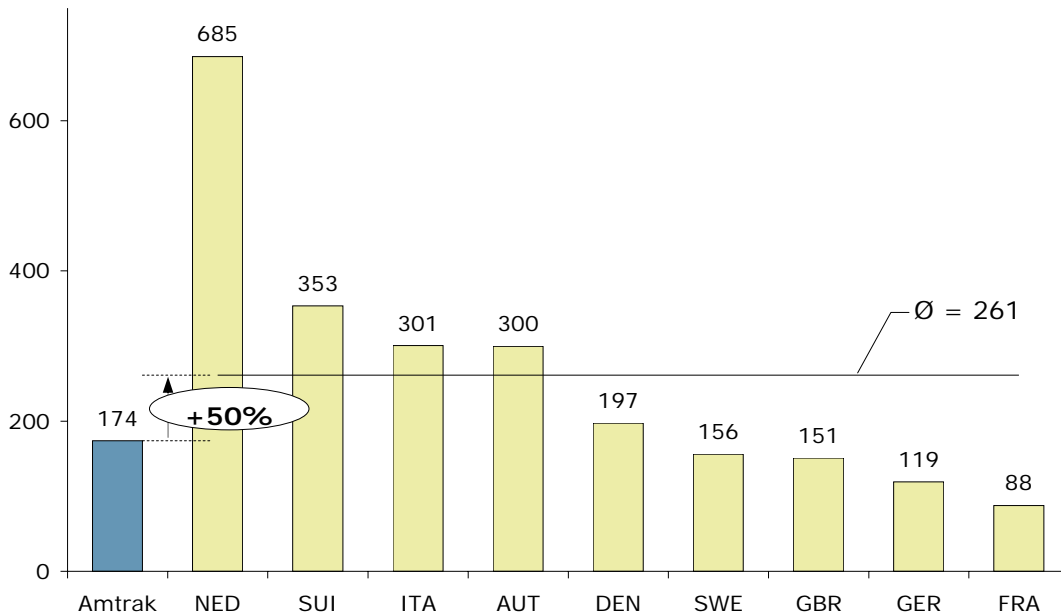


Finding No. 5 - The average subsidy provided to maintain and operate the infrastructure for European Passenger Train Operations is well above the subsidy level provided to Amtrak.

To be able to make a valid comparison of subsidy levels, it is necessary to compare the normalized subsidy levels for both infrastructure and train operations. The Public Contribution for Amtrak's infrastructure is based upon actual FY '06 capital expenditures and operating contributions for the Amtrak owned infrastructure. The comparison of infrastructure support is provided on a per main track-mile basis to normalize the costs by taking into consideration the different sizes of the railroads' infrastructures. As shown in the following chart from BSL, the public contribution (i.e. subsidy) for Amtrak's Infrastructure is approximately 50% less than the average direct subsidy for railroad infrastructure maintenance in European countries. It should be noted that this comparison of public subsidy levels does not take into consideration the relative "state of good repair" of each country's infrastructure or the amount of funding needed to maintain the infrastructure at a comparable condition.

Public Budget Contributions for Infrastructure

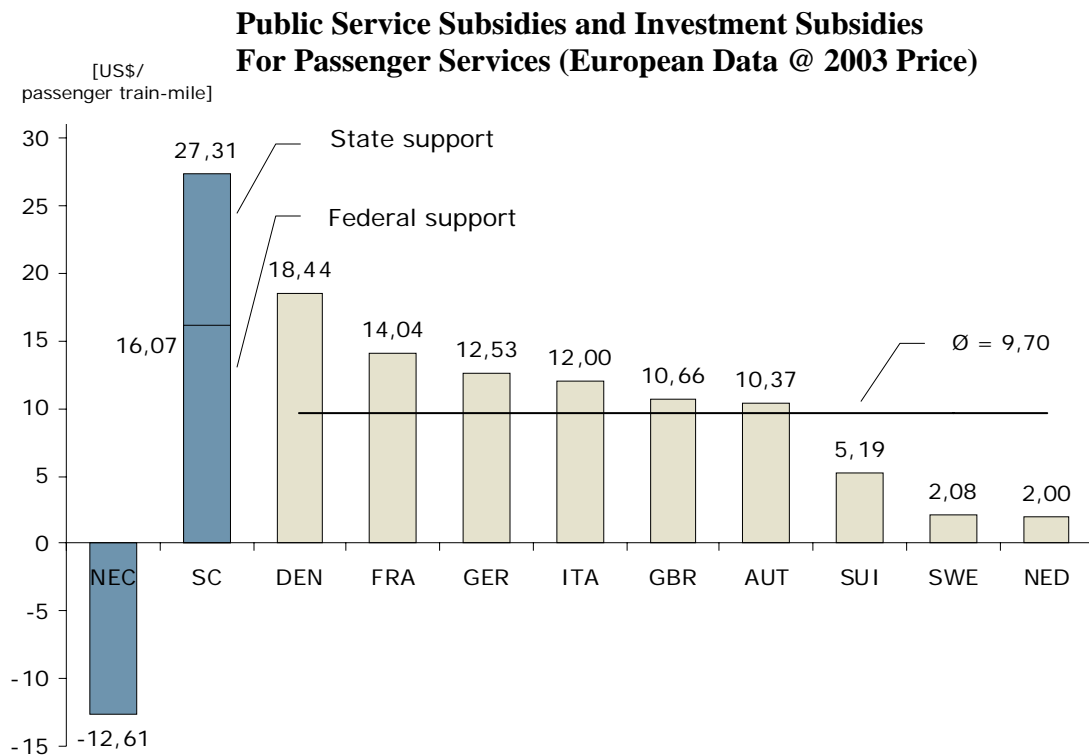
[1.000 US\$/
main track-mile]



Finding No. 6 - Compared to the subsidy levels for European Train Operating Companies, Amtrak's State Corridor Services received higher subsidy levels while its NEC produced a positive cash flow.

When comparing subsidies for passenger train operations, it is reasonable to compare the European passenger train operating companies to that of Amtrak's NEC and State Corridor train operations. Amtrak's NEC and State Corridor train operations have operating parameters (e.g. service level, train frequency, consist sizes, etc.) that are very similar to that of the European Passenger rail operators. Amtrak's Long Distance Trains were not included in these comparisons since the European Passenger Railroads do not operate trains that have comparable service levels, operating frequencies, trip lengths, or consist sizes.

The following graph from BSL illustrates the total amount of public subsidy provided to the European Passenger Railroads and to Amtrak's NEC and State Corridor trains on a US \$ per train-mile basis. The European public funding has been adjusted for the monetary exchange rate applicable for the time period of the data base and the comparisons are made on a passenger train-mile basis to take into consideration any differences in frequency of service and average trip length. The graph illustrates that Amtrak's NEC passenger train operations provides a positive cash flow of \$12.61 per train mile while its State Corridor train operations require \$27.31 per train mile in public subsidy, which is significantly higher than that of the average subsidy for European passenger train operations. It should be pointed out that Amtrak's NEC passenger train operations are not charged track access fees, which are typically charged to the European Train Operating Companies.



Finding No. 7 - When the relative network sizes are taken into consideration, the annual subsidies for the European Passenger Train Operations are much higher than those for comparable Amtrak services.

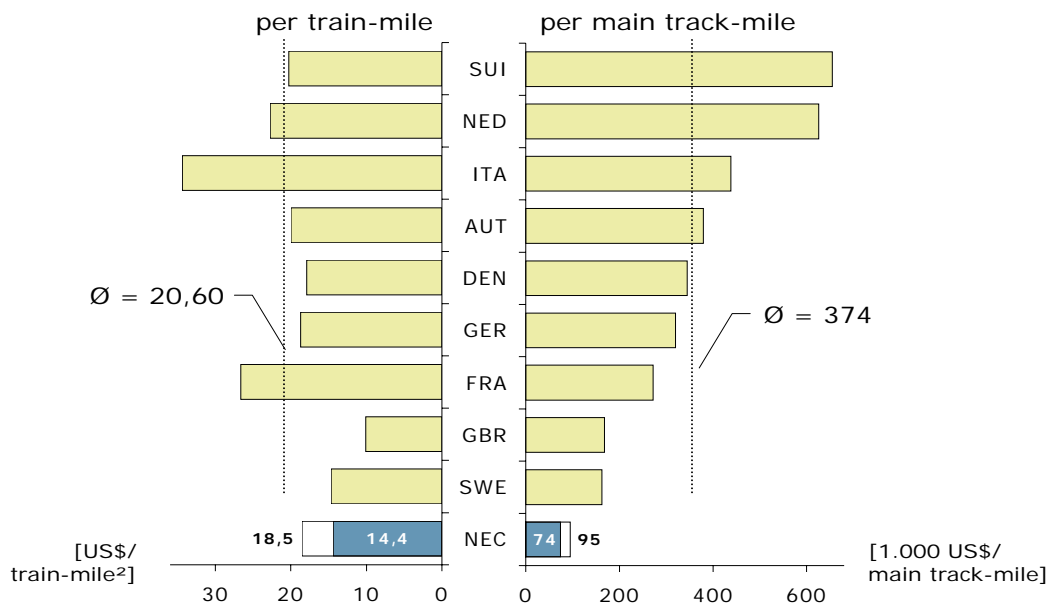
The best measure of the relative levels of public funding is a measure that:

- includes all types of public funding (i.e. on and off balance sheet),
- includes funding for both infrastructure and passenger service, and
- normalizes funding levels for differences in network size and operations.

The following BSL chart, which takes into consideration these factors, presents the total Public Funding provided to support Amtrak’s NEC and the total Public Funding provided to support European Passenger Train Operations on a cost per train-mile basis and a cost per main track-mile basis. Only the NEC is included in this comparison for Amtrak since the Long Distance trains and the State Corridor trains travel on Host Railroad owned tracks and do not fully share in the cost of infrastructure maintenance. Similar to previous comparisons, the 1995 to 2003 time period was used to develop an average annual statistic and the European funding levels were converted to US \$ using the monetary exchange rate applicable for the time period of the data base. The white bar for the NEC indicates the proportion of Amtrak’s debt service that is applicable to the NEC infrastructure and train operations. This chart illustrates the fact that the average annual subsidies for European Railroads are much higher than the NEC subsidies when network size is taken into consideration.

Public Budget Contributions to the Railroads

1995-2003, annual average¹



1) Price level of 2003; 1 € = 1,13 US\$ average annual exchange rate (EZB, 2003)
 2) Passenger and freight trains
 3) NEC only excluding debt services, white bar indicates if debt would be distributed proportionally to total cash flow; Source: OIG

APPENDIX I

Major Contributors to Report E-08-02

<u>Name</u>	<u>Title</u>
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BSL Management Consultants

Dr. Heiner Bente	Managing Director
Klaus Wittmeier	Senior Consultant
Dr. Olaf Zeike	Senior Consultant
Nico Lindenau	Principal

Amtak OIG

Calvin Evans	Deputy IG, Inspect. & Eval.
Jim Simpson	Sr. Dir, Inspections & Evaluations

APPENDIX II

Public Funding Levels of European Passenger Railroads (II)

BSL Management Consultants

February 26, 2008