Amtrak
Office of Inspector General

EVALUATION REPORT E-09-01
Comparison of Amtrak Infrastructure Labor Costs to European Railroad Averages
March 24, 2009

This report will become available to the public on 23 April 2009.
TABLE OF CONTENTS

EXECUTIVE SUMMARY ii

INTRODUCTION 1

FINDINGS

Major Labor Cost Categories

1. Total Annual Labor Cost per Worker 2
2. Annual Base Wages per Worker 3
3. Annual Extraordinary Wages per Worker 3
4. Annual Benefits per Worker 3

Components of Labor Benefits

5. Comparison of Benefit Expenses 5

Comparison of Labor Cost per Available Work Hours

6. Comparison of Available Work Hours per Year 7
7. Comparison of Labor Cost per Available Work hour 7

SUMMARY CONCLUSIONS 11

LIST OF APPENDICES

I - Major Contributors 12
EXECUTIVE SUMMARY

Amtrak’s OIG is in the process of completing an evaluation that compares Amtrak’s infrastructure maintenance expenses to that of a sample of European Rail Passenger Systems. During the cost comparison phase of this evaluation, it was determined that the annual cost of an Amtrak infrastructure worker is significantly higher than that of the average European infrastructure worker. When we briefed the preliminary results of the infrastructure cost comparisons to Amtrak’s CEO, he questioned why the annual cost of an Amtrak infrastructure worker is so much higher than that of the average European worker. This report identifies the primary reasons why Amtrak’s costs are so much higher.

Overall Conclusions

The average annual cost\(^1\) of an Amtrak infrastructure worker is 2.3 times that of the average European railroad infrastructure worker. As illustrated in the bar graph below, the primary reasons why the Amtrak labor costs are so much higher than that of the average European worker are that the Amtrak worker earns $14,500 more in extraordinary wages and that Amtrak pays $24,900 more for employee benefits each year. The difference in the annual base wages amounts to $9,200 per year. The pie chart below illustrates that 51% of the variance in labor cost is due to Amtrak’s higher benefit expenses, 30% due to higher extraordinary wages, and 19% due to higher base wages. A major contributing factor to the higher base wages and extraordinary wages is that, on average, Amtrak infrastructure workers work 32% more hours per year, including six times more overtime hours, than their European counterparts.

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\(^{1}\) This study was based on 2006 Amtrak labor cost data that did NOT include the retroactive pay increases included in Amtrak’s 2008 labor agreement.
INTRODUCTION

Background/ Purpose

Amtrak's OIG is currently in the process of evaluating the efficiency of Amtrak's infrastructure maintenance program. To gauge the relative efficiency of Amtrak's programs, we benchmarked Amtrak's infrastructure maintenance program to that of a sample of European Rail Passenger Systems. During the cost comparison phase of this evaluation, it was determined that the annual cost of an Amtrak infrastructure worker was significantly higher than that of the average European infrastructure worker.

The purpose of this review is to determine why the annual cost of an infrastructure worker at Amtrak is more than twice that of the average infrastructure worker at a European railroad. The evaluation report on the efficiency of Amtrak's infrastructure maintenance program is in the process of being completed and will be published at a later date.

Methodology/ Scope

To determine the reasons why the annual cost of Amtrak's infrastructure workers are higher than European infrastructure workers, we:

- Compared the three major sub-categories of labor cost (Regular wages, extraordinary wages, benefits)
- Compared the detailed categories of benefits
- Compared labor cost on an available work hour basis.

The data for Amtrak workers was obtained from Amtrak's Financial Information System (FIS) and the data for European workers was obtained from surveys that had been issued by BSL Management Consultants, which is a German based consulting company that has been benchmarking the efficiency of European Infrastructure Maintenance Programs for the past 12 years. The Amtrak data does not include the significant increase in labor rates included in Amtrak's 2008 labor agreement.

Amtrak's average annual labor cost of an infrastructure worker for FY 2006 was compared to the average labor cost of infrastructure workers at 15 European Passenger Rail systems. The Amtrak data included labor data on about 3,000 employees and the European data on over 100,000 employees. To make valid comparisons, the European infrastructure labor costs were adjusted for purchasing power, currency, and calendar year. The adjustments for purchasing power, which were based upon data supplied by the Organization of Economic Cooperation and Development (OECD), equalized the purchasing power of the currencies in each country. Some of the more detailed comparisons (e.g. regular work hours per week compared to 12 European RRs) were made to only a portion of the 15 railroads where the detailed information was readily available for the comparison.
FINDINGS:

MAJOR LABOR COST CATEGORIES

The comparisons of costs in this portion of the review are based upon the annual cost per worker.

Finding No. 1 - The average annual labor cost of an Amtrak infrastructure worker is more than twice (2.3) that of the average European railroad infrastructure worker.

Discussion:

As shown in the following BSL graph, the average annual labor cost of an Amtrak infrastructure worker in FY 2006 was 2.3 times that of the average European worker. This comparison of labor costs includes all wages and benefits paid to full time employees working on the infrastructure. For Amtrak, these employees are in the Engineering department and for the European railroads they are often in a separate company (e.g. OBB in Austria) that is responsible for the inspection, maintenance, construction and operation of the railroads fixed asset (e.g. tracks, bridges, tunnels, etc.).

CHART 1

1. $1,000 US$ fte¹ 2 2006 data adjusted to 2006 cost level 3 Purchasing Power Parity equalizes the purchasing power of each country's currency.

1. fte: full time employee
2. 1998 to 2005 data adjusted to 2006 cost level
3. Purchasing Power Parity equalizes the purchasing power of each country’s currency.
Finding No. 2 - Amtrak’s Base Wages per Worker are 1.3 times that of the Average European Worker.

Finding No. 3 - Amtrak’s Extraordinary Wages per Worker are 3.5 times that of the Average European Worker.

Finding No. 4 - Amtrak’s Annual Benefit Costs per Worker are 4.25 times that of the Average European Worker.

Discussion:

Total annual labor cost is comprised of base wages, extraordinary wages, and benefits. Base wages are the wages an employee earns for working the regularly assigned work schedule, extraordinary wages are those earned outside the regular work schedule (e.g. overtime, weekend, etc.), and benefits are the expenses paid for an employee such as health programs, unemployment & accident insurance, retirement, etc. The following bar chart compares these three categories of Amtrak labor expenses to those of the European Railroads. This chart illustrates that the cause of Amtrak’s relatively higher labor expenses

![Average Annual Wages, Extraordinary Wages & Benefits per Infrastructure Worker (Benefits Include Employee Contribution)](chart)

Note: All data based on cost per full time employee and European costs have been adjusted for purchasing power parity.
are related more to its higher extraordinary wages and benefit expenses than to its base wages. To get a better perspective of these relative expense levels, each of the three categories of labor expense is charted below.

**CHART 3**

![Chart 3: Base Wages](image)

Chart 3 illustrates that Amtrak’s annual base wages per worker are only 1.3 times that of the European Average. To compare to the data readily available for European workers, base wages exclude employee contributions to benefits (e.g. RR retirement).

**CHART 4**

![Chart 4: Avg. Annual Extraordinary Wages](image)

Chart 4 illustrates that Amtrak’s annual extraordinary wages per worker are 3.5 times that of the average European worker.

**CHART 5**

![Chart 5: Average Annual Benefits per Employee](image)

Chart 5 illustrates that the annual benefit expenses for Amtrak workers are 4.25 times that of the average European worker. The benefit costs include the employee contributions to benefits.

Note: All data based on cost per full time employee and European costs have been adjusted for purchasing power parity.
COMPARISON OF EMPLOYEE BENEFITS

Finding No. 5 - Compared to the average European railroad, Amtrak’s contributions to employee health and accident insurance are significantly higher.

Discussion:

Employee benefit expenses are those expenses paid for non-wage items including:

- Unemployment Insurance
- Health Insurance
- Pensions
- Accident Insurance
- Other

This analysis compares the payments that only the employer (i.e. either Amtrak or the European Railroad) makes for these expenses. This distinction has been made since Amtrak reports only the contributions it makes to employee benefits while the European Railroads report the total amount that both the employer and employee contribute toward employee benefits. To obtain comparable European data, we requested BSL consultants to research the amount that only the European Railroads contributed to each type of employee benefit. Three European railroads responded to BSL’s request and the resulting data is plotted along with the related Amtrak data in the BSL Chart 6 on the following page.

Chart 6 illustrates that, compared to these three European Railroads, Amtrak’s health benefit expenses and its accident insurance expenses are significantly higher. It is not surprising that Amtrak’s health insurance is much higher since many of the European countries have nationalized health plans, relieving the railroads and other employers from this financial responsibility. Although Amtrak’s pension expenses are high, they are not significantly out of line with the three European railroads included in the comparison. Similarly, Amtrak’s accident insurance and other benefit expenses are also in line with these railroads.
Composition of Benefits
(Employer's share only)

1) NI = National Insurance, re-calculated based on benefit payments
2) Health insurance is obligatory for all Swiss inhabitants, independent from work contracts
3) The National Health service is funded exclusively through income tax
4) Depending on age of employee, here: 40-49 years
5) AHV = Old-age and survivors' insurance, family allowance, administrative costs
6) After privatization, railway industry is continuing payments into pension funds
COSTS BASED ON AVAILABLE WORKING HOUR

All the comparisons of Amtrak labor expenses to this point have been made on an annual cost basis. To obtain a better measure of the relative cost of labor, the comparisons should take into consideration not only the cost of labor, but also the amount of time that an employee is available for work.

Finding No. 6 - Amtrak’s annual available working hours per employee is significantly higher than that of the sample of European Railroads.

Finding No. 7 - Amtrak’s labor cost per available working hours is 1.62 that of the Average European worker.

Discussion:

The number of hours an individual is available for work is mathematically comprised of:

- Hours of regular pay
- Less - the hours “Paid but not worked”
- Plus - overtime hours

For an Amtrak infrastructure employee, this relationship is depicted by the following BSL bar graph - Chart 7. That is, the 2,086 gross annual paid working hours.
hours is decreased by the 362 non-worked but paid hours and then increased by the 498 overtime hours to generate an average of 2,222 available hours per year.

There are significant differences between the work hours for the average Amtrak and the average European infrastructure worker in all three of these work hour categories. The regular gross working hours for employees is based upon the weekly number of regular paid working hours for each railroad. For Amtrak, the 40 hour per week schedule equates to 2,086 regular work hours per year. As shown in the following BSL chart – Chart 8, there is a significant variance in the regular paid weekly work hours for the European railroads and an overall 5% difference between an Amtrak work week and the average European work week.

**CHART 8**

There are even greater variances amongst these railroads in the number hours that the workers are paid but not available to work. The following four BSL bar graphs – Chart 9 - compare, by cause, the amount of time the average employee from each railroad is unavailable for work. These graphs illustrate how Amtrak employees experience significantly fewer paid but not worked days because of vacation and illness, roughly the same number for bank holidays, and a few more for training.
The net impact of the differences in regular paid work hours, paid but not worked hours and overtime hours on the number of available working hours per year is presented for Amtrak and a sample of six European railroads in the following BSL table - Chart 10. **This chart demonstrates that Amtrak’s annual available working hours per employee is significantly higher (32%) than that of the sample of European Railroads.**

**CHART 10**

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Amtrak</th>
<th>R2</th>
<th>R3</th>
<th>R6</th>
<th>R8</th>
<th>R9</th>
<th>R11</th>
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<tbody>
<tr>
<td>Gross working hours</td>
<td>2,086</td>
<td>1,929</td>
<td>2,086</td>
<td>1,955</td>
<td>1,999</td>
<td>2,138</td>
<td>2,034</td>
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<tr>
<td>Total absence time</td>
<td>362</td>
<td>448</td>
<td>395</td>
<td>412</td>
<td>330</td>
<td>438</td>
<td>509</td>
</tr>
<tr>
<td>Net hours excl. overtime</td>
<td>1,724</td>
<td>1,482</td>
<td>1,691</td>
<td>1,544</td>
<td>1,669</td>
<td>1,700</td>
<td>1,524</td>
</tr>
<tr>
<td>Overtime</td>
<td>498</td>
<td>120</td>
<td>99</td>
<td>95</td>
<td>120</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td>Available working hours</td>
<td>2,222</td>
<td>1,602</td>
<td>1,790</td>
<td>1,639</td>
<td>1,789</td>
<td>1,720</td>
<td>1,566</td>
</tr>
</tbody>
</table>
Amtrak’s relatively higher number of available working hours per year has a direct and proportional impact on its relative labor cost per available working hour. The following BSL bar graph - Chart 11 illustrates that when labor costs per available working hour are compared, Amtrak labor costs are 1.62 times that of the European average labor cost instead of being 2.3 times that of the European average when the total annual costs per year are compared.
**SUMMARY CONCLUSIONS**

- Amtrak's labor cost per infrastructure worker is clearly above that of European railroads; over 2 times that of the average European worker.
- Compared to the average European worker, Amtrak's:
  - Base wages per employee are 1.3 times as much
  - Extraordinary wages per employee are 3.5 times as much, and
  - Benefits per employee are 4.2 times as much.
- Amtrak's benefit cost per employee is higher primarily due to its higher Health and Accident Insurance (FELA) costs.
- Amtrak's available working hours per employee is significantly higher than the European average because its base hours are higher and its overtime hours amount to almost 30% of regular hours.
- After taking into consideration its higher working hours, Amtrak's labor cost per available working hour is only 62% above the sample's average; higher primarily due to its higher benefit costs and its higher % of extraordinary wages.

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2 Amtrak labor costs do not include the significant hourly wage increases included in the recent Amtrak labor agreement. To make the comparison of Amtrak costs to that of multiple European railroads, the purchasing power of each European currency was equalized using the Purchasing Power Parity factors of the Organization for Economic Co-operation and Development (OECD).
## APPENDIX I

**Major Contributors to Report E-09-01**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
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<tbody>
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