BEFORE EMERGENCY BOARD No. 243

Between

The Railroads Represented
By The National Carriers’ Conference Committee

And Their Employees
Represented By
American Train Dispatchers Association,
International Association of Machinists and Aerospace Workers,
International Brotherhood of Electrical Workers,
Transportation Communications International Union,
Transport Workers Union,
And
The Rail Labor Bargaining Coalition.

National Mediation Board Case Nos. A-13569; A-13570;
A-13572; A-13573; A-13574; A-13575; A-13592

CARRIERS’ EXHIBIT No. 3:

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I. EXECUTIVE SUMMARY.

I have been asked by the railroad industry to analyze the current round of collective bargaining from the perspective of a labor economist and to propose a principled theory of compensation for determining the wages and benefits for employees represented by the Coalition Unions. In sum, my conclusions are as follows:

1. Total compensation—the sum of monetary payments and the cost of non-monetary benefits—is the most appropriate metric for evaluating competing contract proposals offered by the Carriers and the Coalitions in this proceeding because only total compensation captures the true value of the respective proposals to both the Carriers and to their Coalition Employees. From an economic standpoint, it is an error to evaluate contract proposals by focusing on a single component, such as wages. It is a well-established principle of labor and personnel economics that employees value the entirety of a compensation package, so that greater growth in one component, say wages, offsets lesser growth in another, such as non-wage benefits. Similarly, employers evaluate a compensation package based on its full cost and composition—their willingness to offer more costly health benefits is determined by the cost of providing other components, such as wages. From both an employer’s and an employee’s perspective, a proper framework for evaluating compensation must recognize the total value of compensation, including all components of the compensation package.

2. The appropriate level and composition of total compensation are determined by market forces, as competing employers seek to recruit and retain workers. These market forces determine the employment alternatives available for workers with
skills similar to those required in the rail industry. In practice, this means that the level and form of compensation will be sufficient for the Carriers to recruit and retain workers with the requisite skills, while rail employees do not lose ground relative to alternative occupations. It is important to note that the Carriers have no incentive to set total compensation “too low” compared to market alternatives because doing so would deprive the Carriers of the skilled employees they need to effectively operate. Conversely, setting total compensation levels “too high” compared to market alternatives raises operating costs, diverts resources that could be used for capital investment, and induces inefficient reductions in the use of labor. These distortions raise the market price of rail transportation services, which would cause substantial harm to consumers and social welfare.

3. Profitability is not an appropriate basis for setting total compensation. There is no intrinsic connection between firm profitability and employee compensation, as the history of railroad compensation increases itself demonstrates. Rail employees have not suffered wage cuts during periods of poor economic performance, and have no reason to expect above-market wage increases during periods of better economic performance. This is due, at least in part, to the fact that profitability is driven by market prices for the products and services provided by the Carriers and the costs incurred by the Carriers in providing those products and services. In contrast, employee compensation costs ordinarily are a function of supply and demand for labor. Thus, unless the Coalitions are seeking a profit-sharing mode of compensation – and my understanding is
that they are not – there is no reason to consider the recent profit performance of the Carriers.

4. Likewise, labor productivity in the railroad industry is not an appropriate factor for setting total compensation. Compensation is affected by productivity growth in the labor market as a whole, not within a single employer or group of employers. This is because aggregate productivity growth raises demand for labor, not because particular groups of employees are working harder or better. Indeed, productivity growth is a function of various factors—such as technology and capital investment—that have nothing to do with labor.

5. The Carriers’ proposal, which is premised upon the voluntary agreement reached with the UTU, is most consistent with current and foreseeable labor market conditions. It meets the dual interests of allowing the Carriers to recruit and retain workers at a reasonable cost, while preventing Coalition Employees from losing ground relative to alternative jobs. In contrast, the Coalitions’ proposals would result in total compensation increases substantially greater than those necessary to meet these objectives. Indeed, the additional compensation sought by the Coalitions would not enhance employee recruiting or retention for railroad workers. Analysis of recruiting and retention metrics reveals that current total compensation is more than sufficient for the Carriers to recruit and retain qualified workers.¹

6. In contrast to the UTU agreement, the Unions’ proposals are significantly above what a market-based and cost-effective benchmark would indicate. In their

¹ See Carriers’ Ex. 5 (Report of Dr. Topel) at 10-29.
proposal, the Carriers have offered total compensation increases of approximately 14.8 percent through 2014. In contrast, the Coalition is demanding total compensation increases of 21.9 percent over the same five year period – a difference of approximately $1.9 billion in compensation costs to the Carriers.\(^2\) The above-market increases in total compensation demanded by the Coalitions, if implemented, would unduly harm the Carriers, their customers and other stakeholders, including many current and potential members of the Coalition Unions and other rail employees. The reasons for these deleterious effects are as follows:

First, the Coalitions’ proposals go beyond maintaining the high relative total compensation packages that Coalition Employees currently enjoy – it increases the premium already enjoyed by these employees by adopting total compensation increases substantially above rates of compensation growth in other occupations and sectors. Moreover, from an economic perspective, the timing of these increases is precisely wrong, increasing the cost of employing blue-collar labor when labor market opportunities are weakest and unemployment remains high.

Second, the above-market compensation growth demanded by the Coalitions’ proposals is greater than necessary for the Carriers to recruit and retain workers. This excess leads to two important distortions. The higher labor costs of the Coalitions’ proposals will be passed on by the Carriers, in whole or in part, as higher prices paid by

\(^2\) The $1.9 billion differential between the competing proposals significantly understates the true variance. Specifically, it does not include any of the Coalitions’ miscellaneous compensation and craft specific proposals discussed in Carriers’ Submission No. 7 which taken together would provide hundreds of millions of dollars of additional compensation to Coalition Employees. See Carriers’ Submission No. 7 (Miscellaneous Issues).
shippers, which not only harms shippers (and the consumers of goods shipped by rail) but also reduces the quantity of rail transportation services that they will use. Further, higher labor costs would encourage the Carriers to substitute away from artificially expensive labor and toward other inputs, especially capital. Both of these effects reduce employment in rail transportation. The burden of this reduction would fall mainly on workers with less seniority, who may lose their jobs, and those who would otherwise be “new” hires but will be unable to find work in the industry.

Third, the higher cost and price of rail services that would result from the Coalitions’ proposals will reduce investments in rail capital and infrastructure, so that both the quantity and quality of rail services would be artificially and needlessly diminished. Given the substantial positive impact of railroad infrastructure investments on job creation in the freight rail industry as well as complementary industries, the diminution in capital investments resulting from extraordinary spending on labor would adversely affect job growth in the freight rail industry and the broader U.S. labor market. The burden of these effects would fall on employees, shippers, consumers, and the general public.

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For all of these reasons, a settlement consistent with the terms outlined in the voluntary agreement between the UTU and the Carriers (“UTU Agreement”) is

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3 Studies estimate that over $1 billion in capital investments by the freight railroad industry creates between 12,300 and 26,600 jobs throughout the U.S. economy. See BlueGreen Alliance, Gauging Growth: The Freight Rail Supply Chain and Job-Creation Potential, p. 5 (June 15, 2011).
appropriate. Compared to the demands of the Coalitions, the UTU agreement maintains and even enhances the relative compensation premium enjoyed by Coalition Employees while minimizing the adverse impacts of raising the Carriers’ costs. These points are addressed in greater detail below.

II. **THE PEB SHOULD FOCUS ON TOTAL COMPENSATION.**

When employee compensation consists of many elements, which is almost always the case in labor relations, *total compensation* is the proper framework for evaluating both the value and the cost of contract proposals. In simple terms, this framework means that elements of a compensation bundle are complementary, and cannot be analyzed in piecemeal fashion. This holistic view of employee compensation is firmly grounded by research in the field of *personnel economics*, a branch of labor economics that studies employment relations, incentives and the optimal determination of compensation packages. 4 The total compensation concept is also recognized as a key element of government policy and accounting methodology for personnel and compensation matters. 5

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4 See Edward Lazear’s *Wicksell Lectures*, published under the title *Personnel Economics* (MIT Press 1995). For a useful recent review of the literature, see Edward P. Lazear and Paul Oyer, *Personnel Economics*, in Robert Gibbons and John Roberts (eds.), *Handbook of Organizational Economics* (Princeton University Press to be released 2012). As Lazear and Oyer put it in their discussion of the mix of total compensation, “Money isn’t everything, but everything can be expressed in terms of its monetary equivalent.” Their analysis, and that of the broad literature they review, is based on the premise used here—that elements of a compensation bundle are substitutes for each other, and they cannot be analyzed in a piecemeal fashion.

A. Total Compensation Measures the Full Value Provided to Rail Employees for their Labor.

Total compensation should be adopted by the PEB as the appropriate benchmark for evaluating the respective proposals of the parties because total compensation measures the full value provided to rail workers for their services, as well as the total cost to the Carriers of employing these workers.

According to the personnel economics, there are two basic reasons why a proper analysis should focus on total compensation.

First, from an employee’s perspective, the value received from an employment opportunity depends on the full bundle of wages, benefits and working conditions that a job may offer. Valuable elements of the bundle are therefore economic substitutes—a compensation package that offers more generous health or pension benefits, or more deferred compensation, for example, need not offer as high a wage in order to attract and retain workers. Similarly, compensation bundles that offer lower growth in one dimension of compensation—such as benefits—may still be very attractive to employees because they offer greater growth in other dimensions, such as wages.\(^6\)

These facts mean that any negotiation or settlement process must recognize the effective “trade-off” among elements of a compensation bundle, just as employers must

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recognize this trade-off in designing compensation packages that effectively recruit, motivate and retain employees. Most importantly, individual elements of the bundle should not be viewed or evaluated in isolation. It is simply an error to evaluate a compensation package based on either the level or rate of growth of a single component, such as wages, while ignoring the value employees receive from other components, such as health or pension benefits. This is why the government’s General Accounting Office (GAO) pointedly criticized previous “piecemeal” approaches to compensation by the Department of Defense and Congress, explicitly advocating a total compensation framework. Confronting exactly the issues that arise here, the GAO stated:

DOD and Congress have expanded military pay and benefits using a piecemeal approach rather than a total compensation approach that could help to balance the appropriateness, affordability, and sustainability of personnel-related costs.

Much of the increase in basic pay in recent years has been driven by concerns that military basic pay was not equivalent to civilian (or private sector) pay, without taking into consideration other types of compensation beyond basic pay. GAO reported in April of 2010 that studies done by the Congressional Budget Office and the Center for Naval Analyses concluded that when pay and some benefits are taken into account, military compensation compares favorably to civilian compensation.7

Second, elements of a compensation package are both cumulative and substitutable from an employer’s perspective, because each element is costly to provide. Thus, for a given level of total labor cost, a compensation package that offers greater

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wages must be offset by lower cost in some other elements, such as less costly health or pension benefits. This does not mean that all compensation packages of a given total cost are equivalent in the view of employers. For any given cost of compensation, it is in the interest of an employer to design and offer the bundle of wages and benefits that is most valuable to the types of workers the employer hopes to attract, because doing so facilitates recruitment and retention without unnecessarily raising the employer’s cost.8

Because wage levels are easily comparable across industries and occupations, it is tempting to evaluate contract offers in terms of wages alone. But for both of the reasons noted above—value to employees and costs to employers—it is misleading to compare a compensation package to alternatives by focusing on only a single element of that package, such as wages. This is precisely the error pointed out by the GAO in its criticism of Defense Department compensation policies. Here, focusing on a single element would ignore the substantial costs borne by the Carriers of providing other elements in the compensation bundle, and the very substantial value of non-wage elements to Coalition Employees. Though a focus on total compensation—inclusive of all elements of a compensation package—makes comparisons somewhat more complicated, it is essential to focus on total compensation in order to analyze both the level and form of compensation enjoyed by railroad employees. Total compensation embeds the true value that railroad employees receive for their labor and the true cost borne by the Carriers associated with employing them.

B. Comparing Total Compensation Increases in the UTU Agreement to the Unions’ Proposals.

Total compensation is the market value of all considerations and emoluments that employees receive in exchange for their labor. Total compensation received by Coalition Employees averaged $46.58 per hour in 2010 according to Carrier data from the NRLC,\(^9\) which greatly exceeds the hourly compensation of similarly skilled workers in other industries and occupations. This total compensation package consists of a bundle of elements, each of which is both costly for the Carriers to provide and valued by employees. In addition to wages, which averaged $26.66 per hour in 2010, the total compensation bundle received by Coalition employees includes overtime and supplemental pay plus a long list of non-wage benefits, valued at $19.92 per hour in 2010. These non-wage benefits include:

1. Health insurance
2. Prescription drug coverage
3. Dental insurance
4. Vision insurance
5. Life insurance
6. Sick leave
7. Long-term disability insurance
8. Paid vacation
9. Holidays

\(^9\) See Carriers’ Ex. 6 (Report of Dr. Evans) at 20.
10. Railroad retirement benefits
11. Profit-sharing
12. Early retirement health benefits
13. Short-term disability insurance
14. Railroad Unemployment Insurance Act (RUIA) benefits
15. Supplemental/overtime compensation

As explained in detail in the report of Dr. David Evans, the dollar value of compensation of rail employees at issue in this PEB proceeding is far above the value of total compensation received by similarly skilled and experienced employees in other
According to Dr. Evans’ estimates, the current wage and benefit levels for workers represented by the Unions are roughly double those of similar workers in other industries. Their total compensation is higher, as are both their benefits and straight time earnings.11

The Carriers’ proposals – premised on the UTU pattern agreement – would preserve and even enhance the total compensation premiums enjoyed by Coalition Employees. In terms of wages alone, the Carriers’ proposals provide for annual general wage increase of 2% (retroactive to 7-1-10), 2.5% (retroactive to 7-1-11), 3% (7-1-12) 3% (7-1-13), 3.5% (7-1-14) and 3% (1-1-15), equating to compounded wage growth of 18.24 percent between 2010 and 201512 and an average rate of wage growth in excess of 3 percent per year.13 This rate exceeds the average wage and salary growth in the private sector labor force, which has averaged just 0.6 percent since 2008.14 This growth rate also exceeds forecasted inflation over the contract period, which averages 1.8 percent or less, implying substantial real wage growth over the life of the contract.15 Indeed, the President of the UTU points out that the real (net of inflation) wage increases in the UTU

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10 See Carriers’ Ex. 6 (Report of Dr. Evans) at 17-20.
11 Id.
12 Additional special compensation in the Carrier’s proposal raises compounded growth to 18.8 percent.
13 The Carriers’ proposals also include a lump sum payment of $300 and a special wage adjustment of .5% effective July 1, 2011. These wage adjustments are not included in the 18.24% compounded GWI figure.
14 See Carriers’ Ex. 6 (Report of Dr. Evans) at 28.
15 Id. at 32.
agreement are the highest the Union has ever negotiated.  

Accounting for special wage adjustments and health care, the UTU agreement offers growth in total compensation of 3.5 percent per year.  

By comparison, total compensation growth in the private sector labor market has averaged just 1.7 percent since 2008.  

In other words, even under the UTU agreement, compensation of rail employees should substantially outpace that of similar employees in other industries and occupations.

Under the Coalition Unions’ proposal, annual Carrier compensation costs per Coalition Employee would reach $11,343 ($56.78 per hour) by 2014 – $6,579 ($3.29 per hour) more than under the Carriers’ proposal.  

See Figure 2 below.

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17 The terms and cost projections for wages, work rules, health costs and total compensation are summarized in the Report of Dr. Evans.  See Carriers’ Ex. 6 (Report of Dr. Evans) at 1.

18 See Bureau of Labor Statistics, Employment Cost Index Historical Listing, Table 6 (July 29, 2011).

19 See Carriers’ Ex. 6 (Report of Dr. Evans) at 34-35.
Total compensation growth under the Coalition Unions’ proposal exceeds total compensation growth under the Carriers’ proposal by 7.1% through 2014.

III. COMPENSATION SHOULD BE BASED ON MARKET FORCES.

Given that total compensation is the economically correct benchmark for evaluating potential agreements, it remains to establish the amount by which total compensation will typically change over time. This requires an understanding of the market forces that determine the level and growth of compensation.20

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The dollar value of per-employee total compensation over a particular period of time may be viewed as the price that the Carriers (or other employers) pay for using the time and skills of these employees. When this price is market-determined by the interplay of the supply of and demand for labor, total compensation of any particular type of skill will reflect the value of the incremental output produced by a worker with those skills. For example, if workers of a particular skill command total compensation of $100,000 per year, then that is what employers in industry \( A \) must pay in order to recruit and retain them. It is also the value of what those workers could earn if they worked in some other industry, say \( B \). This is why more skilled, or more productive, individuals earn more than those with less skill—they contribute more to overall productivity than less skilled individuals, so they command greater overall compensation in order to attract them away from competing employment alternatives.

The market forces that determine the growth in employee compensation are often misunderstood. In this dispute, the Coalition Unions argue that large increases in compensation are justified by the recent financial results of the Carriers -- in essence, their profitability. In effect, the argument is that compensation should rise because the Carriers can afford to pay more. This argument reflects a fundamental misunderstanding of how the level and growth of compensation are determined in labor markets.

**A. Compensation and Profitability.**

The Coalitions claim that recent increases in the profitability of the Carriers calls for increased compensation of Coalition Employees. This argument is a fallacy—compensation of employees is not determined by the profitability of the particular firms
or industries in which they work (except in circumstances of explicitly designed profit sharing plans). Instead, the level of compensation is driven by market forces of supply and demand for labor, which affect the relative scarcity of workers and the skills they embody. Accordingly, the total compensation package offered by a particular employer must be sufficient to recruit and retain skilled workers, which means that it must be at least as attractive as what alternative employers offer. This is true whether the employer is earning high profits or low ones, and whether its profits are rising or falling.

These points are particularly relevant in the context of current labor market conditions. The current (2011) unemployment rate among high school graduates exceeds 10 percent—more than double its pre-recession level of about 4.5 percent. The employment-to-population ratio, which includes the impact of discouraged workers who are not counted as unemployed because they have stopped searching for a job, is nearly 7 percentage points below its pre-recession level.\(^\text{21}\) As this is written, forecasts for improvement in labor market conditions affecting blue collar workers are not optimistic.\(^\text{22}\) In this economic environment, the profitability of a particular sector may

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\(^{22}\) See, e.g., A. Sum and I. Khatiwala, Labor Utilization Problems of U.S. Workers Across Household Income Groups at the End of the Great Recession; A Truly Great Depression Among the Nation’s Low Income Workers Amidst Full Employment for the Most Affluent, Northeastern University Center for Market Studies, p.7 (Feb. 2010) (“The unemployment problems of U.S. workers have substantially increased in absolute size and their incidence during the Great Recession of 2007-09, and the character of these problems also has changed markedly…. As unemployment increased by leaps and bounds, it also became considerably longer in duration, with a historically high mean duration of 29 weeks prevailing at the end of 2009, and a substantial majority of the unemployed being permanent job losers, especially blue collar workers.”)
raise labor demand in that sector, so that employers are willing to hire more workers.\textsuperscript{23}

But a collective bargaining outcome that raises relative compensation and hence costs in the (rare) profitable and expanding sector inevitably reduces the amount of hiring and job creation that would otherwise take place. The effect is to harm individuals who would have found work in the sector and, as I quantify below, to harm social welfare generally.\textsuperscript{24}

A number of economic factors could lead to increased profitability of firms in a particular industry. First, an increase in the demand for certain products or services may raise profits and an industry’s output and profitability, and firms will then expand their employment of labor and other productive factors. This expansion will not raise compensation of employees (or the prices of other factors), however, unless employers are unable to recruit or retain workers at the previous level of compensation; that is, unless increased hiring raises the “supply price” of qualified workers available to the industry. Here, the evidence in the reports of Dr. Evans and Professor Topel

\textsuperscript{23} I understand that the Carriers have announced plans to expand hiring and employment. See Association of American Railroads, \textit{Great Expectations 2011; Freight Rail’s Role in the U.S. Economic Recovery}, p. 4 (2011) available at www.aar.org/greatexpectations.aspx.

\textsuperscript{24} In the context of collective bargaining, the substantial compensation premiums enjoyed by union labor are sometimes related to rent extraction from the financial returns of employers. These premiums are not market determined. Instead, they reflect the relative power of unions to extract above-market wages and benefits through collective bargaining and the threat of strikes, which may be greater in profitable industries or in firms with specific and immobile assets. See, e.g., Robert A. Connolly, Barry T. Hirsch, and Mark Hirschey, “Union Rent Seeking, Intangible Capital, and Market Value of the Firm,” \textit{Review of Economics and Statistics} Vol. 68, no. 4 (1986). As a result, unionization generally has a negative impact on profitability, employment, investment and growth. \textit{Id.; See also} Barry T. Hirsch, \textit{Unionization and Economic Performance: Evidence on Productivity, Profits, Investment, and Growth}, in Fazil Mihlar (ed.), \textit{Unions and Right-to-Work Laws}, pp. 35-70 (The Fraser Institute 1997).
convincingly shows that the compensation premium received by rail employees creates an excess supply of willing and qualified workers—especially in the current economic environment—so that the Carriers could easily expand employment even at lower levels of compensation.  

The same reasoning applies to other events that may raise profitability in an industry. For example, productivity growth can reduce the quantity of inputs required to produce a given rate of output, so costs decline. In the rail industry, such increases in productivity have typically reduced the Carriers’ demand for union labor, as the report of Drs. Eakin and Schoech clearly shows. If anything, such productivity-induced reductions in labor demand mean that qualified workers are more abundant at the current level of compensation—excess supply is exacerbated—which surely does not call for an increase in compensation. Costs may also decline because of changes in the market prices of factors of production, such as fuel or steel. Again, an increase in profits due to a decline in the price of one factor, say fuel, does not justify paying more for other factors, such as labor, unless the employer in question is unable to recruit and retain workers at the previous level of compensation.

As I noted above, the evidence provided by Dr. Evans and Professor Topel indicates that the opposite has occurred—workers are more abundant, and recruiting and retention even easier, because of the large compensation premium that Coalition

25 See Carriers’ Ex. 5 (Report of Dr. Topel) at 10-29; Carriers’ Ex. 6 (Report of Dr. Evans) at 35-39.
26 See Carriers’ Ex. 8 (Report of Dr. Eakin and Dr. Schoech) at 21.
Employees enjoy.\(^{27}\) Average wage and compensation growth in the US labor market is well below the rates proposed by the Coalition, especially for blue-collar workers.\(^{28}\) This means that market forces have enhanced the abilities of the Carriers to attract qualified workers at current levels of compensation.

The fact is that labor supply to the rail industry has increased as opportunities for blue-collar labor elsewhere have eroded. Between 2007 and 2010, unemployment rates among blue collar workers similar to those in rail transportation more than doubled—by 2010, the rate among men with high school and associates degrees had risen to 13.75 percent.\(^{29}\) In this environment, the data demonstrate that many more people are seeking a relatively small number of positions in the industry, and those with rail jobs are extremely reluctant to leave.\(^{30}\) The implication is that recruiting and retention have become easier—labor is much less scarce—which is not a circumstance that calls for an increase in its price. As I explain in greater detail below, substantially raising compensation in the face of excess supply, as advocated by the Coalition, will only make matters worse for blue collar labor, as fewer people will be hired.

The power of unions to extract above-market compensation can also adversely affect investment decisions. Empirical evidence indicates that a key source of union

\(^{27}\) See Carriers’ Ex. 6 (Report of Dr. Evans) at 17-39; Carriers’ Ex. 5 (Report of Dr. Topel) at 10-29.

\(^{28}\) See Bureau of Labor Statistics, Employment Cost Index Historical Listing, Tables 6 and 10 (July 29, 2011).


\(^{30}\) See Carriers’ Ex. 4 (Report of Dr. Topel) at 19-29.
compensation premiums derives from unions’ ability to “capture” the returns on long-term capital investments, which may appear as accounting profits. That is, once investment costs are sunk and the necessary stream of returns begins, union power extracts a portion of the returns, so the value of investments is lower. The implication is that capital will go elsewhere as forward-looking investors seek competitive returns. In the context of the capital-intensive rail industry and the Carriers’ investment decisions, the implication is that continued extraction of returns in the form of granting increasing union compensation premiums will raise the Carriers’ financing costs, reduce investment and dampen growth. These effects are elements of the harm to economic activity and efficiency that I discuss further below.

In some cases, employers may establish or negotiate compensation systems with a variable wage or salary component tied to the financial performance of the firm—a profit-sharing bonus. The strategic purpose of these compensation strategies is to raise compensation when demand is strong and (presumably) profits high, and reduce it when demand falls. This is not done because the employer can “afford” to pay more, however. Rather, it is best understood as a tradeoff between variability in employment and variability in compensation—if compensation (cost) declines when the demand for output


32 See Carriers’ Ex. 7 (Report of Dr. Gallamore and Mr. Gray) at 17-19.
(and hence labor) falls, the employer has less incentive to engage in layoffs. Employees who would otherwise be laid off benefit from such programs.

The role of profit sharing compensation is often misunderstood. It is generally not the case that profit sharing improves workers’ incentives—the efforts of an individual engineer or brakeman have negligible impact on the overall profitability of a Carrier, so the profit-sharing element of compensation does not change if an individual “works hard.” Rather, the benefits of profit sharing derive from the employment effects mentioned above. In a weak economic environment where labor demand falls, flexible compensation reduces labor costs and reduces the need for layoffs. Further, since railroad employees tend to remain in the occupation for long periods, hiring decisions today must be forward looking. Armed with the knowledge that they will not be “locked-in” to high compensation in the event that future market conditions deteriorate, employers may be more willing to add employees today and to adopt technologies that are relatively labor intensive. The result is higher and more stable employment than would otherwise occur. In other words, the “incentive” effect of variable compensation falls mainly on the employer, who stabilizes employment.

The Coalitions’ proposals violate this principle of variability—their proposals for higher compensation based on the current performance of the industry would lock-in an

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increase in costs, with no provision to reduce labor costs if and when the economic performance of the industry declines. To the extent the Board members believe that the current or prospective success of the railroads should be taken into account in determining compensation, the PEB should consider the fact that future financial results and labor demand are not guaranteed, being subject to the vagaries of both macroeconomic factors and factors that are specific to the rail transportation industry, such as changes in fuel costs that disproportionally affect transportation costs. Accordingly, a system that seeks to compensate Coalition Employees in proportion to the economic performance of the Carriers should be flexible, increasing compensation somewhat when demand for labor services is strong, and cutting back somewhat when demand is weak.

As an alternative to the Coalitions’ proposals for fixed general wage increases, on occasion, individual Carriers have negotiated profit sharing programs whereby railroad workers can earn more if the Carriers are financially successful. BNSF, CSX, and Norfolk Southern all currently have agreements with BLET that involve profit-sharing in lieu of general wage increases. Moreover, there are many examples of successful profit-sharing programs both inside and outside the rail industry. For instance, on February 14, GM announced that it would pay 45,000 employees profit sharing checks worth “upwards of $4,000” ($189 million total), reflecting the improved state of the firm.34

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B. The Relation of Compensation to Labor Productivity.

Perhaps the most prominent fallacy related to compensation growth is the belief that compensation paid to a particular employer’s workers increases because labor productivity at that employer increases over time.\(^{35}\) This fallacy is the basis for arguments by the Coalition Unions and their experts that improvements in “labor productivity”—which the Coalition defines as output per ton mile—in rail transportation should be considered by the PEB as a justification or reason for granting above-market increases in total compensation, as reflected in the Coalitions’ proposals.

The Coalition Unions’ argument is wrong—growth in compensation is driven by productivity growth in the market, not by productivity growth that occurs at a particular worker’s employer or in the worker’s occupation.\(^{36}\)

To see the fallacy, think of occupations in which there has been little or no productivity growth over long periods, such as barbers, college lecturers and clinical psychologists—these jobs are done today pretty much as they were in, say, 1960. Yet compensation in these occupations has risen by roughly the same amount as in other occupations that employ individuals with similar talents. The reason is that aggregate

\(^{35}\) In national income and product accounts, “labor productivity” is defined as output per hour worked. This can increase because employers acquire more capital for labor to work with, because of technical improvements, or because of skill accumulation, such as education, by workers. The report by Drs. Eakin and Schoech contains a more detailed discussion of productivity growth and its relation to wages and compensation. See Carriers’ Ex. 8 (Report of Dr. Eakin and Dr. Schoech).

productivity growth raises labor demand in the marketplace, so even occupations with zero productivity growth must pay more in order to attract workers to those jobs. Thus, barbers get paid more because labor productivity increased in other occupations—the labor market as a whole—even if productivity did not increase in the hairstyling industry.

In a functioning labor market, compensation does not grow most rapidly in occupations with the largest increases in productivity, or more slowly in occupations with slower productivity growth. Compensation growth is a market phenomenon.

In any particular sector, such as rail transport, the average product of labor may increase over time for a variety of reasons. Here is a basic taxonomy of factors that may cause increases in output per worker:

- Technical, organizational and managerial advances may enable a firm to produce more output from given amounts of labor and capital. This growth in “total factor productivity” raises the amount of output per worker in the sector, even though workers have not become innately more productive or skilled, nor are employers in other sectors willing to pay more for their services.

- Investments by employers may increase the capital-labor ratio, so that the representative employee works with more capital. With more capital to go around, output per worker will rise.

- Technical improvement may cause each unit of capital to become more productive. Again, the greater productivity of capital will cause output per worker to rise.

- The representative worker in the sector may become more skilled, perhaps because changing production methods in the sector require greater amounts of talent, education or training to perform particular tasks.

Of the four reasons for increases in the level of output per worker given above only the last—rising skills—is a valid economic reason for increasing total compensation
relative to that available in other sectors. This is because more skilled individuals command greater compensation in the marketplace, so employers must pay more in order to recruit and retain such workers. The report by Drs. Eakin and Schoech demonstrates that productivity growth in rail transportation is overwhelmingly due to investments by the Carriers in labor-saving capital and technology. This fact is also directly observable from the long-term decline in the real price of rail transportation services, driven by declining costs.

This is why productivity advances in rail transportation are interesting and economically beneficial, but not relevant to determining the market level of compensation for the types of individuals who work in the industry. If, for whatever reason, technical progress and investments raised labor productivity for an individual Carrier, then that Carrier would want to hire more workers. The Carrier would attract business from other Carriers where productivity did not increase, and so the more productive Carrier would produce more output. But if the required rail occupation skills do not become more scarce in the marketplace, the relative compensation of rail workers need not rise because the Carriers can continue to attract and retain workers at the same “price” as before.

Taking the argument a bit further, suppose that productivity increased for all Carriers, which is what actually occurred. Then the same amounts of labor and capital


38 See Carriers’ Ex. 8 (Report of Dr. Eakin and Dr. Schoech) at 20-23.
will produce more transportation services than before. Whether this raises or lowers the
industry’s demand for labor depends on whether consumers end up buying the additional
output of rail services. If demand is “inelastic”—so consumers don’t buy much more
even at a lower price—the industry’s demand for workers will actually fall when
productivity increases. This is evidently what has occurred over the long run in the
industry, as overall employment has declined.\(^39\) Again, unless the requisite skills become
more scarce, there is no reason that even large productivity advances in the industry
should increase the market level of compensation for workers of a particular type.\(^40\)

In this sense, the Coalitions’ productivity argument for greater compensation has
things exactly backward. That is, the productivity enhancements that have occurred in
rail transportation have not caused increased scarcity of the types of workers qualified for
jobs in the industry—if anything, the opposite has occurred.

IV. **Total Compensation is Sufficient if Employers are Able to Attract and Retain Qualified Workers.**

These arguments imply that the relevant benchmark for evaluating changes in
compensation in rail occupations (or any other occupation) is how compensation and
employment opportunities have evolved in the *marketplace.* As in any industry, the total
compensation of employees in rail transportation should advance the long-term objectives
of providing a cost-effective and competitive output—here transportation services—

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\(^39\) See Carriers’ Ex. 8 (Report of Dr. Eakin & Dr. Schoech) at 23-25.

\(^40\) See Kevin M. Murphy and Finis Welch, “The Structure of Wages,” *Quarterly Journal of Economics,* pp. 285-326 (Feb. 1992); Lawrence Katz and Kevin M. Murphy, “Changes in
while retaining and recruiting appropriately skilled employees. This principle holds true regardless of whether the employees in question are covered by collective bargaining agreements.

From an economic standpoint, therefore, total compensation for any group of workers should be based upon market forces that affect the employer’s access to the skilled labor needed to operate the enterprise. Recruiting and retention require that the value to employees of career compensation, including all wages and benefits, be at least equal to what a representative employee could obtain elsewhere in the labor market.41 This point is critical—it means that an employer has no incentive to set compensation “too low,” because doing so will defeat its long-run recruiting and retention goals. Conversely, setting the value of compensation substantially above alternatives needlessly raises costs, reduces employment and output, and harms the consumers of transportation services through its impact on prices.

In a competitive labor market for workers of a particular skill type, market forces will determine a total compensation package that is just sufficient to attract and retain employees.42 Thus a useful benchmark for evaluating contract proposals in this or any other negotiation is whether the associated compensation package meets this test—is it sufficient to attract and retain workers, allowing the Carriers to offer competitively priced transportation services?

42  Id.
In the current context, this test is complicated by the fact that unionized railroad employees receive a substantial compensation premium relative to alternative occupations and industries. This premium is what economists call an economic “rent,” which means that the compensation of Coalition Employees is substantially greater than the level necessary to attract the typical worker to occupations in the rail industry.\textsuperscript{43} According to the reports submitted by Dr. David Evans and Dr. Charles Fay, the total compensation premium received by Coalition Employees is enormous—Dr. Evans estimates the average premium at nearly 80 percent, which is to say that the combined earnings and benefits of Coalition Employees are 80 percent higher than that of comparably skilled workers in alternative occupations and industries.\textsuperscript{44} This means that compensation is 80 percent greater than the level necessary for the Carriers to recruit and retain workers.

In their proposal, the Carriers do not seek to reduce or erode this relative compensation premium. Instead, they take its existence and magnitude as a given for the purpose of determining the appropriate level of total compensation in an evolving labor market. At the same time, the Carriers are opposed to the Coalitions’ proposals that would substantially increase the relative compensation premiums enjoyed by Coalition Employees. Such an extraordinary increase in compensation would raise the Carriers’ costs without enhancing productivity or the efficiency of their operations.

\textsuperscript{43} For details on the magnitude of these economic rents, see Carriers’ Ex. 4 (Report of Dr. Fay) and Carriers’ Ex. 6 (Report of Dr. Evans). The implications of these rents for recruiting, retention and labor turnover are documented in Carriers’ Ex. 5 (Report of Dr Topel). I discuss the evidence in these reports below.

\textsuperscript{44} See Carriers’ Ex. 6 (Report of Dr. Evans) at 20.
V. THE SOCIAL COSTS OF INCREASING RAIL EMPLOYEES’ COMPENSATION PREMIUMS.

The Carriers’ resistance to even greater union premiums and higher labor costs is not surprising—the Carriers benefit from holding the line on labor costs, just as they would prefer lower fuel costs. It is essential to realize, however, that the Carriers’ resistance to further increases in the relative compensation premium of Coalition Employees also promotes a more important goal of social efficiency and welfare. As I demonstrate in the following analysis, excessive compensation transfers from other members of society to union members harms social welfare by reducing economic activity. Standard economic tools allow us to estimate this harm. Based upon my analysis of the industry, I conclude that each dollar increase in the compensation premium enjoyed by union labor imposes costs of about two dollars on other members of society, mainly consumers. Of these two dollars, one dollar is a transfer from consumers to union members, which they pay for in the form of higher prices. The second dollar is the value of economic activity that is “wiped out” by the excessive increase in compensation. This is pure social waste.

The large relative compensation premium earned by Coalition Employees is conceptually identical to a tax on their services, which is received by the employees. This tax raises costs, which distorts the incentives and decisions of the Carriers, who inefficiently substitute away from artificially expensive labor and toward other productive inputs, mainly capital. See, e.g. Daniel S. Hamermesh, Labor Demand (Princeton University Press 1993).

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consumers, who inefficiently substitute toward other means of transporting things, such as trucking, when the compensation tax is inevitably passed through in terms of higher prices. These distortions harm social welfare by reducing the overall value that society derives from rail transportation services. Economists refer to this social loss in value as “deadweight loss” – it is the reduction in social welfare caused by artificially elevated costs and prices. And since higher costs are passed through to consumers, the effect of increasing the compensation premium is to transfer wealth from consumers of transported goods – which includes virtually everything – to Coalition Employees.

A. Measuring the Social Costs of Excess Compensation.

A well known and accepted result in the field of welfare economics is that the loss in social welfare caused by a tax depends on (a) by how much a unit increase in the tax distorts choices, and (b) the size of the tax. Expressed in terms of a formula, the deadweight loss is:

\[
L = \frac{1}{2} X E p^2 / (1 + p)
\]

In this equation, \(X\) represents the total wage bill accruing to Coalition Employees, \(E\) represents the elasticity of employment with respect to elevated compensation (which depends on both substitution by the Carriers and by consumers of rail services), and \(p\) is the compensation premium expressed as a percentage amount. Then \(L\) — the deadweight

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loss in social welfare—is expressed as a flow of dollars per year. The deadweight loss is greater when compensation is greatly elevated ($p$ is large), when behavior is greatly affected ($E$ is large) or when the affected market itself is large ($X$ is large).

To get a feel for the magnitudes at stake, Dr. Evans estimates an average compensation premium across all Coalition Employees of about 80 percent.\textsuperscript{47} This means that Coalition Employees enjoy total compensation that is 80 percent greater than what comparable workers earn in other industries and occupations. So set $p=0.80$. The total compensation of Coalition Workers in the Carriers’ workforce in 2010, $X$, came to about $7.8$ billion. This leaves $E$, which measures the response of employers and consumers to the higher costs caused by compensation premium. Evidence for the rail industry indicates that $E$ is slightly larger than $1.0$, so I will set $E=1$ for illustrative purposes.\textsuperscript{48} The formula implies an annual social loss of $\frac{1}{2} \cdot (7.8 \text{B}) \cdot (1.0) \cdot (0.80)^2 / (1.0) = 1.4$ billion per year. This value measures the annual social waste—mainly lost value to consumers\textsuperscript{49}—caused by the compensation premium. Expressed as a present discounted value at 6 percent real interest, the reduction in current and future social value from maintaining the premium indefinitely is $(1.4 \text{ billion} / .06) = 23.3$ billion.

\textsuperscript{47} See Carriers’ Ex. 6 (Report of Dr. Evans) at 17-20.
\textsuperscript{49} Competition in the broad market for transportation services means that most or even all of the higher costs caused by a compensation premium will be passed through to consumers in terms of higher prices. This is reflected directly in higher prices for transporting people and goods, and indirectly in higher prices for the goods that people consume. The overall effect is to reduce economic activity.
I noted above that the Carriers’ resistance to further increases in the compensation premium promotes the goal of social efficiency, or of avoiding ever greater social harm. This fact is implied by formula (1), which indicates that the social inefficiency of the compensation premium rises with the square of the premium—raising the premium by (say) one percentage point causes more social harm when the premium itself is already large than when it is low.\textsuperscript{50} Based on this, the marginal cost to other members of society per dollar of increase in the compensation premium may be expressed as:\textsuperscript{51}

\[ M = 1 + E \cdot p \]

According to formula (2), the cost to society of raising the compensation premium by \$1 is greater than \$1, because the increase creates wasteful decisions. Importantly, the additional social waste created is proportional to \textit{p— the social harm from raising the premium is greater when the premium is already large.} For example, raising the premium by one dollar when Coalition Employees enjoy an 80 percent compensation premium (\(p=0.80\)) is twice as costly as an equivalent increase from a level of \(p=0.40\), and four times as costly as an equivalent increase from \(p=.20\) (a 20 percent premium).

Using the values above – that is, \(E = 1.0\) and \(p=0.80\) – each dollar of additional premium has a full cost to other members of society of \$1.80. That is, each additional dollar paid to Coalition Employees in the form of higher relative compensation in a

\textsuperscript{50} This is a well-known result of welfare economics and public finance, which states that the deadweight loss of a tax increases with the square of the tax rate.

collective bargaining agreement imposes an additional cost on other members of society of $0.80. Toted over the roughly $7.8 billion annual compensation of Coalition Employees, a one percentage point increase in relative compensation would raise the pay of rail employees by about $78 million per year, which would mainly be paid by consumers as costs are passed through in the form of higher prices. By raising prices and distorting decisions, this transfer would harm others by $140 million per year. Of this, $78 million is a transfer from consumers and others to Coalition Employees – who already receive a large compensation premium – and $62 million is additional social waste created by the increase in Coalition Employees’ economic “rents.” The social cost is 80 percent more than the amount that is transferred to Coalition members. At six percent real interest, the present discounted value of the social harm caused by a hypothetical one percent increase in relative compensation is ($62 million/.06) = $1.04 billion. The stakes are large, even for small changes in compensation.

The Coalitions’ proposal would increase the Carriers’ compensation costs by an average of 4.4 percent each year from 2010 to 2014, for a cumulative increase of 21.9 percent. By comparison, the cumulative total compensation increase in the Carriers’ proposal premised on the UTU pattern agreement is 14.8 percent over the same five-year term, so the cumulative difference in the proposed compensation growth is 7.1 percent. Because, as stated above, this projection excludes a number of expensive elements of the Coalitions’ proposal, it significantly understates the true cost difference between the competing proposals. Thus, we may view the 7.1 percent differential as a conservative estimate of the additional increase in labor costs under the Coalitions’ proposal. A lower
bound on the social cost of this gap is then about 7.1 times the social cost of a one percent
difference. This yields an annual social waste due to an excessive increase in total
compensation of 7.1 X $62 million = $440.2 million. The present value of this social
harm, again at six percent interest, is $7.3 billion.

This analysis indicates why, from an economic perspective, the Carriers’
resistance to further increases in the compensation premium of Coalition Employees is
not simply a matter of “dividing the pie” between the Carriers and Coalition Employees.
Many others would be harmed, and they are not participants in the negotiations. Though
it is not the Carriers’ intention to promote social welfare or to avoid ever-higher social
harm—they care about their own costs—the Carriers’ bargaining position is consistent
with exactly that goal.

B. The Coalition’s Proposals Will Harm Consumers.

The loss in social welfare discussed above is caused by a reduction in mutually
advantageous trade, for example because goods are not transported and consumed, or
they are wastefully transported by inefficient means. Excessive compensation of
Coalition Employees also has to be paid for, however, and that implies a transfer of
income from other members of society.

The main source of this income transfer will be in the form of harm to consumers,
who will pay higher prices. This follows from the economic fact that increases in
operating costs, of which compensation is a large part, are “passed through” in the form
of higher prices. With strong competition in the market for the good or service in
question, we can be confident that the pass through rate of higher costs is about 1.0—all of a cost increase falls on consumers.

Since the passage of the Staggers Act in 1980, the real (adjusted for inflation) price of rail transportation services has fallen by over 50 percent. This decline in price reflects the long term decline in the Carriers’ costs, driven by technical advances and competition, which are passed through to consumers. Just as long-run reductions in cost have been passed through to consumers in the form of lower prices for rail transportation services, higher costs caused by aggressive increases in the compensation of Coalition Employees will raise prices in the long run. One might argue that the ability of the Carriers to pass through their costs is somewhat limited because freight rates are regulated by the Surface Transportation Board. It is true that regulatory lags might delay the pass through somewhat but, in the long run, the Carriers must offer a competitive rate of return in order to attract capital to the industry. Then prices must reflect costs.

As a rough estimate of harm to consumers, note that labor costs account for about one-third of costs. The $7.8 billion total compensation of Coalition Employees accounts for about half of the compensation costs of all (union and non-union) rail employees, so they account for 19.2 percent of total operating costs. Therefore, raising total compensation by 7.1 percentage points above the Carriers’ proposal through 2014 will raise prices by about (.071 x .192) = 1.4 percent. Given annual revenues in the industry of about $56.8 billion, this means that consumers would pay roughly $795 million per

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52 See Carriers’ Ex. 7 (Report of Dr. Gallamore and Mr. Gray) at 11-13; Carriers’ Ex. 8 (Report of Dr. Eakin and Dr. Schoech) at 36.
year more, which is a transfer from consumers of all goods and services with a rail transportation component to Coalition Employees. Expressed as a present value at six percent annual interest, the loss to consumers is $13.3 billion.

C. The Coalition Employees’ Proposal Will Reduce Employment.

As I explained above, when workers with the requisite skills are abundant at the current level of compensation, compensation need not change in order to attract new workers to the industry. The market wage is determined by the forces of supply and demand in the overall labor market for the skills in question, not by the fortunes of the particular employers for whom individuals work.

Recently, the Carriers have announced plans to increase employment.53 It is true that a strong state of current labor demand for railroad workers would mitigate at least the immediate impact of higher-than-necessary compensation on the employment of current Coalition Employees. The jobs that would be eliminated are mainly those that would be filled by new hires, as industry employment expands by less than it would otherwise. These workers are not union members, and so their interests have little or no “voice” in the contract proposals of the Coalition, but the harm to them is no less real. As I stated above, the fact that the railroad industry is currently doing well does not eliminate or even diminish the impact that higher labor costs will have on employment, industry output or prices paid by the consumers of rail services.

53 See, e.g., Association of American Railroads, Great Expectations 2011: Freight Rail’s Role in the U.S. Economic Recovery, p. 4 (2011) available at http://www.aar.org/greatexpectations.aspx (“In the coming year, railroads have announced plans to hire 10,000 or more rail workers…”).
Economic analysis establishes that employment of factors of production, such as labor, obeys the “law of demand”—raising the price of labor will always reduce employment levels.\textsuperscript{54} Applied here, this means that above-market increases in compensation will cause the Carriers to reduce their employment of unionized workers below what would otherwise occur.

There are two fundamental sources of the reduction in labor utilization caused by higher-than-necessary compensation. The first is that higher costs are passed through to consumers of the employer’s product, who respond by purchasing less. With lower overall output, employment is reduced below what it would otherwise be. This includes reduced employment of both union and non-union labor. This also reduces employment in other sectors of the economy as the higher cost of transportation services makes other goods and services more expensive. The second force is caused by technological substitution, as the Carriers adjust their production methods to avoid the artificially high price of labor services.

Both of these factors are relevant here. In the ongoing negotiations between the Coalition Unions and the Carriers, the Coalitions have proposed a five year sequence of wage increases averaging 4.1 percent per year (compounded) ending in 2014. Over the term of the contract, the Coalitions’ proposal would raise total compensation costs for covered workers by 7.1 percent more than would the Carriers’ proposal based on the UTU Agreement, through 2014. Regardless of what might be the current state of the

\textsuperscript{54} See, e.g., Jeffrey Perloff, Microeconomics, 6e (Pearson 2011). For details on labor demand, see Daniel S. Hamermesh, Labor Demand (Princeton University Press 1993).
industry, this increase is effectively permanent and the Carriers will respond accordingly. Applying the principle that the “elasticity of demand” is larger in the long run, we can be sure that the reduction in employment will be cumulative over several years, as the Carriers adjust their production methods.\footnote{For a useful survey of evidence on labor demand elasticities, including the degree of substitution of other inputs for labor when compensation rises, see Daniel S. Hamermesh, \textit{Labor Demand} (Princeton University Press 1993).} Indeed, empirical evidence puts the post-deregulation elasticity of labor demand in freight railroads slightly above 1.0, which means that each one percentage point increase in total compensation reduces employment by more than one percent.\footnote{See Yu Hsing and Franklin G. Mixon Jr., “The Impact of Deregulation on Labor Demand in Class-I Railroads,” \textit{Journal of Labor Research}, Vol. XVI, No. 1 (Winter 1995).} Since the Coalitions’ proposal would raise total compensation costs by over seven percentage points relative to the Carriers’ proposal, their proposal would reduce industry employment below what would otherwise occur by more than seven percent in the long run.

It is important to understand that this reduction below the “but-for” level of employment occurs regardless of whether current performance and profits in the industry are high or low. Given the powerful role of seniority in labor contracts, the burden of this reduction will typically fall on two groups. First, to the extent that higher compensation induces layoffs or eliminates rehires that would otherwise occur, existing union members with the least seniority are harmed because they lose their jobs in the industry, which pay substantially more than alternatives. Viewed in this way, it is little wonder that the large majority of union members would favor such an increase – a small percentage of current
employees would lose their jobs, while the large majority of more senior employees would earn more.

The second harmed category is comprised of people who would have been hired, but are not because of the higher compensation premium. Again, the source of their loss is the compensation premium documented by Dr. Evans and Dr. Fay—these individuals would have preferred a union job with the Carriers, and they would have gotten one but for the above-market increase in compensation.

VI.FINAL COMMENTS ON THE CURRENT STATE OF THE LABOR MARKET.

To conclude this discussion, I believe it is useful to frame this analysis in the context of current labor market conditions. I noted earlier that the unemployment rate among transportation and material-moving workers similar to those in the rail industry is near 11.6 percent, well above the national unemployment rate of 9.1%. Rates among construction workers are even higher at 13.2%. The weak state of the labor market and macro-economy—evidenced by low wage growth in blue-collar occupations and high unemployment and joblessness—clearly indicates that the effective compensation premium enjoyed by Coalition Employees has risen, even at current levels of compensation. This means that the social cost of aggressive compensation increases is unusually large, reducing employment and raising the cost of a key part of the nation’s

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58 For some evidence on the impact of the recession on job and earnings losses see, for example, Henry S. Farber, Job Loss in the Great Recession: Historical Perspective from the Displaced Workers Survey, 1984-2010, Princeton University Industrial Relations Section, Working Paper no. 564 (May 2011).
transportation infrastructure at exactly the wrong time. The effect would be to harm economic performance and consumer welfare in the rail transportation industry, and in all other sectors that depend on the industry’s services.

Such results are inconsistent with my understanding of the PEB’s objectives in this proceeding. As I understand it, the primary function of the PEB is to report to the Obama Administration regarding the current labor dispute, and recommend a settlement that is both fair to the parties and consistent with the administration’s policy goals. The Obama Administration has publicly stated that job creation is the government’s economic priority.59 Awarding above-market compensation increases here would be inconsistent with that policy objective, since the impact of above-market total compensation increases will be to reduce job growth in the rail industry. As explained above, such cost increases may also reduce the Carriers’ incentives to invest in infrastructure and other forms of capital, which is also at odds with the stated policy goals of the Administration.

VII. THE UTU PATTERN AGREEMENT SATISFIES COMPENSATION OBJECTIVES IN THE CURRENT LABOR MARKET.

The Carriers’ position in this proceeding is that the voluntary agreement reached with the UTU should be the appropriate benchmark for resolving the open agreements with the Coalition Unions, and determining the total compensation for their Coalition Employees. Based on my review of the UTU agreement, and in light of the economic framework developed above, I endorse that view. In a nutshell, the terms outlined in the

UTU collective bargaining agreement achieve the goal of neither eroding nor excessively increasing the compensation premium that has historically been received by Coalition Employees, while maintaining the ability of the Carriers to recruit and retain qualified employees.

Put differently, in comparison to the Coalitions’ proposals, the Carriers’ proposals – based upon the UTU pattern agreement – are far more consistent with labor market realities. Thus, among the relevant alternatives proposed by the parties, the Carriers’ proposal – premised upon the terms of the UTU agreement – maintains the relative total compensation position of Coalition Employees while minimizing the harm to overall economic performance and social welfare. Economically then, the Carriers’ proposal is superior to the alternative proposals of the Coalition Unions.

As I noted earlier in this report, the total compensation package in the Carriers’ proposals provides for wage increases that are consistent with, and even superior to, the rates of wage growth for comparably skilled individuals in the overall labor market. The same can be said of other elements of the Carriers’ proposed total compensation package. Relative to the proposals of the Coalition Unions, the package will not cause substantial harm to economic performance, employment and the costs of transportation services. Thus, under the principle of adopting an agreement that minimizes harm to economic performance and welfare while maintaining and even enhancing the relative living standards of Coalition Employees, I view Carriers’ proposal as the most reasonable and productive among the total compensation packages presented to the PEB for consideration.
The wage growth provided by the UTU agreement is substantial. According to the President of the UTU: “In the 41-year history of the UTU, this wage increase is the highest in excess of the current and projected consumer price index.” As I emphasized earlier, it is an economic error to evaluate either the costs or the value of the UTU pattern agreement in terms of wages alone. And as I explain shortly, the UTU pattern agreement also contains reforms and incentives that will reduce the growth in health care costs relative to the status quo, in large part by strengthening deductibles, co-payments and other incentives of employees to make more cost-effective health care decisions.

Reflecting the current slow pace of economic growth in the US, and wage growth in particular, the wage increases in the Carriers’ proposals are back-loaded—rising from 2 percent in the first year to 3.5 percent in 2014 and 3 percent in 2015. This back-loading reflects the reasonable expectation that improving labor market conditions will increase aggregate wage growth in future years, thereby justifying similarly greater growth in the compensation of Coalition Employees. Note, however, that if wages for similarly skilled workers increase by less than 18.2 percent between 2010 (the base year for the agreement) and 2015, then the Carriers’ proposals would yield a substantial increase in the relative value of total compensation among Coalition Employees.

Nationwide, the costs of providing healthcare benefits are the most rapidly increasing component of employee compensation.\textsuperscript{61} For a given rate of overall productivity growth, this means that rising healthcare costs constrain growth in other forms of compensation, most particularly in wages. This issue has been recognized by both government policy makers and by private industry, with the result that evolving health care plan designs – whether public or private – now place greater emphasis on incentives for cost containment.\textsuperscript{62} Other things being equal, by better managing the costs of this element of compensation, competition in the marketplace will cause other elements of compensation, such as wages, to grow more rapidly.\textsuperscript{63}

The health and medical benefits established by the UTU pattern agreement are consistent with the evolution of healthcare plan design norms in US private industry,


\textsuperscript{63} Total compensation of employees rises with growth in economy-wide labor productivity. If the costs of providing health care are better controlled, then competition for workers will cause wages to rise by more than if health costs were not controlled.
which place greater emphasis on enhancing efficiency through improved incentives. Specifically, the UTU plan design changes are intended to encourage more efficient use of health care services while maintaining health outcomes for covered individuals. The resulting savings enable wage growth in the UTU agreement that will significantly improve the standard of living enjoyed by Coalition Employees by providing real wage growth of nearly 10% over the term of the agreements. This illustrates why it is important to evaluate potential agreements in terms of the total compensation that they offer employees, rather than on a component-by-component basis.

The proposed restructured health care plan compares favorably to benefit designs under the Patient Protection and Affordable Care Act. Were it maintained, the current plan design is likely to trigger the so-called “Cadillac Tax” on high-cost health plans in 2018. The proposed plan will avoid that outcome while meeting all the “essential benefits” requirement of the Act (and future likely agency regulations). It will also offer benefits more generous than the anticipated gold level plan designs of the forthcoming Health Care Exchanges.

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64 The UTU Agreement includes design changes for prescription drug coverage, such as re-aligned co-pay tiers, step therapy, prior authorization for drugs in certain therapeutic classes, and lower co-pays for generic use. These changes provide incentives to use less expensive brand and generic drugs where therapeutically appropriate. It also provides for less expensive mail order pharmacy use, via Medco, for maintenance drug prescriptions. The UTU Agreement also includes a modest deductible for in-network services and 15 percent in-network co-pay, with an annual out-of-pocket cap.

65 See Carriers’ Ex. 6 (Report of Dr. Evans) at 33.

VIII. CONCLUSION.

For all of the foregoing reasons, the PEB should recommend a settlement of the present labor dispute based upon the Carriers’ proposals. These proposals are predicated on the UTU pattern agreement, which provided significant improvements in the total compensation packages received by Coalition Employees and preserves their current preferred position from a compensation standpoint. Any increases in total compensation above the Carriers’ proposals would yield no discernible improvements in recruiting, retention or productivity of Coalition Employees, and would result in significant social harm to the Carriers, shippers, consumers and the broader U.S. economy.

The Coalitions’ arguments premised on the Carriers’ profitability and productivity improvements are unavailing. Neither Carrier profits nor industry productivity provides a legitimate economic justification for extraordinary increases in employee compensation. Optimal compensation levels must be determined based upon the interrelationship between supply and demand for labor in the relevant market, not the financial performance of individual employers. Moreover, productivity improvements in the entire labor market influence compensation levels for labor, not productivity in any particular industry or enterprise. Accordingly, the Coalitions have not offered any legitimate justification for their overreaching wage and benefit demands.
Respectfully submitted,

[Signature]

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Appendix: Qualifications

Dr. Murphy has a Ph.D. in economics from the University of Chicago and is the George J. Stigler Distinguished Service Professor of Economics in the Booth School of Business and Department of Economics at the University of Chicago. He specializes in microeconomics and price theory, and has made important contributions to many fields, including labor economics, employee compensation, health economics and income inequality. In 1997 he was awarded the John Bates Clark Medal from the American Economic Association, recognizing the most significant contributions to economic research by an economist under the age of 40. He is a Fellow of the Society of Labor Economists and of the Econometric Society, a Research Associate of the National Bureau of Economic Research and a Member of the American Academy of Arts and Sciences. His research has also earned the Von Neumann Prize, the Kenneth Arrow Award and the Eugene Garfield Award.