#### **REBUTTAL REPORT OF**

#### LOUIS S. THOMPSON

# DAMAGES SUFFERED BY FERROVIAS GUATEMALA AND RAILROAD DEVELOPMENT CORPORATION

March 17, 2011

# **REBUTTAL REPORT OF LOUIS S. THOMPSON**

1. My name is Louis S. Thompson. I previously provided a report to this Tribunal dated June 9, 2009 entitled "Evaluation of the Railroad Development Corporation/Ferrovías Guatemala Usufruct of Rail Right-of way and Equipment in Guatemala." My address and qualifications remain the same as in that report.

2. The purpose of this report is to revise and restate Claimant Railroad Development Corporation's (RDC) damages claim based on the information developed in the proceedings so far and certain additional considerations and information that has come to my attention since I submitted my previous report that have caused me to reconsider and refine certain aspects of my prior analysis. In addition, I will address and respond to certain arguments and criticisms made by Respondent's expert witness, Dr. Pablo T. Spiller, in his report dated October 4, 2010, entitled "Comments to RDC's Damage Assessment."

# I. ORGANIZATION OF THE STATEMENT

- 3. I have organized this report in six sections:
  - 1. Lost Investment Claim. This consists of all amounts directly and indirectly invested in Ferrovías Guatemala (FVG) by RDC and FVG's minority shareholders.
  - 2. **Shutdown Expenses Claim**. This section describes the amounts contributed by RDC to FVG in 2007 to wind down and terminate FVG's railway operations after the Lesivo Declaration.
  - 3. Lost Profits Claim. This claim is based on the net present value (NPV) of the estimated discounted cash flow (DCF) FVG would have earned over the remaining 42 years of the usufruct were it not for the Lesivo Declaration.
  - 4. **Response to Dr. Spiller's Criticisms.** In this section, I address and respond to the principal criticisms of my prior damages analysis and calculations made by Guatemala's damages expert, Dr. Pablo Spiller.
  - 5. **Total Revised Damages Claim**. This section describes the calculation of the net total claim based on an appropriate combination of the above values.
  - Deduction for Mitigation Efforts FVG Lease and Easement Income Collected After Lesivo Declaration. This section consists of a subtraction of the income collected by FVG since the Lesivo Declaration from pre-Lesivo leases and easements in order to mitigate its damages.

# II. SUMMARY OF PRIOR CLAIM

4. For the convenience of the Tribunal, in my original damages analysis dated June 9, 2009, I calculated Claimant's lost investment claim to be **US\$27,874,732**. This result was based on a total nominal investment of **US\$16,421,010** and a 10% interest rate to convert past

invested values into 2007 values, and included an amount of **US\$1,033,823** for shutdown expenses. I calculated Claimant's lost profits to be **US\$36,161,127**. This calculation was based on a 10% discount rate and included an allowance for estimated income taxes to be paid. There was no credit for lease and easement income collected after shutdown. The total claim was for **US\$64,035,859**.

# III. DISCUSSION OF THE REVISED CLAIM<sup>1</sup>

### A. Claim for Lost Investment

5. My revised calculation of RDC's damages claim for its Lost Investment can be found in Table One. The first part of the revised claim ("Investment Flows from FVG Accounts") is based on the direct investment flows into FVG from 1998-2006 as provided in "Compañia Desarrolladora Ferroviaria, S.A. Detailed Cash-Flow Statement from Financing Activities, 1998-2007" (Ex. C-145) and "Railroad Development Corporation Analysis of CODEFE Investment and Expenses, 1998-2007" (Ex. C-146). The total amount directly invested in FVG through 2006 was US\$16,717,144. This amount consists of both the amounts RDC directly invested in FVG (US\$12,800,682) and the amounts other shareholders invested in the company (US\$3,916,460). Based on my discussions with Claimant's legal counsel, it is my understanding that, as a legal matter, Claimant can recover in these proceedings both the amounts it invested in FVG and the amounts FVG's other shareholders invested.

6. Two additional components of Claimant's revised Lost Investment claim that were not included in my original calculation are (i) certain unreimbursed travel, consulting and legal expenses RDC incurred in connection with the FVG railway enterprise (US\$246,838); and (ii) allocated amounts of RDC personnel salaries attributable to FVG along with associated overhead costs (US\$2,061,342). The latter amounts are based upon a reasonable estimate of the percentage of time RDC's employees devoted to FVG-related business and activities in relation to other RDC investments and activities during the period from 1999-2007. These two additional investment components are set forth in the summary investment chart prepared by RDC<sup>2</sup> and are listed in **Table One** as "Additional RDC Expenses." These RDC expenses and labor costs were not charged to FVG and, therefore, do not appear on FVG's balance sheets but are clearly expenses which are properly a part of RDC's investment because they represent indirect investments by RDC into FVG, and were real costs that were incurred on FVG's behalf. As shown in **Table One**, the total amount directly invested in FVG by RDC and other shareholders through 2006 was US\$16,717,144, and the indirect RDC investment was

<sup>&</sup>lt;sup>1</sup> For the use of the Tribunal, I have submitted in Microsoft Excel format the RDC Damages Model that supports my analysis [Thompson Ex. 1]. This will allow the Tribunal to explore the impact of the assumptions and variables used on results. The model consists of six spreadsheets: (1) *Lost Investment* shows the lost investment and shutdown expense calculations; (2) *FVG Consolidated* shows the estimated consolidated FVG income from real estate and railway activities; (3) *FVG Operations* shows the estimated results of the Atlantic railway and real estate; (4) *Real Estate* shows the entire real estate portfolio; (5) *Lease Income Received* details the leasing income received by FVG after the Lesivo Declaration; and (6) *Total Claim* sets forth the total damages claim. The discount rate can be changed in cell B5 of the *Total Claim* sheet, and the accumulation/interest rate can be changed in cell B6 of the *Total Claim* sheet.

<sup>&</sup>lt;sup>2</sup> RDC Analysis of CODEFE Investment & Expenses, 1998-2007 (Ex. C-146).

US\$2,308,179, for a total US\$19,025,323. When brought up to the values as of the end of 2007, using the 12.9% interest rate developed by Dr. Shannon Pratt (*see* Pratt Section IV), the value of the Lost Investment totals **US\$42,943,553**.<sup>3</sup>

# B. Business Termination and Wind Down Costs

7. **Table One** also displays the direct and indirect investment in FVG by RDC in 2007 to wind down and terminate FVG's active business operations in an orderly way and establish whatever continuing functions that were needed to secure the usufruct assets and attempt to mitigate its damages. This required RDC to contribute an additional **US\$1,035,000** in direct investment in FVG and an additional **US\$315,429**, in travel expenses and allocated labor costs for a total of **US\$1,350,429**.

# C. Lost Profits Claim

# 1. Introduction

8. As discussed in my prior report, in its bid for the railway usufruct, FVG proposed to pursue a business plan based on railway activities in combination with development of the real estate assets included in the usufruct. The Government of Guatemala was well aware that the real estate activities were a critical underpinning of the business and included them in the usufruct specifically for that purpose.

9. Moreover, as also shown in my prior report, the most viable business strategy for FVG consisted of railway development on the Atlantic side of the country (Puerto Barrios and Puerto Santo Tomás to Guatemala City), combined with leasing and development of all real estate assets.<sup>4</sup> In fact, as FVG's business prospects were refined over the first few years, it became clear that real estate values were the predominant driver of income-based value and that the railway, while critical to the economic development of Guatemala, was a secondary asset for FVG (see Thompson, 2009, ¶ 56).<sup>5</sup>

10. It is also worthwhile emphasizing that my analysis established that immediate development of the Pacific side of the railway (called "Scenario Two" in my initial report) was not profitable and would actually reduce the value of the usufruct to FVG. I also pointed out, however, that the benefits of Scenario Two to the nation of Guatemala in reduced transport costs, highway wear and accidents and connectivity to Mexico would have justified a Government role in obtaining financing for the Pacific railway (Tecún Umán to Escuintla to Puerto Quetzal). In other words, Scenario Two was economically feasible for Guatemala, but it

<sup>&</sup>lt;sup>3</sup> In my previous report, the values were calculated as the End of Year (EOY) 2007. The calculation has been revised to calculate values as of EOY 2006 as that more accurately represents the timing of the Lesivo Declaration.

<sup>&</sup>lt;sup>4</sup> This was called "Scenario One" in my prior report.

<sup>&</sup>lt;sup>5</sup> The calculation that attempted to show the relative income of railway and real estate in my prior report was explicitly intended only to indicate the disparity in value of the two activities and was clearly described as an "approximate estimate." It was not intended to be an exact calculation of the value of either the real estate or railway standing alone, and should not be used as such (see Spiller, pg 28, fn. 56). In order to avoid confusion, I do not provide such a separation in this report.

was not, in the near future, financially profitable for FVG. Thus, the discussion below focuses on the Atlantic railway, but includes development of all real estate included in the usufruct.

# 2. Revised Real Estate Valuations

11. The details of the revisions to the calculation of real estate values are included in the rebuttal report of Robert MacSwain. In summary, as discussed by Mr. MacSwain, the significant changes from his prior real estate analysis are as follows:

- 1. The development schedule for a number of the properties was moved back in time to reflect a more conservative development schedule.
- 2. The income from the Chiquita/COBIGUA lease in Puerto Barrios was increased for 2007-2014 by using a rate of escalation based on the actual experience from 2002 to 2006 (11%). The rent under the COBIGUA lease is based directly on traffic in the port on which FVG received 2% of the gross revenues (and on which FEGUA received a like amount through 2014). The terms of the agreement specify that, commencing in March, 2015, FVG will receive the entire leasing income. After 2014, the income is escalated at the rate used by Dr. Spiller (3.47%).
- 3. The value of the income from right-of-way (ROW) easements was recalculated by Mr. MacSwain using corrected lengths by category (Main Line versus Rural Spurs). In addition, the Main ROW easement income was phased in over the first six years, while the Rural Spurs were deferred for four years and then phased in over five years. This provides a significantly more conservative estimate of ROW easement income.
- 4. Mr. MacSwain delayed the start dates for the leasing of most real estate parcels by five years from the start dates in his prior analysis.
- 5. For five properties -- Zacapa Retail and Industrial, El Rancho, Gerona Station and Escuintla -- Mr. MacSwain escalated the estimated leasing incomes by 10% every five years beginning in the tenth year after commencement. Gerona Parking was escalated every five years by 10%.

12. In addition to these adjustments, FVG's short term annual rental income was increased to US\$125,000 as a result of an analysis of the actual amounts collected by FVG prior to 2007.

13. The revised real estate valuation calculations developed by Mr. MacSwain are shown in the spreadsheet entitled "Real Estate." The results from this spreadsheet are summarized by year and then entered into the yearly results of the FVG Operations and FVG Consolidated spreadsheets in order to be incorporated into the Lost Profits calculations.

# 3. Revised Railway Operations Valuation

14. My model of the railway operations (spreadsheet "FVG Operations"), which projects the results of railway revenues and costs, is largely unchanged from my previous

analysis; however, I have now removed an allowance for income taxes from the calculation. I made this change because it is now my understanding that any taxes owed by Claimant will be based and paid on the total amount of the actual award in this arbitration and on the balance among its components (operating income, real estate and lost investment). One minor change from my previous analysis was correcting an error in projecting revenues from cross border operations at Tecún Umán (escalation was applied beginning in 2007 rather than in 2008).

# 4. Consolidated Lost Profits Calculation

15. As in my prior analysis, the spreadsheet "FVG Consolidated" adds together the results of the rail operations and real estate to develop the consolidated claim for lost income. Aside from the individual modifications to the prior real estate values and the cost and escalation factors in rail operations, this spreadsheet has one additional change: it contains an item amortizing the accumulated value (including the interest which brought the value up to 2006) of the lost investment over the remaining 42 years of the usufruct. For the reasons discussed in Dr. Pratt's report (Pratt Section IV), this was done in order to avoid any possible double-counting of damages when the total damages claim is computed.

# 5. Revised Lost Profits Claim

16. Just as in my prior analysis, the revised value of the Lost Profits claim has been computed using discounted cash flow (DCF), a method that Dr. Spiller agrees is the "gold standard of the methods used to determine fair market value." (Spiller, pg 13, paragraph 24). Although Dr. Spiller disagrees with some of the forecasts and coefficients used in my DCF model (and these will be discussed below), he does not argue with the approach or the structure of the model used.

17. The model projects the operations of FVG over the 42 years that were remaining in the usufruct, calculates a net cash flow (cash income minus cash expenditures) and amortization of the investment component of the claim for each year, calculates a net present value (NPV) for each cash flow using a weighted average cost of capital (often called a discount rate) and then accumulates the NPVs to yield the total DCF value of the enterprise. As discussed above, the model does not separate values for real estate versus railway.

18. The results of the overall lost profits calculation can be found in the FVG Consolidated spreadsheet. Using a weighted average cost of capital of 12.9% as developed by Dr. Pratt, the consolidated pre-income tax Lost Cash Flow/Profits Claim for the Atlantic railway and real estate (previously called Scenario One in my earlier statement) is US\$22,188,540.

# D. Response to Dr. Spiller's Criticisms

19. Dr. Spiller's criticisms of my prior calculation of the railway component of the Lost Cash Flow/Profits claim fall into three main categories: 1) the cost of capital used to calculate

the DCF NPV – 10% – was too low; 2) my traffic forecasts for the railway were too optimistic; and 3) I did not provide enough investment to allow for potential capacity constraints.<sup>6</sup>

20. Regarding Dr. Spiller's first criticism, Dr. Pratt has calculated that a more appropriate weighted average cost of capital should be slightly higher, 12.9%, and I defer to his more experienced judgment on this issue. As to Dr. Spiller's criticisms that my traffic forecasts are too optimistic and do not allow for potential capacity constraints, I do not believe Dr. Spiller is correct on either front and, even if he were, incorporation of his criticisms into my railway projections would not make a significant difference in the claim valuation.

21. It is not surprising that experts will reach somewhat different conclusions in the projections over 42 years in a small, developing country like Guatemala. It is also clear, as noted in my prior report, that the results of any projection can be nit-picked on the details. However, I believe that for every factor or parameter in my projections that is arguably overly optimistic, there are many others that are overly pessimistic. The net result, I believe, is as good as is reasonably possible under the circumstances.

22. My traffic forecasts are a good example of this dynamic. In his analysis of my traffic forecast for FVG, Dr. Spiller argues that I have been far too optimistic. In order to quantify this difference, **Table Two** shows the growth forecasts I employed in comparison to those of Dr. Spiller. **Table Two** clearly shows that the growth rates I used for both containers and steel are faster than those of Dr. Spiller in the early years, but actually fall **below** those of Dr. Spiller toward the end of the usufruct period. Table Two also shows that the growth rate in tariffs that I used was **lower** than that of Dr. Spiller for every year except 2009 and 2010, where he was able to use actual data, whereas my model is based on data forecast as of the end of 2006 when the Declaration of Lesivo was issued.<sup>7</sup> The net result is shown in Figure One, which displays the revenue forecasts by commodity group.

23. The significant difference between my estimates and Dr. Spiller's estimates is in container traffic, where my projection is slightly greater than twice that of Dr. Spiller by the end of the usufruct in 2048. This difference is largely due to my use of a 15% growth rate between 2007 through 2017, 7% from 2018 to 2027, 4% from 2028 to 2037, and 2% thereafter. By contrast, Dr. Spiller used 7.5% through 2011 and then 3.5% (slightly rounded) from 2012 through the end of the usufruct. Dr. Spiller's estimates are more conservative, but I do not believe they are more reasonable.

24. **Table Three** shows that FVG's annual percentage growth in container tonnage from 2000 to 2005 was substantially **greater** than 15%, actually averaging **40.5%** over the period, and was equal to or greater than 15% in every individual year after 2000.<sup>8</sup> Of course, nothing grows indefinitely at over 40% compounded annually, but it does not seem at all unreasonable to project a 15% growth for the initial 10 years, especially since FVG started from

<sup>&</sup>lt;sup>6</sup> Summarized in Dr. Spiller's report at ¶ 59.

<sup>&</sup>lt;sup>7</sup> LECG-14.

<sup>&</sup>lt;sup>8</sup> I have excluded 2006 because the Lesivo Declaration substantially affected traffic for that year.

such a low base. Later on, growth would taper off, as I have projected, but I see no reason why Dr. Spiller's lower estimates are inherently any better than the ones I have provided.

25. I have put this issue into a different perspective in **Table Four**. **Table Four** begins with the actual container and total traffic through Puerto Barrios and Puerto Santo Tomás from 1996 through 2006, and shows that the overall traffic was growing strongly, with container traffic growing faster than the overall trend. As a result, the ratio of container traffic to total traffic in the two ports was increasing.

26. **Table Four** next estimates the container tonnage in the two ports through the life of the usufruct using Dr. Spiller's growth rate for all traffic.<sup>9</sup> I added to Table Four an extrapolation of the ratio of container traffic based on the past trends in this percentage and an assumption that the percentage would taper off eventually after reaching 65%. This permitted an estimate of the total tonnage through the ports and, through subtraction, an estimate of the non-container traffic (steel and other commodities).

27. I have compared the FVG tonnage developed in my forecasts on **Table Four**. The reason for using Dr. Spiller's estimate for total tonnage and my estimates for FVG tonnage is to show what the maximum percentage of FVG traffic in the ports might be. As Table Four shows, even in this conservative approach, FVG's share of the container tonnage through the ports never exceeds 8.7%, and FVG's share of non-container tonnage never exceeds 5.6%. Neither of these percentages seems unduly high given the advantages that FVG could have offered on import and export traffic to Guatemala City.

28. I further emphasize that I only attempted to forecast **two** commodity groups: containers and steel. This limitation is certainly too conservative, because there were a number of other potential commodities (discussed below) that I did not include. In this sense, the steel forecasts should be seen as a proxy not only for steel, but also for other markets that FVG had not yet entered, but had intended to enter, as shown its business plan submitted during the bidding process.

29. The potential importance of this last point can be seen in **Table Five**, where I have displayed the results of two significant Guatemalan railway traffic analyses, one done for the Government of Guatemala and the other done for FEGUA. The first demand forecast, "Estudio Plan Maestro Nacional de Transporte," was performed in 1992 for the Government by Consorcio RHLG.<sup>10</sup> The second document, "informe resumen de investigacion del POTENCIAL MERCADO FERROVIARIO," is a report prepared for FEGUA by Price Waterhouse and ASI Information Resources and is dated November, 1995.<sup>11</sup>

30. I draw several conclusions from this Table. First, there were many commodities other than iron/steel and containers that would have made up total railway traffic demand. In

<sup>&</sup>lt;sup>9</sup> I note that Dr. Spiller used the same growth rate for containers as for other commodities, an assumption that has no apparent basis. I would normally expect container traffic to grow faster than other traffic as it had done in the past.

<sup>&</sup>lt;sup>10</sup> Thompson Ex. 2.

<sup>&</sup>lt;sup>11</sup> Thompson Ex. 3.

fact, the Estudio Plan's estimates showed iron/steel and containers making up only 41% of demand, with the rest distributed over fuels, wheat, cement and bananas, among others.<sup>12</sup> The FEGUA study supports the conclusion that demand would be distributed over many commodities other than steel/iron and containers, although it does not permit a clear estimate of how much of the total demand would be containerized as opposed to bulk.<sup>13</sup> An additional conclusion emerges from both studies: according to studies done for the Government, FVG had, by 2005, only achieved around 4% of the total traffic that Government studies had forecast. Juxtaposing these studies with my demand forecasts, even by 2048, FVG would achieve only half of the railway market foreseen for the year 2000 in the Government-supported studies.

I acknowledge that these studies were done before award of the usufruct, and 31. that they are not fully consistent with each other, though the total tonnage estimated is roughly consistent given the range of error in forecasts of this sort. I also agree that not all of the traffic shown would have been available to FVG if it served only Guatemala City to the Atlantic ports: sugar, for example, lies mostly on the Pacific side, and some portion of many of the other commodities would have used Puerto Quetzal rather than Atlantic ports. With this said, however, it is also important to note that the forecasts in Table Five were prepared before Guatemala had joined CAFTA, with all the positive prospects that CAFTA offered for increased trade with the U.S. and other Central American countries. If the earlier Government-supported studies had taken CAFTA into account, their forecasts might well have been even higher.

Thus, despite the discouraging traffic experience that resulted after the Lesivo 32. Declaration, there are a number of reasons to conclude that my long-term traffic forecasts are reasonable, even conservative.

Furthermore, this conclusion applies not only on the demand side. In a number 33. of cases, the cost parameters in my model are quite conservative. For example, because of the conservative assumptions I made about the cost of fuel and because I did not assume any increase in the efficiency of fuel usage, the cost of fuel rises from about 20% of operating cost in 2007 to something over 50% in the later years of the usufruct period. FVG's fuel efficiency between 2001 and 2006 ranged from 100 to 135 ton-km/gallon of fuel (Table Six), and this was not projected to increase significantly afterwards.

For comparison, the fuel efficiency (measured in ton-km/gallon) of the U.S. Class 34. I railroad industry increased from 269 to 701 in the 44 year period from 1955 through 2009, and increased from 343 to 701 in the 29 year period since 1980.<sup>14</sup> The cost of fuel in 2009 was about 20 percent of the operating cost of the U.S. Class I railroads.<sup>15</sup> While it is true that FVG's fuel efficiency would always be somewhat below U.S. practice because smaller trains and lower axle loads increase fuel consumption, there was significant room for improvement and, long before fuel costs at FVG reached such high percentages of operating costs, FVG would have rehabilitated and upgraded the fleet of existing locomotives available to it. I will

<sup>&</sup>lt;sup>12</sup> See Table Five.

<sup>&</sup>lt;sup>13</sup> See generally Thompson Ex. 3.

<sup>&</sup>lt;sup>14</sup> Thompson Ex. 4, Association of American Railroads, "Railroad Facts 2010 Edition," pg. 40.

<sup>&</sup>lt;sup>15</sup> Thompson Ex. 5, U.S. Surface Transportation Board, "Statistics of Class I Railroads 2009"

return to this issue below in discussing the need for additional capacity as traffic grows; but, I want to emphasize that fully defensible assumptions using more favorable fuel efficiency parameters would have a positive effect on the lost profits claim.

35. Probably the most significant conclusion is that **Dr. Spiller's arguments about the railway section of the model, even if valid, do not really affect the lost profits claim significantly**. I have re-run the model using his assumptions about traffic and price growth while holding all other factors constant.<sup>16</sup> Under these assumptions, the Lost Cash Flow/Profits claim would be reduced by slightly over US\$930,000 from my calculated value of **US\$22,188,540**. In other words, with regard to the railway part of the model, one could make a large number of arguments about individual parameters and, depending on the assumptions, the value of the railway could be adjusted up or down somewhat. I have attempted to develop a mid-range of the value of the Lost Cash Flow/Profits claim including assumptions about costs and traffic that I think are reasonable. Even if I adopt Dr. Spiller's assumptions for slower growth in railway traffic and revenues, the effect on the Lost Cash Flow/Profits claim is small – well within the range of variation that could easily be produced by reasonable changes in the input parameters.

36. I now want to address Dr. Spiller's assertion that the capacity of FVG, both for track and for locomotives, would have to be increased over the life of the usufruct in order to carry the growing traffic tonnage I have predicted for FVG, especially in the later years of the usufruct. He also asserts that the need for added capacity was not addressed explicitly in the model. While Dr. Spiller's assertions are true in both cases, they ultimately are not significant.

37. I did not add explicit consideration of future capacity directly in my model because I did not want to make an already complicated model even more so. It would have been possible to add projections of track and locomotive investments in the future, along with assumptions about related cost savings; but this would simply have added another layer of parameters to argue about. Instead, what my model does is allow the expenses for track and rolling stock to escalate much faster than other expenses in order to generate more funding for capacity. Specifically, as opposed to a 2% rate of escalation for most expenses, track repair and materials were escalated at 6% annually, while rolling stock repairs were escalated at 5% annually and rolling stock maintenance was escalated at 6% annually. This means that, over the life of the usufruct, rolling stock maintenance and repair would accumulate to over US\$13.7 million during the remaining 42 years, which would certainly have financed a significant share (though possibly not all) of added rolling stock capacity needed. Given that, as discussed above, savings in energy alone would have financed (at an acceptable rate of return) the repair and upgrading of existing locomotives, there is no reason to expect that adding the rolling stock capacity and upgrading investment not explicitly included in the model would have reduced the lost profits value of the railway. In fact, depending on the assumptions about increased fuel efficiency and the timing of the replacement, it might well increase the value of the lost profits claim.

<sup>&</sup>lt;sup>16</sup> Thompson Ex. 6, RDC Damages Model incorporating Spiller railway operations assumptions.

38. Similarly, the track repair and maintenance accounts would have accumulated to over US\$33.3 million. Against this would be arrayed the clear need to strengthen the FVG track, especially in sharp curves where increased traffic with six-axle locomotives would increase track wear and increase the threat of derailments. I cannot say for certain that the US\$33.3 million would be sufficient to generate enough investment over and above the maintenance needs, and it is possible that added investment would be needed. One obvious additional immediate source of funds for track investment would have been the FEGUA payments between 2007 and 2025 into the Trust Fund, which I have estimated at US\$8.9 million. Any additional track investment would be postponed sufficiently far into the future, and would have a rate of return high enough that it would not significantly affect the value of the NPV of the Lost Cash Flow/Profits claim.

39. Overall, while I conclude that Dr. Spiller is correct in suggesting that added capacity would be needed and that it is not explicitly addressed in my model, it has been indirectly addressed in a way that, along with other considerations, adequately reflects the value of the lost profits of the railway.

40. Dr. Spiller also argues that the total damages claim asserted in my June, 2009 analysis was erroneous because of "double counting." However, as discussed above, per Dr. Pratt's analysis, I have addressed this issue in my revised analysis by amortizing the total accumulated value of the amounts invested in FVG over the remaining 42 years of the usufruct against the income of the company.

# E. Total Revised Damages Claim

41. Claimant's revised total damages claim is shown in **Table Eight**, and amounts to **US\$66,482,522**.

# F. Deduction For FVG Lease and Easement Income Collected After Lesivo Declaration

42. Although FVG's railway operations rapidly declined and eventually ceased after the Lesivo Declaration, FVG has continued to collect income from four long-term right-of-way easement agreements and one long-term lease (COBIGUA) and other short-term rental activities. This mitigation income should rightly be deducted from the value of the claim.

43. **Table Seven** shows the lease and easement income that FVG has received from 2007 through the end of 2010. The total amount of income is US\$2,704,310. Deduction of this amount from the revised damages claim yields a total revised net damages claim of **US\$63,778,212**, as shown in **Table Eight**.

Respectfully submitted, d 0

Louis S. Thompson

March 17, 2011

Attachments: (1) Documents Considered; (2) Tables 1-8; (3) Figure 1

#### **Documents Considered**

Pablo T. Spiller, "Comments to RDC's Damage Assessment," with Appendices and Referenced Exhibits, October 4, 2010

Robert F. MacSwain Rebuttal Report

Shannon P. Pratt, "Opinion on Cost of Capital and Other Issues in the Matter of Railroad Development Corporation v. Republic of Guatemala," March 9, 2011

Compañia Desarrolladora Ferroviaria, S.A. Detailed Cash-Flow Statement from Financing Activities, 1998-2007

Railroad Development Corporation Analysis of CODEFE Investment and Expenses, 1998-2007

Consorcio RHLG, "Estudio Plan Maestro Nacional de Transporte," 1992 (partial)

Price Waterhouse and ASI Information Resources, "informe resumen de investigacion del POTENCIAL MERCADO FERROVIARIO," November 1995 (partial)

Association of American Railroads (AAR), "Railroad Facts 2010 Edition," Washington, DC

U.S. Surface Transportation Board, "Statistics of Class I Railroads 2009," Washington, DC