

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

October 30, 2009

Robert J. Easton Chief Financial Officer Providence and Worcester Railroad Company 75 Hammond Street Worcester, MA 01610

Re: Providence and Worcester Railroad Company

Form 10-K for the fiscal year ended December 31, 2008 Form 10-Q for the quarterly period ended June 30, 2009

File No. 000-16704

Dear Mr. Easton:

We have reviewed the above referenced filings and have the following comments. Some of our comments request changes to disclosure in future filings. If you disagree, we will consider your explanation as to why a revision is unnecessary. Please be as detailed as necessary in your explanation. Our comments may also request information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

The purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects and welcome any questions. Feel free to call us at the telephone numbers listed at the end of this letter.

Please file your response to our comments via EDGAR, under the label "corresp," within ten business days from the date of this letter.

Form 10-K for the fiscal year ended December 31, 2008

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page II-4</u>

1. Please present a table of contractual obligations for amounts due under specified contractual obligations, including but not limited to the agreement with GATX, as of the latest fiscal year end balance sheet as required by FR 67.

Notes 1 and 3 – Property and Equipment, pages II-18 and II-22

2. We note that property and equipment comprise approximately 81% of your total consolidated assets with track structures being approximately 65% of the gross cost of total property and equipment. In addition, you disclose that track structures are being depreciated over a period as long as 67 years. As it is unclear how much of track structures is being depreciated over 67 years, please tell us the amount of total track structures being depreciated over this period as well as the average depreciation period (in percentage or years) being used for the total track structures asset in each of the last three fiscal years.

In addition, we note a significant number of other railroad operators using estimated lives of rail / track structures that generally approximate a useful life of 25-40 yrs or an average depreciation rate that approximates 3% per year (equivalent to an approximate 35 year life). As other railroad operators use periods that are significantly less than your 67 year estimated life, please also tell us in complete and clear detail why you believe a 67 year depreciation period being currently being used is appropriate as well as why you believe that your circumstances provide for an estimated life significantly higher than your peers. In connection with this response, please also re-evaluate whether your current depreciation period being used should be revised under the circumstances.

Notwithstanding the above, we believe the MD&A and financial statement notes can be significantly enhanced with additional disclosures with respect to property and equipment because of its significance as follows:

- Significant Accounting Policy disclosure describing (i) what types of costs are capitalized; (ii) how often you conduct studies of depreciation rates; (iii) how changes in estimated useful lives of depreciation are treated in the financial statements; (iv) how estimated historical installment costs from gross assets and accumulated depreciation are removed upon replacement of track structures; and (v) how and what constitutes an abnormal retirement of track structure assets, if any;
- Critical Accounting Estimate disclosure related to depreciation studies including their relevance to any assumptions that normally retired property is fully depreciated upon replacement as well as how the historical costs attributable to retired or replaced assets are estimated; and
- Liquidity and capital resources discussion regarding actual replacement activity on track structures.

Please advise and revise, accordingly.

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Note 11. GATX Corporation, page II-26

3. Please tell us and disclose how you accounted for the sale-leaseback of the 72 mill gondolas with GATX, including whether any gain or loss was recognized, how any amount was determined, and the timing of the recognition of any amount.

Part II, page 1

Item 9A.(T). Controls and Procedures, page 27

4. We note that you did not include a statement explaining the absence of an attestation report of the company's registered public accounting firm. In future filings, please include such a statement pursuant to Item 308T(a)(4) of Regulation S-K.

Part IV, page 1

Exhibits Index, page 1

5. Please file or incorporate by reference the Common Stock Purchase Agreement and the Exclusive Railcar Supply Agreement with GATX Corporation with your next periodic report.

Exhibits 31.1 and 31.2

6. We note that you have inappropriately modified the content of your certifications. Please amend your filing to provide the exact form of certification required by Item 601(b)(31) of Regulation S-K.

Form 10-Q for the quarterly period ended June 30, 2009

Note 5. Other Income, page 8

7. Please tell us and disclose the circumstances resulting in the receipt of the \$950,000 settlement of "certain legal proceedings and the granting of permanent easement."

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in your filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in its filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Theresa Messinese at 202-551-3307 or Joe Foti for questions regarding the financial statements and related matters, Tarik Gause at 202-551-3528 for questions regarding Comments 4,5, and 6, or the undersigned at 202-551-3380 with any other questions.

Sincerely,

Lyn Shenk Branch Chief