

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

DIVISION OF CORPORATION FINANCE

Mail Stop 3561

April 28, 2010

Mark A. DiBlasi President and Chief Executive Officer Roadrunner Transportation Services Holdings, Inc. 4900 S. Pennsylvania Ave. Cudahy, Wisconsin 53110

Re: Roadrunner Transportation Systems, Inc. Amendment No. 5 to Registration Statement on Form S-1 File No. 333-152504 Filed on April 23, 2010

Dear Mr. DiBlasi:

We have reviewed your responses to the comments in our letter dated April 19, 2010 and have the following additional comments. Please note that all page references below correspond to the marked version of your filing provided by counsel.

Prospectus 1 1

Prospectus Summary, page 1

1. We note your response to our prior comment 2 and added disclosure, and reissue. Please further expand your balancing disclosure to more fully describe how the weakened economy and certain negative trends in your industry impacted your company in 2009.

Our Competitive Strengths, page 2

2. We note your response to our prior comment 3 and reissue as you did not provide a more balanced picture of your business and industry in general, including challenges you face as the less-than-truckload industry experienced industry decreases in 2009.

The Offering, page 6

3. See the sentence that describes the number of common stock to be outstanding after the offering. To facilitate the readers' understanding, please provide a table under the bullet points that reconciles the 29,535,460 shares of common stock to be outstanding after the offering with the total number of common shares outstanding as of the most recent balance sheet included in the filing. We suggest that you include information comparable to that provided to the staff in the two column "Share Count" presentation in Appendix I of your most recent correspondence.

Capitalization Table, page 20

- 4. Refer to the first bullet. Please revise to indicate that the actual column shown in the table gives retroactive effect solely to the conversion of all of your shares of Class A common stock, Class B common stock, and Series B convertible preferred stock at a conversion rate of 149.314 for 1 basis (in the form of a stock split). Further, expand the second bullet to indicate that in connection with consummation of the IPO, all such shares will be converted into a single class of new common stock.
- 5. Given the complexity of the transactions and in view of the fact that you will not be providing pro forma financial information in connection with the GTS acquisition, please expand this disclosure to also include the related detailed schedules provided to the staff in Appendix I of your most recent correspondence. We refer to the schedules for total debt, additional paid-in capital and retained deficit. This may enable you to simplify and/or cross-reference in the accompanying footnotes.
- 6. In addition, please refer to the line item titled "Newly issued common stock." With respect to the number of shares issued and outstanding as adjusted for the offering and the number of shares issued and outstanding as adjusted for the offering and the GTS merger, please cross-reference or reconcile to the figures in the table of shares now presented under "The Offering" on page 6.

Dilution Table, page 22

7. Please consider revising the beginning of the first paragraph to disclose, if true, that your actual net tangible book value as of December 31, 2009 (determined as total tangible assets, which excludes goodwill of \$210.8 million and other intangible assets of \$1.4 million, less total liabilities) was a deficit of \$(92.5) million or \$(5.38) per share of common stock. Also, disclose that for purposes of dilution, and as the GTS merger is conditioned upon the IPO, you have further assumed that the GTS merger has occurred and has had the impact of an additional \$(15.5) million net tangible book

deficit resulting in a pro forma net tangible book deficit as of December 31, 2009 of (108.0) million or (5.33) per share.

New Credit Facility, page 31

8. We note your response to our prior comment 31. Please tell us whether letters of commitment have been entered into in connection with the new credit facility. If so, please file such agreements as exhibits to the registration statement.

Business, page 35

9. Refer to our prior comment 1. Please revise the last sentence to clearly refer to your net income in addition to operating income for the 2008 and 2009 periods. We also note similar disclosure throughout the Business section. Revise your disclosure throughout the prospectus.

Third-Party Logistics, page 36

10. We note the disclosure that despite a downturn in 2009, the third-party logistics sector enjoyed significant growth during two prior decades. Revise the disclosure to remove inferences that the third-party logistics sector may enter into periods of significant growth again because you cannot provide assurances as to such growth.

Our Growth Strategies, page 41

11. See the paragraph beginning with "Continue Generating Operating Improvements..." Please delete the sentence "Had these improvements been implemented at the beginning of 2009...additional operating income of approximately \$5.3 million during 2009" as such is not factually supportable.

Junior Subordinated Notes, page 68

12. Revise to identify the name of the Baird Affiliate.

Financial Statements

Report of Independent Registered Public Accounting Firm, page F-2

13. Prior to effectiveness of the Form S-1 Registration Statement, please include an unrestricted auditors' report in the filing, along with an unrestricted Exhibit 23 of the accountants' consent.

Note 7. Stockholders' Investment, page F-14

14. See the last paragraph under the heading of Common Stock pertaining to the March 2007 increase in authorized capital stock. Please check to ensure that all of your changes made are reflective of the 149.314 for 1 conversion ratio. For example, we noted that pre-conversion authorize capital stock was 305,000 which should have resulted in post-conversion shares of 45.5 million. Please advise or revise.

Note 16. Subsequent Event, page F-20

15. See the discussion of the pro forma balance sheet. Please clarify that all of the outstanding 12,000 pre-split (or 2,082,766 post-split) shares of Series B preferred stock will be converted into newly issued common stock, and that such post-split shares reflect an additional 290,998 shares representing accrued but unpaid dividends as of December 31, 2009 that also will be converted into newly issued common stock.

Part II. Recent Sales of Unregistered Securities, page II-2

16. Please explain to us how Rule 701 would apply to the GTS employees' receipt of your options as part of the GTS merger.

Age of Financial Statements

17. Please consider the financial statement updating requirements set forth in Rule 3-12 of Regulation S-X.

Consents of Independent Registered Public Accounting Firm

 Amendments should contain currently dated accountants' consents. Manually signed consents should be kept on file for five years. Reference is made to Rule 402 of Regulation C.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert this action 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 connection with our review of your filing or in response to our comments on your filing.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Beverly Singleton at (202) 551-3328 or Margery Reich at (202) 551-3347, if you have questions regarding comments on the financial statements and related matters. Please contact Lauren Nguyen at (202) 551-3642 or me at (202) 551-3412 with any other questions.

Sincerely,

Amanda Ravitz Branch Chief -- Legal

cc: Bruce E. Macdonough, Esq. Brandon F. Lombardi, Esq. Greenberg Traurig, LLP Via facsimile (602) 445-8100