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Ms. Cynthia Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, S.W.
Washington, DC 20423-0001

Re: *Application of the National Railroad Passenger Corporation under 49 U.S.C.
§ 24308(a) – Canadian National Railway Company (Docket No. FD 35743)*

Dear Ms. Brown:

Enclosed are the Highly Confidential version of the Fifth Motion of Illinois Central Railroad Company and Grand Trunk Western Railroad Company to Compel Responses to Discovery Requests, which is being submitted under seal in accordance with the Protective Order entered by the Board in this proceeding on December 16, 2013, as well as a Public version of that Motion, to be filed on the public record of this proceeding.

Very truly yours,



Simon A. Steel

Counsel for Illinois Central Railroad Company
and Grand Trunk Western Railroad Company

cc: Administrative Law Judge John P. Dring
Reed W. Neuman, Esquire
Kevin M. Sheys, Esquire

PUBLIC VERSION

BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. FD 35743

APPLICATION OF THE NATIONAL RAILROAD PASSENGER CORPORATION UNDER
49 U.S.C. § 24308(a) – CANADIAN NATIONAL RAILWAY COMPANY

**FIFTH MOTION OF ILLINOIS CENTRAL RAILROAD COMPANY
AND GRAND TRUNK WESTERN RAILROAD COMPANY
TO COMPEL RESPONSES TO DISCOVERY REQUESTS**

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December 12, 2016

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TO COMPEL RESPONSES TO DISCOVERY REQUESTS**

Pursuant to 49 C.F.R. § 1114.31(a), Illinois Central Railroad Company (“IC”) and Grand Trunk Western Railroad Company (“GTW”) (together, “CN”) move for an order compelling National Railroad Passenger Corporation (“Amtrak”) to provide a complete response to CN’s Interrogatory No. 8 in CN’s Second Set of Discovery Requests (attached hereto as Exhibit 1). How Amtrak provides the responsive information is, in principle, up to Amtrak, so long as it promptly provides a complete response. CN has specified to Amtrak the significant responsive information missing from Amtrak’s interrogatory response, and offered to accept that information in narrative form. However, CN believes that the best, most efficient, and least burdensome way for Amtrak to supplement its response would be to make available to CN four documents: the “SDG Tool” (described below), plus [REDACTED]

[REDACTED].¹

¹ This motion is directed to Administrative Law Judge John P. Dring of the Federal Energy Regulatory Commission (FERC), whom the Board assigned and authorized on April 30, 2015, to entertain and rule upon discovery matters and to resolve all disputes concerning discovery in this proceeding.

The interrogatory at issue addresses a question of obvious significance for this case, particularly for the Board’s evaluation of the proposal Amtrak made in its opening statements for a new penalties and performance scheme tied to ASOTP (All-Stations On-Time Performance):

What are the effects, in terms of Amtrak ridership, revenues, and costs, of different levels of ASOTP on the Amtrak services that run on CN’s lines (the “Relevant Services”)? Amtrak has apparently investigated that issue systematically once in the last eight years – through complementary studies by its consultants, Steer Davies Gleave (“SDG”), completed in May 2015. According to the limited information Amtrak has provided, [REDACTED] the SDG Tool, which contains detailed information and analysis on the Relevant Services. Yet Amtrak’s response to Interrogatory No. 8 (comprising Exhibits 2-5 hereto, described below) provides barely any information pertaining to the Relevant Services, and Amtrak has refused to supplement it – either by providing information from the Tool in narrative form or by providing the Tool itself.

BACKGROUND

In August 2013, upon Amtrak’s application, under 49 U.S.C. § 24308(a), the Board initiated this proceeding to establish reasonable terms and compensation for Amtrak’s continued use of CN’s rail lines, facilities, and services for the several Amtrak trains that CN hosts in whole or in part – the “Relevant Services.” After a lengthy discovery period, during which multiple CN motions to compel were necessary to force Amtrak to produce relevant information, the parties filed simultaneous opening submissions on September 4, 2015. One of the main issues addressed in those submissions is how performance payments and penalties should be determined under the CN-Amtrak operating agreement.² The parties generally agree that

² See generally CN and Amtrak’s Opening Submissions; see also Amtrak’s Statement of

performance payments and penalties should continue to be assessed based on some measure of CN's contribution to the on-time performance of, and/or delays to, the Relevant Services, but beyond that they disagree sharply.

CN advocates a modified version of the current system, which adjudges a train "on-time" if it is deemed to have arrived at its checkpoints (endpoints on CN lines and, for one service, also an intermediate checkpoint) by the scheduled time or within an agreed "tolerance" period after taking into account "relief items" (delays for which the parties have contractually agreed CN is not responsible), and then provides for performance payments insofar as on-time performance thus defined exceeds 80% and for penalties insofar as it falls short of 70%.

In contrast, Amtrak advocates an untested new system based on a performance measure – ASOTP³ – and a delineation of CN responsibility for delays based on Amtrak's own definition of "host-responsible delays" and a related "HRD" metric. Amtrak's expert purports to define a correlation between HRD and ASOTP for each Relevant Service, and Amtrak proposes penalties whenever HRD is above, and performance payments whenever HRD is below, the HRD level he equates to 80% ASOTP. *See generally* Exh. 6 (Sacks Verified Statement (Sept. 4, 2015) ("Sacks V.S.")). Amtrak's ASOTP-based proposal would radically alter the parties' contractual relationship by imposing substantial penalties at performance levels that currently earn CN positive performance payments. If implemented retroactive to the beginning of this proceeding (in August 2013), as Amtrak seeks, it would cost CN tens of millions of dollars, [REDACTED]

Disputed Issues ¶¶ 1, 2 (Oct. 24, 2013); CN's Statement of Disputed Issues ¶ 2 (Oct. 24, 2013).

³ All Stations On-Time Performance, or ASOTP, is defined by Amtrak as the percentage of train departure or arrival times (departure time from origin station and arrival time at all other stations) at all of a train's stations that take place within 15 minutes of the time in the public schedule.

[REDACTED]

[REDACTED]

After the parties filed their opening submissions, on October 7, 2015, the Board granted Amtrak's motion to modify the schedule for this proceeding to provide for a second round of discovery before rebuttal submissions. Each party served a second round of discovery requests in October 2015. Amtrak's included 16 document requests and 13 interrogatories; CN's included 16 document requests and 9 interrogatories, including the subject of this motion: Interrogatory No. 8, which requests Amtrak to:

Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the value of ASOTP, including without limitation the effect of changes in ASOTP on Amtrak revenues, ridership, public benefits, or costs associated with the Relevant Services.⁴

Read in conjunction with the accompanying definitions, Interrogatory No. 8 seeks "a full and complete narrative account" of the "studies or analyses" it encompasses, including their "findings, conclusions or recommendations," "without omission of any relevant facts, whether deemed material by you or not, and without omission of information that could lead to relevant facts."⁵

Amtrak's initial response to CN's discovery requests, provided on October 30, 2015, included a boilerplate objection to Interrogatory No. 8 as "overbroad and unduly burdensome," and an undertaking to "provide responsive information, which may include responsive, non-privileged documents."⁶ Amtrak provided a supplemental response on August 25, 2016, [REDACTED]

⁴ Exh. 1 (CN's Requests) (served Oct. 14, 2015), at 13 (Interrogatory No. 8).

⁵ Exh. 1, at 5 (defining "Describe with particularity"), 6 (defining "Identify").

⁶ See Exh. 2 (Amtrak's initial Responses) (served Oct. 30, 2015), at 22-23.

Amtrak eventually produced the SDG reports in an acceptable form on November 30, 2016.⁸ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **The reports**

7

8

themselves contain no information whatsoever about the findings and results of SDG’s investigation of the relationship between OTP and ridership, revenue, [REDACTED] specific to any of the Relevant Services.

[REDACTED] CN believes that the “full and complete” account it requested in Interrogatory No. 8 requires either (i) substantial additional information pertaining to the Relevant Service that is available in or can be generated from the Tool and its supporting information, or (ii) access to the Tool and supporting documents. CN has requested that Amtrak either provide the necessary information itself – CN provided Amtrak a list of specific information for that purpose – or provide CN with access to [REDACTED] the Tool, and supporting documents.⁹ CN believes the best way for Amtrak to minimize further delay and burden to itself and to ensure a complete response would be to provide the Tool and its supporting documents, but CN left the mode of compliance up to Amtrak, so long as compliance is complete. Amtrak, however, has refused to provide any further information in either form.¹⁰

In sum, less than two years ago, Amtrak commissioned a major study of the relationship between ASOTP and Amtrak’s ridership and finances for, among others, the Relevant Services. That relationship is important in this proceeding because Amtrak’s Opening Submission proposes to impose new and large financial penalties on CN based on the ASOTP of the Relevant Services. CN specifically asked for a “full and complete” account of Amtrak’s studies of that relationship, including their “findings” and “conclusions.” But, although it has all the

⁹ [REDACTED]

¹⁰ [REDACTED]

relevant and responsive information in just four documents (the Tool [REDACTED]
[REDACTED]), Amtrak has refused to disclose to CN in any form the vast majority of the studies' data, assumptions, findings, results, or forecasts for the Relevant Services.

LEGAL STANDARDS

Parties to the Board's proceedings are entitled to discovery "regarding any matter, not privileged, which is relevant to the subject matter involved in a proceeding." 49 C.F.R. § 1114.21(a)(1);¹¹ *Ballard Term. R.R. – Acquisition & Operation Exemption – Woodinville Subdivision*, Docket No. FD 35731, slip op. at 3, 2013 STB LEXIS 269, at *7 (STB served Aug. 22, 2013). Information is relevant, and thus subject to production or disclosure, if it "might be able to affect the outcome of a proceeding." *Waterloo Ry. – Adverse Aban. – Lines of Bangor & Aroostook R.R. in Aroostook Cnty, Me.*, Docket No. AB-124 (Sub.-No. 2), slip op. at 2, 2003 STB LEXIS 732, at *3 (STB served Nov. 14, 2003). The responding party cannot pick and choose the relevant information it will provide. Absent valid objections on other grounds, a party is entitled in discovery to "all relevant and potentially admissible information ... not only the information that the [opposing party] believes is sufficient." *Seminole Elec. Coop. Inc. v. CSX Transp., Inc.*, Docket No. FD 42110, slip op. at 2, 2009 STB LEXIS 25, at *3 (STB served Feb. 17, 2009).

"Answers to interrogatories must include sufficient detail to respond fully to the question." MOORE'S FEDERAL PRACTICE - CIVIL § 33.101. The responding party has "an affirmative duty to furnish any and all information available" to it. *Id.* § 33.102; *see, e.g., Ark. River Power Auth. v. Babcock & Wilcox Power Generation Grp., Inc.*, 2015 U.S. Dist. LEXIS

¹¹ "It is not grounds for objection that the information sought will be inadmissible as evidence if the information sought appears reasonably calculated to lead to the discovery of admissible evidence." 49 C.F.R. § 1114.21(a)(2).

59361, *8-*18 (D. Colo. 2015) (ordering defendant to supplement interrogatory answers by (i) identifying data used to generate emissions predictions, (ii) specifying the emissions estimate for the boiler at issue “utilizing the bracket, or range, of fuels included in the estimate,” and (iii) identifying and/or producing any omitted data underlying a technical internal memorandum it had relied on as responsive). A party may respond to an interrogatory by providing a full and complete answer in narrative form and/or by providing documents from which a full and complete answer can be derived as readily by the requesting party as by the responding party. 49 C.F.R. § 1114.26(b); Fed. R. Civ. P. 33(d). However, insofar as a party chooses to respond to an interrogatory by producing documents, the documents must provide sufficient information to fully answer the interrogatory. *See, e.g., Health Grades, Inc. v. MDX Med., Inc.*, 2014 U.S. Dist. LEXIS 802, *16 (D. Colo. 2014) (although defendant “produced substantial documents from which [plaintiff] may be able to ascertain an answer to Interrogatory No. 2,” court required defendant to “make the necessary inquiry, including the duty to design any specific query necessary to run the analysis on [defendant’s] database,” to fully comply); *Atlanta Coca-Cola Bottling Co. v. Transamerica Ins. Co.*, 61 F.R.D. 115, 117 (N.D. Ga. 1972) (holding that the documents produced in response to an interrogatory did “not supply the information requested” and ordering defendant to provide more information).

In considering a motion to compel, the Board takes into account the burden of production relative to the value of the information at issue. *See, e.g.,* September 23, 2014, Order at 8 (“discovery may be denied if it would be unduly burdensome in relation to the likely value of the information sought”) (citing 49 C.F.R. § 1114.21(c)).

ARGUMENT

I. Amtrak Has Refused to Provide Information That Is Both Responsive and Relevant.

Interrogatory No. 8 requests “full and complete” information, including “findings” and “conclusions,” about all Amtrak studies in the last three years addressing “the value of ASOTP,” including its relationship to Amtrak’s ridership, revenues, and costs for the Relevant Services.

[REDACTED]

[REDACTED] SDG studied [REDACTED] those issues for Amtrak. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

This response is deficient [REDACTED]

[REDACTED]

[REDACTED].¹² [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] But Amtrak has refused to provide key information from the Tool [REDACTED]

[REDACTED] and it has also refused, as an alternative, to provide those documents

¹² [REDACTED]

[REDACTED] Compare Exh. 4 with Exh. 12 (M. Feldman et al., *Impact of On-Time Performance and Fuel Prices on Amtrak Ridership and Revenue* (Aug. 1, 2015), available with subscription at <http://amonline.trb.org/16-2464-1.2982718?qr=1>).

themselves. In effect, Amtrak has identified the source for information responsive to CN's interrogatory, but withheld both the information and the source. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Without key information from and about the SDG Tool, or the SDG Tool itself, CN lacks information that is both responsive – because it is [REDACTED] part of the only studies encompassed in Interrogatory No. 8 – and relevant to the issues in this proceeding. For example, [REDACTED]

[REDACTED] using the SDG Tool [REDACTED]

[REDACTED] one should be able to establish:

- **the SDG models' estimates of Amtrak's ridership, revenues, [REDACTED] for each Relevant Service, and (with respect to ridership and revenues) for particular station pairs on each Relevant Service, at various ASOTP levels and from various baselines.** The relevance of such information is obvious. Amtrak has proposed that substantial penalties, designed to rise as ASOTP falls, be imposed on CN both retroactively and prospectively. *See generally* Exh. 6 (Sacks V.S.). So CN is entitled to Amtrak's estimate of the financial consequences to Amtrak of different levels of ASOTP to see whether and, if so, to what extent the penalties (and performance payments) proposed by Amtrak are proportionate. Amtrak has also designed its penalty scheme to assure that CN undertakes whatever costs are necessary for Amtrak to achieve its 80% ASOTP goal. *See id.* at 12 ¶ 35, 17 ¶ 48.

[REDACTED]

So CN is entitled to see if, based on Amtrak's own studies, the benefits of 80% ASOTP to Amtrak are proportionate to those costs;¹⁴

- **the relative significance of different station pairs, as determined by SDG in consultation with Amtrak.** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Such information is

relevant in evaluating Amtrak's proposed ASOTP performance criterion, which, contrary to the existing Operating Agreement and the methodology used by SDG, includes all stations and treats each as equal regardless of ridership;

- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹⁴ [REDACTED]

[REDACTED] Estimates at reasonably frequent ASOTP intervals are necessary to understand SDG's conclusions with respect to the Relevant Services; extrapolation from fewer data points [REDACTED] will not suffice since SDG states that the relationships it found between ASOTP and ridership, revenues, [REDACTED] were non-linear. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- **the importance of historical performance, as determined by SDG.** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This is relevant to Amtrak's proposal, which calls for the imposition of large penalties on CN unless Amtrak services on CN greatly exceed their historical range of performance. For Amtrak's Illini/Saluki service, for example, Amtrak would impose penalties on CN for average monthly HRD above 432, *see* Exh. 6 (Sacks V.S.) at 12-13, whereas for the past 3 years (beginning January, 2014) monthly average HRD has ranged from 1127 to 2138; and

- **the ASOTP, ridership, revenue, [REDACTED] data on which SDG relied for the Relevant Services, and SDG's other key assumptions and methodological choices.** This basic underlying information is needed to understand and evaluate SDG's work and conclusions.

This missing information is obviously relevant to the performance payments and penalties issues in this proceeding. As discussed above, it is specifically relevant to the evaluation of Amtrak's main proposal – to considering both (i) the proportionality and

reasonableness of the penalties Amtrak proposes and (ii) the wisdom of keying performance payments and penalties to an all-stations measure. More generally, if any fundamental revision of the performance payments and penalties scheme in the CN-Amtrak contract is to be undertaken, it should involve a weighing of the costs and benefits of improved performance, including impacts on Amtrak's ridership, revenues, and costs. See Exh. 13 (Willig Verified Statement (Sept. 4, 2015)) at 8.

II. Amtrak Has No Valid Ground for Withholding the Information CN Seeks.

A. Amtrak's Formal Responses and Objections

Amtrak's formal responses and objections to Interrogatory No. 8 include boilerplate references to burden and overbreadth. However, CN is seeking only information relevant to the Relevant Services, and only information embedded within the Tool and its related documentation: discrete, concrete deliverables of the studies that Amtrak received in 2015.

Amtrak can use these materials to provide the information specified in CN's latest letter [REDACTED].

Alternatively, Amtrak can produce the four related documents that have already been identified and that it presumably keeps together: the SDG Tool, [REDACTED]

The latter alternative, in particular, would require minimal time and effort. But either way, particularly given the significance of the information at issue, CN's request is neither unreasonably burdensome nor overbroad.

B. Amtrak's Recent Arguments

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Those missing documents contain information on estimated ridership, revenues, [REDACTED] for the Relevant Services under various assumptions, and key information on the data, assumptions, and methodology used, which is absent from the SDG reports themselves.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] But Amtrak refuses to disclose the substance of that analysis to CN, either directly or by giving CN access to the Tool. Amtrak may not wish to discuss the SDG analysis because it may be favorable to CN's, rather than Amtrak's, case, but that is no basis for opposing discovery. *See, e.g., Seminole Elec. Coop.*, slip op. at 2, 2009 STB LEXIS 25, at *3 (discovery extends to "all relevant and potentially admissible information ... not only the information that the [responding party] believes is sufficient.").

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Interrogatory No. 8 is an interrogatory, not a document request. The date limit in the JDP applies on its face only to “[s]earches for [r]esponsive [d]ocuments” “[i]n response to a request for document production.” Exh. 14, at 1. Particularly given the Board’s October 2015 order (entered at Amtrak’s instigation) providing for a new round of discovery, the JDP cannot be read to bar CN from obtaining current information in response to an interrogatory – especially information that can be obtained without any substantial searching for documents.¹⁵

Indeed, the parties have not read the JDP that way. Amtrak produced 2015 documents – the SDG reports – in response to Interrogatory No. 8. And Amtrak propounded multiple interrogatories to CN that call for post-2013 data and that are, on their face, more apt to be answered by production of documents than in narrative form. For example, in its Interrogatories Nos. 8-10 served in October 2015, Amtrak asked CN to provide detailed data on gross ton miles, train miles and freight car miles on various CN subdivisions “annually from 1990-present,” in

¹⁵ [REDACTED]

[REDACTED] For example, each party has a pending notice under 49 C.F.R. § 1114.22 and Fed. R. Civ. P. 30(b)(6) to depose the opposing party – notices that may lead to depositions in 2017. CN’s notice lists among the topics to be addressed one that plainly encompasses the SDG studies: “Assessments by Amtrak of the financial and/or public value of improved OTP or reduced delays on the Relevant Services.” Exh. 15, at 3 ¶ 6 (CN notice to depose Amtrak) (served Oct. 14, 2015). Under Rule 30(b)(6) precedents, the Amtrak deponent will have a duty to familiarize him- or herself with documents to prepare to testify. *See, e.g., Concerned Citizens v. Belle Haven Club*, 223 F.R.D. 39, 43 (D. Conn. 2004).

[REDACTED]

response to which CN produced documents through the end of 2014 (*i.e.*, beyond the JDP document production date deadline).

The option to respond with documents exists for all interrogatories, 49 C.F.R. § 1114.26, and is often the most practical option. But that does not transform this or any other interrogatory into a document request. Formally, Interrogatory No. 8 is not a document request; and substantively, CN has offered a way for Amtrak to comply without producing the Tool or other documents. [REDACTED].¹⁶

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] an interrogatory requires the responding party to do the work necessary to provide a complete answer. That may include requiring a producing party to extract relevant information from a database or model.¹⁷ In this case, Amtrak can either use the Tool and

¹⁶ Given the nature of the SDG studies – which CN did not know when it propounded its interrogatory – CN prefers that Amtrak provide the documents in question, particularly given the potential for further delays and further arguments if Amtrak spends time formulating a narrative answer that may again be incomplete. But the practical reality that it would be less burdensome and more useful for Amtrak to produce the documents does not transform Interrogatory No. 8 into a document request.

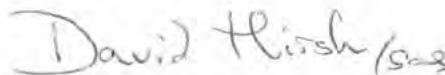
¹⁷ As the Court in *Health Grades* explained in discussing its order requiring a party to respond fully to an interrogatory by running specific queries of its database:

supporting documentation to provide the information required to complete its response, or it can provide those documents to CN so that CN may do so.

CONCLUSION

For the foregoing reasons, CN respectfully requests that the Board order Amtrak (i) if it can do so efficiently and without further delay, to provide in narrative or in another form a full and complete account of the data, assumptions, methodology, and results of the SDG studies insofar as they relate to the Relevant Services ([REDACTED]), or (ii) to produce the SDG Tool and [REDACTED]

Respectfully submitted,



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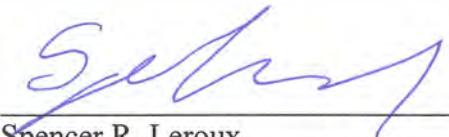
December 12, 2016

When answering interrogatories, a party is charged with knowledge of what its agents know, ***or what is in records available to it*** A party responding to interrogatories cannot meet its discovery obligations by sticking its head in the sand and refusing to look for the answers Nor is it sufficient for a party to refuse to provide a full answer to an interrogatory simply because it does not maintain the data in the format requested.

2014 U.S. Dist. LEXIS 802, at *8-*9 (citations and internal quotation marks omitted; emphasis in original).

CERTIFICATE OF SERVICE

I certify that I have this 12th day of December, 2016, caused a true copy of the foregoing Fifth Motion of Illinois Central Railroad Company and Grand Trunk Western Railroad Company to Compel Responses to Discovery Requests to be served upon all known parties of record in this proceeding by first-class mail or a more expeditious method.



Spencer R. Leroux

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EXHIBIT 1

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BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. FD 35743

APPLICATION OF THE NATIONAL RAILROAD PASSENGER
CORPORATION UNDER 49 U.S.C. § 24308 (a) –
CANADIAN NATIONAL RAILWAY COMPANY

SECOND SET OF DISCOVERY REQUESTS OF IC AND GTW

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October 14, 2015

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SURFACE TRANSPORTATION BOARD

Docket No. FD 35743

APPLICATION OF THE NATIONAL RAILROAD PASSENGER
CORPORATION UNDER 49 U.S.C. § 24308 (a) –
CANADIAN NATIONAL RAILWAY COMPANY

SECOND SET OF DISCOVERY REQUESTS OF IC AND GTW

Pursuant to the Board's Order in this proceeding dated October 7, 2015 and 49 C.F.R. Part 1114, subpart B, Illinois Central Railroad Company and Grand Trunk Western Railroad Company (collectively, "CN") serve their Second Set of Discovery Requests upon Applicant National Railroad Passenger Corporation ("Amtrak" or "you"). Responses should be served as soon as possible, and in no event later than 15 days from the date of service hereof. You are requested to contact the undersigned promptly to discuss any objections or questions regarding these requests with a view to resolving any disputes or issues of interpretation informally and expeditiously.

INSTRUCTIONS

1. These Discovery Requests ("Discovery Requests" or "Requests," and each of them a "Discovery Request" or "Request") call for all Documents and information in the possession, custody, or control of Amtrak or its employees, officers, agents, affiliates, subsidiaries, or counsel.
2. Where a Request has a number of separate subdivisions, or related parts or portions, a complete response is required to each part or portion. Any objection to a Request shall clearly indicate the subdivision, part, or portion of the Request to which it is directed.

3. Each Request shall operate and be construed independently, and, unless otherwise indicated, no Request limits the scope of any other Request.

4. Words used in the singular shall include the plural and words used in the plural shall include the singular, whenever the context permits. Terms such as “and,” “or,” “any,” “all,” or “including” shall be construed in the broadest and most inclusive manner, in the disjunctive or conjunctive as necessary, in order to bring into the scope of each Discovery Request all information which might otherwise be construed as outside the scope of the Request.

5. References to the present tense shall be construed to include the past tense, and references to the past tense shall be construed to include the present tense, as necessary to bring within the scope of each Request all responsive information that might otherwise be construed to be outside the scope of the Request.

6. References to years in defining date ranges for Requests shall be construed broadly, to include the entire year, such that, for example, a Request for Documents “from 2008 to 2012” would include all Documents from January 1, 2008 to December 31, 2012, and a Request for Documents “since 2008” would include all Documents from January 1, 2008 to the present. Unless otherwise stated in an individual Request, the following Requests encompass the entire period May 1, 2011 to October 31, 2013.

7. If you believe that any Request or definition or instruction applicable thereto is ambiguous, set forth the language that you believe is ambiguous and the interpretation that you are using in responding to the Request.

8. In the event that you object to any of these Requests on the basis of a contention that it is overbroad or unduly burdensome, you shall respond to the Request as narrowed such that said objection is removed and state the extent to which the Request has been narrowed.

9. For any part of an Interrogatory for which you cannot provide a full answer, after exercising due diligence to secure the information needed to do so, so state, and answer to the extent possible, specifying your inability to answer the remainder and stating whatever information or knowledge you have responsive to such part.

10. Where an Interrogatory seeks identification or information as to the existence or content of any Document or study, producing or furnishing a copy of the Document or study will be accepted as an adequate response to the Interrogatory.

11. Please make legible, complete, and exact copies of Documents responsive to each Document Request and transmit them to the undersigned counsel. The originals of responsive Documents should be retained in the files of you, your counsel, or the consultants or others who have assisted you in connection with this proceeding and have Documents in their possession, and made available if requested.

12. If and to the extent that Documents responsive to any Document Request are in electronic form, produce them in accordance with the requirements specified in the Joint Discovery Protocol.

13. Documents responsive to each Request should be produced separately with a clear indication of which Request they are responsive to, save that Documents responsive to multiple Requests need only be produced once. Subject to the foregoing, Documents should be produced in the groupings in which they are maintained in the ordinary course of business.

14. To the extent that you ascertain or are aware of the existence of information or Documents responsive to these Requests but not within your possession, custody, or control, for each such Document (a) identify the individual or entity who possesses the information or

Documents, (b) identify the location of such information or Documents, and (c) summarize the substance of such information or Documents.

15. In accordance with 49 C.F.R. §1114.29, you are required to supplement your responses if you obtain information upon the basis of which (1) you know that the response was incorrect when made; or (2) you know that the response though correct when made is no longer true or complete and the circumstances are such that a failure to amend the response is in substance a knowing concealment.

16. If no responsive non-privileged Documents exist for a particular Request, so state in your response to the Request.

17. Produce Documents responsive to any individual Request or part of a Request as soon as possible and without waiting to produce Documents responsive to other Requests wherever possible.

18. If you believe you have previously produced responsive information or otherwise answered a Request in whole or part, specify the prior response and the responsive information or Documents.

DEFINITIONS

1. “Amtrak-Responsible Delay” means delay attributed to Amtrak by Amtrak.
2. “ASOTP” means “All-Stations On-Time Performance” as determined, recorded, or reported by Amtrak.
3. “CN” means GTW and/or IC.
4. “Date” means the exact date; if the exact date is unknown, provide the approximate date or time range to the best of your ability.

5. “Describe with particularity” means to give the Date and a full and complete narrative account of the information requested without omission of any relevant facts, whether deemed material by you or not, and without omission of information that could lead to relevant facts, all within the spirit of the discovery rules that these Discovery Requests should elicit all information and Documents possessed by or known to you about the subject specified in the Request.

6. “Document” means any writing or other compilation of information, whether printed, typed, handwritten, recorded, or produced or reproduced by any other process, including but not limited to intra-company communications, correspondence, telegrams, memoranda, contracts, instruments, studies, analyses, projections, forecasts, summaries, or records of conversations or interviews, minutes or records of conferences or meetings, records or reports of negotiations, diaries, calendars, photographs, maps, tape recordings, computer tapes, computer disks, other computer storage devices, computer programs, computer printouts, models, statistical statements, graphs, charts, diagrams, plans, drawings, brochures, pamphlets, advertisements, circulars, trade letters, press releases, invoices, receipts, financial statements, accounting records, worksheets, drafts, revisions of drafts, and original or preliminary notes. Further, the term “Document” includes

(a) both basic records and summaries of such records (including computer runs);

(b) both original versions and copies that differ in any respect from original versions; and

(c) both Documents in your possession, custody, or control and Documents in the possession, custody, or control of consultants or others who have assisted you in connection with this proceeding.

7. “DOT” means the United States Department of Transportation.

8. “eDR” means the Electronic Delay Reporting system described on pages 15-16 of the Verified Statement of Paul Vilter.

9. “Host Railroad” means any railroad, or any State or State entity, with which Amtrak has entered an agreement pursuant to 49 U.S.C. § 24308(a)(1) or section 402(a) of RPSA providing for use by Amtrak of facilities of, or provision to Amtrak of services by, such railroad, State, or State entity.

10. “HRD” means “Host-Responsible Delay,” as determined, recorded, or reported by Amtrak.

11. “Identify,” when used in relation to an individual, corporation, partnership, or other entity, means to state the name, address, and telephone number thereof. “Identify,” when used in relation to a Document, means to

(a) state the nature of the Document (*e.g.*, letter, memorandum, etc.);

(b) state the author, each addressee, each recipient, date, number of pages, and title of the Document;

(c) state the current location of the Document; and

(d) provide a brief description of the contents of the Document and any findings, conclusions, or recommendations contained therein.

12. “IG” means Inspector General.

13. “Infrastructure” means the track, equipment, facilities, or systems relating to railroad operations.

14. “Miscellaneous Time” means the miscellaneous time component of an Amtrak train’s schedule (*i.e.*, time that Amtrak may add or remove from a schedule for operational convenience), as determined, recorded, or reported by Amtrak.

15. “Operating Agreement” means an agreement made pursuant to 49 U.S.C. § 24308(a)(1) or section 402(a) of RPSA, between Amtrak and a railroad or regional transportation authority, regarding the provision to Amtrak of services by, or the use by Amtrak of facilities of, the railroad or authority.

16. “OTP” or “On-Time Performance” means on-time performance, as determined, discussed, recorded, or reported by Amtrak for any purpose, including without limitation (a) performance within tolerance, for purposes of determining compensation to any Host Railroad under any Operating Agreement; (b) “on-time performance” or “on time performance” as used in any of the following sections of the United States Code or PRIIA: 49 U.S.C. §§ 24105, 24308(f), 24315(a)(1)(H), 24710(b)(1), or 24902(b)(6), or section 207 or 208 of PRIIA; and (c) the metrics for All-Stations On-Time Performance (“ASOTP”) and Endpoint On-Time Performance (“Endpoint OTP”) promulgated by Amtrak and the FRA under section 207 of PRIIA.

17. “PRIIA” means the Passenger Rail Investment and Improvement Act of 2008, Pub. L. No. 110-432, 122 Stat. 4907.

18. “PRT” means the pure run time component of an Amtrak train’s schedule (*i.e.*, the travel time between two points at maximum authorized passenger train speeds, without delay), as determined, recorded, or reported by Amtrak.

19. “Recovery Time” means the recovery time component of an Amtrak train’s schedule (*i.e.*, the time added to the schedule to compensate for certain delays encountered en route), as determined, recorded, or reported by Amtrak.

20. “Relating to” shall be construed broadly such that a Document or piece of information shall be deemed to relate (a) to a claim or assertion if it tends to support, tends to undermine, or is otherwise relevant to that claim or assertion, or if it was considered when making that claim or assertion; and (b) to a subject if it refers to, discusses, describes, or deals with that subject, or if it consists of, or constitutes, in whole or in part, the matter to which that subject refers.

21. “Relevant Service” or “Relevant Services” means any Amtrak service that runs in whole or in part over lines owned, leased, or operated by CN, and includes all portions of the route, including the portion of the route that is operated over the lines of a railroad other than CN.

22. “RPSA” means the Rail Passenger Service Act, Pub. L. No. 91-518, 84 Stat. 1327, including all amendments thereto (codified at 49 U.S.C. §§ 24101 *et seq.*).

23. “Third Party-Responsible Delay” means delays, attributed by Amtrak, to a cause or party other than Amtrak or the Host Railroad over which Amtrak was operating at the time of the delay.

24. “You” or “your” refers to Amtrak and to its employees, officers, directors, and agents.

DOCUMENT REQUESTS

1. All Documents that analyze or discuss the impact on OTP of adding and/or redistributing schedule time for the Relevant Services.

2. All Documents from January 1, 2008 through October 31, 2013 that constitute, describe, or discuss the methods, programs, criteria, processes, or models used by Amtrak to establish, analyze, or evaluate elements of the schedules of Amtrak trains that operated over the lines of Host Railroads, including but not limited to: (a) the amount of PRT; (b) the amount of Recovery Time; (c) the distribution of Recovery Time within a schedule; (d) the amount of Miscellaneous Time; or (e) the distribution of Miscellaneous Time within a schedule.

3. All Documents that discuss or describe questions or concerns regarding the sufficiency of PRT, Recovery Time, or Miscellaneous Time in any Amtrak train schedule.

4. All Documents from January 1, 2008 through October 31, 2013 that analyze or discuss, either generally or for one or more of the Relevant Services, the relationship between ASOTP and (i) Host-Responsible Delay minutes; (ii) Amtrak-Responsible Delay minutes; (iii) Third Party-Responsible Delay minutes; or (iv) Endpoint OTP.

5. All Documents that analyze or discuss the relationship between ASOTP and “performance within tolerance” as measured under the CN-Amtrak Operating Agreement.

6. All Documents from January 1, 2008 through October 31, 2013 that analyze or discuss the value of ASOTP, including, without limitation, the effect of changes in ASOTP on Amtrak revenues, ridership, public benefits, or costs associated with the Relevant Services.

7. The pleadings and decisions in any legal proceeding (judicial, regulatory, or arbitral) in which Amtrak has sought to recover costs or damages or other compensation or financial relief for delays incurred by Amtrak trains.

8. All Documents relating to the Amtrak IG and DOT IG work referenced in ATK0000032304 regarding “the cost of incentives vs cost of late trains,” including without

limitation the work “referencing the point where making the service better costs more than the additional revenue we’ll earn.”

9. All rail line capacity, infrastructure, and operations planning studies from January 1, 2008 through October 31, 2013 conducted by you or on your behalf on existing routes used by a Relevant Service, and all Documents that discuss such studies.

10. All Documents relating to (i) the removal of Infrastructure from any portion of the IC rail lines since 1971; or (ii) the upgrade, installation, or improvement of the dispatching or signal system on any portion of the IC rail lines since 1971, including, without limitation, the installation of the centralized traffic control system known as CTC.

11. All Documents relating to capital expenditures and investments that Amtrak has made, planned, or considered since 1971 to improve its on-time performance or reduce delays on the Relevant Services (both on and off CN rail lines).

12. Without regard to the date limitation of Instruction No. 6, all written testimony of, statements of, and transcripts of depositions of Benjamin Sacks in the following proceedings referenced in the Verified Statement of Mr. Sacks that you submitted in this proceeding:

- a) *ACS Shareholder Litigation*, Delaware Court of Chancery, Consolidated C.A. No. 4940-VCP;
- b) *National Railroad Passenger Corporation vs. ExpressTrak, LLC*, United States District Court for the District of Columbia, Index No. 02-CV-1773.

13. Without regard to the date limitation of Instruction No. 6, the following academic papers co-authored by Benjamin Sacks and listed in the curriculum vitae attached to the Verified Statement of Mr. Sacks:

- a) Sacks, B.A, J.V. Hotz, C. Mulligan, and A. Zellner: “Three Essays on Bayesian Methods for Analyzing Limited Dependent Variable and Multinomial Choice Models with Measurement Error and Missing Data”;
 - b) Sacks, B.A., and A. Zellner: “Bayesian Method of Moments (BMOM) Analysis of the Multiple Regression Model with Autocorrelated Errors.”
- 14. All Documents relating to the training of Amtrak employees to enter data in eDR.
 - 15. All Documents relating to quality control procedures (including audits) that you have implemented or undertaken with respect to eDR data entry.
 - 16. All Documents relating to errors by, or inaccuracies in, the eDR system, including but not limited to errors or inaccuracies (i) in logging the correct arrival, departure, or passing time at stations or other locations; and (ii) in calculating the correct number of minutes of delay above PRT.

INTERROGATORIES

- 1. For each Relevant Service, identify every instance in which Amtrak has considered but decided against updating PRT since the initial establishment of the train’s schedule. For each such instance, include in your response (i) the month and year the update was considered; (ii) the nature and location of the update that was considered; (iii) the reason(s) the update was considered; (iv) the reason(s) the update was not implemented; and (v) the Amtrak personnel involved in the decisions.
- 2. Describe with particularity all changes made to the distribution of Recovery Time or Miscellaneous Time within schedules for the Relevant Services since October 31, 2013. For each such change, include in your response (i) the month and year the change was implemented;

(ii) the nature and location of the change; (iii) the reason(s) the change was implemented; and (iv) the Amtrak personnel involved in the decisions.

3. Describe with particularity the “new operating practices [implemented by Amtrak] to facilitate on-time departures from Chicago Union Station even when trains arrive late” referenced in the Report of the Amtrak Chicago Gateway Blue Ribbon Panel (October 2015) at page 23 (Attachment 1, hereto), and all projected, anticipated, or actual effects of such practices on the ASOTP or Endpoint OTP of any Relevant Service.

4. Describe with particularity the “additional equipment sets [added by Amtrak] to Chicago-based routes during periods when delays have been so severe that trains arrive too late to be serviced in time for same day departures” referenced in the Report of the Amtrak Chicago Gateway Blue Ribbon Panel (October 2015) at page 23, and all projected, anticipated, or actual effects of those additions on the ASOTP or Endpoint OTP of any Relevant Service.

5. Describe with particularity all data and calculations that provided the basis for, or that support, the estimates of freight delay in the following statement that appears on page 3 of “Amtrak Chicago Gateway Railway Capacity Constraints: An analysis of current National economic effects and consequences of failure to act” (September 2015), a link to which may be found on Amtrak’s website at www.amtrak.com/ChicagoGateway: “Failure to act on the Chicago problem would increase freight delay from 46 to 143 minutes per 100 freight train-miles in 20 years.”

6. Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the relationship between ASOTP and (i) Endpoint OTP; (ii) Host-Responsible Delay minutes; (iii) Amtrak-Responsible Delay minutes; or

(iv) Third Party-Responsible Delay minutes, either generally or for one or more of the Relevant Services.

7. Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the relationship between ASOTP and “performance within tolerance” as measured under the CN-Amtrak Operating Agreement.

8. Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the value of ASOTP, including without limitation the effect of changes in ASOTP on Amtrak revenues, ridership, public benefits, or costs associated with the Relevant Services.

9. Describe with particularity all capital expenditures and investments that Amtrak has made, planned, or considered since 1971 to improve its On-Time Performance or reduce delays on the Relevant Services.

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*Counsel for Illinois Central Railroad Company
and Grand Trunk Western Railroad Company*

October 14, 2015

EXHIBIT 2

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

Docket No. FD 35743

**APPLICATION OF THE
NATIONAL RAILROAD PASSENGER CORPORATION
UNDER 49 U.S.C. § 24308(a)
— CANADIAN NATIONAL RAILWAY COMPANY**

**NATIONAL RAILROAD PASSENGER CORPORATION'S
RESPONSES AND OBJECTIONS TO SECOND SET OF DISCOVERY
REQUESTS OF IC AND GTW**

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

Docket No. FD 35743

APPLICATION OF THE
NATIONAL RAILROAD PASSENGER CORPORATION
UNDER 49 U.S.C. § 24308(a)
— CANADIAN NATIONAL RAILWAY COMPANY

**NATIONAL RAILROAD PASSENGER CORPORATION’S RESPONSES AND
OBJECTIONS TO SECOND SET OF DISCOVERY REQUESTS OF IC AND
GTW**

National Railroad Passenger Corporation (“Amtrak”), by and through its attorneys, Nossaman LLP, hereby responds, answers, and objects to the requests for admission, requests for production of documents and interrogatories (collectively, “discovery requests”) set forth in the Second Set of Discovery Requests of Illinois Central Railroad Company (“IC”) and Grand Trunk Western Railroad Company (“GTW”) (collectively, “CN”), dated October 14, 2015, as follows.

GENERAL OBJECTIONS

Each definition, instruction, request, and/or interrogatory is subject to and incorporates the following general objections, as applicable. These objections are set forth here to avoid the duplication and repetition of restating them for each interrogatory and request. Some general objections may be referred to in a given answer for purposes of clarity. The failure to list a particular general objection in a given answer should not be construed as a waiver of that objection.

Amtrak reserves the right to supplement or modify these responses and objections as the application proceeding and discovery proceed.

1. Beyond the Scope of the Surface Transportation Board's Rules of Practice:

Amtrak objects to CN's discovery requests and the definitions and instructions contained therein to the extent that they exceed the scope and requirements of the Surface Transportation Board's ("STB" or "Board") Rules of Practice ("STB Rules").

2. Privilege: Amtrak objects to CN's discovery requests to the extent they seek information protected by the attorney-client privilege, the work-product doctrine, the privilege accorded to settlement materials, or any other applicable privilege, immunity, protective order, or court rule. If any protected information or material is produced, such disclosure is not intentional and shall not be deemed a waiver of any privilege or protection. Amtrak further objects to the extent the discovery requests seek documents prepared in anticipation of or during the course of any litigation or administrative proceeding, or which otherwise constitute or disclose the mental impressions, conclusions, opinions, or legal theories of any attorney for Amtrak.

3. Possession, Custody, or Control: Amtrak objects to CN's discovery requests to the extent they seek documents or information beyond those in the immediate and present possession of Amtrak. Amtrak further objects to CN's discovery requests to the extent they seek information that is primarily or exclusively within CN's knowledge or control.

4. Confidential Business Information: To the extent a discovery request requires the disclosure of secret, confidential, and/or proprietary information or any information implicating privacy interests, Amtrak's response shall be subject to a

protective order entered by the Board. Amtrak further objects to the extent a discovery request seeks confidential or proprietary or personal information of a third party, the disclosure of which is not permitted by reason of contract, privacy laws, or other binding legal obligation.

5. Discoverability: Amtrak objects to CN's discovery requests to the extent they seek information not relevant to the issues in this proceeding, not calculated to lead to the discovery of admissible evidence, and neither material nor necessary to this proceeding. To the extent that Amtrak provides information in response to these discovery requests, Amtrak does not concede that the information is admissible in evidence or relevant to issues in this action.

6. Unduly Burdensome: Amtrak objects to CN's discovery requests as oppressive and unduly burdensome to the extent they seek information or documents that are unreasonably cumulative or duplicative; already in CN's possession, custody, or control; equally available to CN as to Amtrak; uniquely known or once controlled by CN; or obtainable with less burden or expense from another source, such as public sources. Amtrak further objects to the extent that the burden or expense of proposed discovery would be disproportionate to the probative value or relevance of the material sought, and objects to the extent that the Requests for Production request voluminous information which Amtrak can locate and copy only at tremendous expense of money and/or personnel resources expenditure.

7. Reasonable Search: Amtrak objects to CN's discovery requests to the extent they purport to impose on Amtrak a duty to search for information or documents beyond a reasonable search of the locations and files where potentially responsive

materials would reasonably be expected to be found. To the extent that electronically stored information is necessary to answer CN's discovery requests, Amtrak will search reasonably accessible computer files for responsive electronically stored information in a manner that balances the obligation to identify relevant information against the avoidance of undue burden or expense. Amtrak objects to the extent a request requires it to search electronically stored information on back up or legacy systems or to the extent that the request calls for the restoration of any systems, programs, or media.

8. Information That Can Be Derived From Documents To Be Produced or Other Forms of Discovery: Amtrak objects to CN's Interrogatories to the extent they are document requests posed in the form of an interrogatory or they seek deposition-type testimony. Amtrak objects to those of CN's Interrogatories that request an interpretation of documents which are readily accessible to CN and which contain terms and conditions that speak for themselves. Amtrak further objects to the Interrogatories to the extent the information requested may be determined by examining, compiling, abstracting, or summarizing business records that will be produced by Amtrak, where the burden of deriving or ascertaining the information is substantially the same for Amtrak as it is for CN.

9. Vague, Ambiguous, or Overbroad: Amtrak additionally objects to CN's discovery requests insofar as they are vague, ambiguous, indefinite, overbroad, or otherwise unclear as to the information sought. Amtrak further objects to the extent the discovery requests use terms that are not defined with sufficient clarity to permit a meaningful response.

10. Reservations Regarding Interrogatories: In responding to the Interrogatories, Amtrak does not concede that the Interrogatories are relevant to the subject matter of this action or are calculated to lead to the discovery of admissible evidence. In addition, Amtrak does not adopt by responding to the Interrogatories any definition of words or phrases or any express or implied characterizations of fact or law contained in the Interrogatories. Amtrak expressly reserves the right to object to further discovery into the subject matter of the Interrogatories and the right to object to the introduction into evidence, in this or any other litigation, of its responses to the Interrogatories. Amtrak further reserves the right, at any time, to supplement its responses should further investigation disclose additional evidence, but it declines any obligation to do so beyond those expressed in the STB Rules.

11. Reservations Regarding Requests for Production: The fact that Amtrak objects to any particular Request for Production should not be construed generally to mean that responsive documents exist. Similarly, the statement that Amtrak will produce responsive documents in response to any particular Request for Production should not be construed to mean that documents of a type or in the category described in the Request for Production in fact exist. Furthermore, the production of any documents that are otherwise subject to an objection is not a waiver of any such objection as to any other document not produced. In addition, Amtrak does not adopt by responding to these Requests for Production any definition of words or phrases or any express or implied characterizations of fact or law contained in the Requests for Production. Amtrak further reserves the right, at any time, to supplement its responses should further investigation disclose additional responsive documents, but declines any

obligation to do so beyond those expressed in the STB Rules or otherwise required by law. The responses below are made without waiver of, and with preservation of:

- a. all objections as to competency, relevancy, materiality, privilege, and admissibility of the responses and the subject matter thereof as evidence for any purposes in any further proceeding in this action and any other action;
- b. Amtrak's right to object on any ground and at any time to a demand or request for additional documents or other discovery procedures related to the subject matter of this case; and
- c. Amtrak's right, at any time, to revise, correct, add to or clarify any of the documents produced by Amtrak.

ADDITIONAL GENERAL OBJECTIONS TO CERTAIN INSTRUCTIONS

1. Amtrak objects to Instruction 1 to the extent CN seeks to include Amtrak's "employees, officers, agents, affiliates, subsidiaries, or counsel." This instruction is overbroad, unduly burdensome, and oppressive, and it encompasses information which is neither relevant nor calculated to lead to the discovery of admissible evidence and neither material nor necessary to the investigation. Amtrak further objects to the extent the Instruction seeks information not within the possession, custody, or control of Amtrak or otherwise purports to impose obligations beyond those imposed by the STB Rules or law.

2. Amtrak objects to Instructions 7 and 14 to the extent that they impose requirements beyond those required by law and the STB Rules.

3. Amtrak objects to Instruction 6, to the extent it seeks responsive documents beyond the limits imposed under Section 1(a)(i) of the Joint Discovery Protocol agreed to by the Parties.

ADDITIONAL GENERAL OBJECTIONS TO CERTAIN DEFINITIONS

1. Amtrak objects to Definition 5 to the extent the definition of “Describe with particularity” is overbroad, vague and ambiguous, and seeks to impose requirements that are unduly burdensome and beyond the scope of permissible discovery by stating that “these Discovery requests should elicit all information and Documents possessed by or known to you about the subject specified in the Request.”

2. Amtrak objects to Definition 6 to the extent the definition of “Document” is overbroad and unduly burdensome, includes irrelevant information, and purports to impose obligations beyond those imposed by the STB Rules. Amtrak will interpret the term “document” according to the customary meaning of the term and in compliance with applicable law and the STB Rules.

3. Amtrak objects to Definition 8 to the extent the definition of “eDR” is overbroad and unduly burdensome, includes irrelevant information, and purports to impose obligations beyond those imposed by the STB Rules.

4. Amtrak objects to Definition 9 regarding the definition of “Host Railroad” on the ground that it is overbroad and seeks to impose requirements that are unduly burdensome and beyond the scope of permissible discovery insofar as it would require Amtrak to produce information or documents that are not in Amtrak’s possession, custody, or control, and insofar as it is used to seek documents and information that are irrelevant to the issues between the parties in this proceeding.

5. Amtrak objects to Definition 11 to the extent the definition of “Identify” purports to impose obligations beyond those imposed by the STB Rules and seeks information protected by the attorney-client privilege or work-product doctrine.

6. Amtrak objects to Definition 13 regarding the definition of “Infrastructure” on the grounds that the terms “system” and “relating to railroad operations” are overbroad and unduly burdensome, includes irrelevant information, and purports to impose obligations beyond those imposed by the STB Rules.

7. Amtrak objects to Definition 21 on the grounds that the definitions of “Relevant Service” or “Relevant Services” are overbroad, unduly burdensome, and beyond the scope of permissible discovery insofar as it would require Amtrak to produce information or documents that are irrelevant to the issues between the parties in this proceeding, including matters that relate solely or in part to rail lines or services that are not subject to the 2011 Agreement.

**RESPONSES TO SPECIFIC REQUESTS FOR PRODUCTION OF
DOCUMENTS**

REQUEST FOR PRODUCTION NO. 1

All Documents that analyze or discuss the impact on OTP of adding and/or redistributing schedule time for the Relevant Services.

RESPONSE TO REQUEST FOR PRODUCTION NO. 1

Amtrak objects to this Request on the grounds that it is compound and overbroad. Amtrak further objects that its terms (including, but not limited to, “redistributing schedule time”) are vague, ambiguous, unintelligible and incapable of response. Subject to and without waiving Amtrak’s foregoing general and specific

objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 analyzing or discussing the impact on OTP of adding schedule time for Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 2

All Documents from January 1, 2008 through October 31, 2013 that constitute, describe, or discuss the methods, programs, criteria, processes, or models used by Amtrak to establish, analyze, or evaluate elements of the schedules of Amtrak trains that operated over the lines of Host Railroads, including but not limited to: (a) the amount of PRT; (b) the amount of Recovery Time; (c) the distribution of Recovery Time within a schedule; (d) the amount of Miscellaneous Time; or (e) the distribution of Miscellaneous Time within a schedule.

RESPONSE TO REQUEST FOR PRODUCTION NO. 2

Amtrak objects to this Request on the ground that it is overbroad and compound. Amtrak further objects as it seeks documents beyond the limits imposed under Section 1(a)(i) of the Joint Discovery Protocol. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 as limited to Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 3

All Documents that discuss or describe questions or concerns regarding the sufficiency of PRT, Recovery Time, or Miscellaneous Time in any Amtrak train schedule.

RESPONSE TO REQUEST FOR PRODUCTION NO. 3

Amtrak objects to this Request for Production on the ground that it is overbroad and compound. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 as limited to Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 4

All Documents from January 1, 2008 through October 31, 2013 that analyze or discuss, either generally or for one or more of the Relevant Services, the relationship between ASOTP and (i) Host-Responsible Delay minutes; (ii) Amtrak-Responsible Delay minutes; (iii) Third Party-Responsible Delay minutes; or (iv) Endpoint OTP.

RESPONSE TO REQUEST FOR PRODUCTION NO. 4

Amtrak objects to this Request on the grounds that it is overbroad and compound. Amtrak further objects as it seeks documents beyond the limited imposed under Section 1(a)(i) of the Joint Discovery Protocol. Amtrak further objects on the grounds that it seeks documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence relevant to issues in this proceeding. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 as limited to Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 5

All Documents that analyze or discuss the relationship between ASOTP and “performance within tolerance” as measured under the CN-Amtrak Operating Agreement.

RESPONSE TO REQUEST FOR PRODUCTION NO. 5

Amtrak objects to this Request on the ground that it is overbroad and compound. Subject to and without waiving Amtrak’s foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 as limited to Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 6

All Documents from January 1, 2008 through October 31, 2013 that analyze or discuss the value of ASOTP, including, without limitation, the effect of changes in ASOTP on Amtrak revenues, ridership, public benefits, or costs associated with the Relevant Services.

RESPONSE TO REQUEST FOR PRODUCTION NO. 6

Amtrak objects to this Request on the ground that it is overbroad and compound. Amtrak further objects as it seeks documents beyond the limited imposed under Section 1(a)(i) of the Joint Discovery Protocol. Subject to and without waiving Amtrak’s foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 as limited to Amtrak trains operating on CN lines.

REQUEST FOR PRODUCTION NO. 7

The pleadings and decisions in any legal proceeding (judicial, regulatory, or arbitral) in which Amtrak has sought to recover costs or damages or other compensation or financial relief for delays incurred by Amtrak trains.

RESPONSE TO REQUEST FOR PRODUCTION NO. 7

Amtrak objects to this Request on the ground that it is overbroad. Amtrak further objects on the grounds that it seeks documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence, as Amtrak seeks neither damages or other financial compensation in this proceeding. Amtrak further objects on the grounds that any pleadings and decisions in other STB proceedings are publicly available on the STB's website and are equally available to CN as they are to Amtrak. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013 regarding such judicial or arbitral proceedings.

REQUEST FOR PRODUCTION NO. 8

All Documents relating to the Amtrak IG and DOT IG work referenced in ATK0000032304 regarding "the cost of incentives vs cost of late trains," including without limitation the work "referencing the point where making the service better costs more than the additional revenue we'll earn."

RESPONSE TO REQUEST FOR PRODUCTION NO. 8

Amtrak objects to this Request on the ground that it is overbroad. Amtrak further objects to this Request to the extent that such documents are not in Amtrak's

possession, custody or control. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013.

REQUEST FOR PRODUCTION NO. 9

All rail line capacity, infrastructure, and operations planning studies from January 1, 2008 through October 31, 2013 conducted by you or on your behalf on existing routes used by a Relevant Service, and all Documents that discuss such studies.

RESPONSE TO REQUEST FOR PRODUCTION NO. 9

Amtrak objects to this Request on the grounds that it is compound and overbroad. Amtrak previously provided to CN in response to Document Request 11 of CN's First Set of Discovery Requests for Discovery a number of documents starting in 2008 relating to any determination or consideration by or within Amtrak of whether and what infrastructure investment would be necessary, appropriate, or desirable to improve the performance of or reduce costs associated with Amtrak trains operating on CN lines. Amtrak will not supplement its response and will not produce further documents on these matters.

Amtrak further objects that its terms (including, but not limited to, "operations planning studies") are vague, ambiguous and incapable of response, as Amtrak does not conduct "operations planning studies" with respect to Amtrak trains operating on CN lines. Amtrak further objects as it seeks documents beyond the limits imposed under Section 1(a)(i) of the Joint Discovery Protocol.

REQUEST FOR PRODUCTION NO. 10

All Documents relating to (i) the removal of Infrastructure from any portion of the IC rail lines since 1971; or (ii) the upgrade, installation, or improvement of the dispatching or signal system on any portion of the IC rail lines since 1971, including, without limitation, the installation of the centralized traffic control system known as CTC.

RESPONSE TO REQUEST FOR PRODUCTION NO. 10

Amtrak objects to this Request on the ground that it is overbroad and compound. Amtrak further objects as it seeks documents beyond the limits imposed under Section 1(a)(i) of the Joint Discovery Protocol. Amtrak further objects to this Request as unduly burdensome insofar as it seeks documents that are CN's own documents and/or are in CN's possession, custody, control or equally available to CN as they are to Amtrak, and CN is in the best position to determine which documents may be responsive. We note that CN already has identified such documents in its possession, in its response to Request for Documents number 11 of Amtrak's Second Set of Discovery Requests. Amtrak will not produce documents in response to this Request.

REQUEST FOR PRODUCTION NO. 11

All Documents relating to capital expenditures and investments that Amtrak has made, planned, or considered since 1971 to improve its on-time performance or reduce delays on the Relevant Services (both on and off CN rail lines).

RESPONSE TO REQUEST FOR PRODUCTION NO. 11

Amtrak objects to this Request on the grounds that it is compound and overbroad. Subject to and without waiving Amtrak's foregoing general and specific

objections, Amtrak previously provided to CN in response to Document Requests 8, 9 and 10 of CN's First Set of Discovery Requests a number of documents from 2008 to 2013 related to capital expenditures and investments to improve, facilitate or reduce costs associated with Amtrak's service on CN's tracks. Amtrak will not produce any additional documents in response to this Request.

REQUEST FOR PRODUCTION NO. 12

Without regard to the date limitation of Instruction No. 6, all written testimony of, statements of, and transcripts of depositions of Benjamin Sacks in the following proceedings referenced in the Verified Statement of Mr. Sacks that you submitted in this proceeding:

- a) *ACS Shareholder Litigation*, Delaware Court of Chancery, Consolidated C.A. No. 4940-VCP;
- b) *National Railroad Passenger Corporation vs. ExpressTrak, LLC*, United States District Court for the District of Columbia, Index No. 02-CV-1773.

RESPONSE TO REQUEST FOR PRODUCTION NO. 12

Amtrak objects to this Request on the grounds that it is overbroad as to time, unduly burdensome and oppressive. Amtrak further objects on the ground that the written testimony of, statements of, and transcripts of such depositions may contain highly confidential and commercially sensitive information of Amtrak and third parties. Amtrak further objects as it seeks documents beyond the time limits imposed under Section 1(a)(i) of the Joint Discovery Protocol. Amtrak will not produce any documents in response to this Request for Production.

REQUEST FOR PRODUCTION NO. 13

Without regard to the date limitation of Instruction No. 6, the following academic papers co-authored by Benjamin Sacks and listed in the curriculum vitae attached to the Verified Statement of Mr. Sacks:

- a) Sacks, B.A, J.V. Hotz, C. Mulligan, and A. Zellner: "Three Essays on Bayesian Methods for Analyzing Limited Dependent Variable and Multinomial Choice Models with Measurement Error and Missing Data";
- b) Sacks, B.A., and A. Zellner: "Bayesian Method of Moments (BMOM) Analysis of the Multiple Regression Model with Autocorrelated Errors."

RESPONSE TO REQUEST FOR PRODUCTION NO. 13

Amtrak objects to this Request insofar as it seeks documents that are not in Amtrak's custody or control, can be obtained by CN through a public search and are equally available to CN as they are to Amtrak.

REQUEST FOR PRODUCTION NO. 14

All Documents relating to the training of Amtrak employees to enter data in eDR.

RESPONSE TO REQUEST FOR PRODUCTION NO. 14

Amtrak objects to this Request on the ground that it is overbroad. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013.

REQUEST FOR PRODUCTION NO. 15

All Documents relating to quality control procedures (including audits) that you have implemented or undertaken with respect to eDR data entry.

RESPONSE TO REQUEST FOR PRODUCTION NO. 15

Amtrak objects to this Request on the ground that it is overbroad. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013.

REQUEST FOR PRODUCTION NO. 16

All Documents relating to errors by, or inaccuracies in, the eDR system, including but not limited to errors or inaccuracies (i) in logging the correct arrival, departure, or passing time at stations or other locations; and (ii) in calculating the correct number of minutes of delay above PRT.

RESPONSE TO REQUEST FOR PRODUCTION NO. 16

Amtrak objects to this Request on the ground that it is overbroad. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will search for and produce, at a time and place and in a format mutually agreed upon by Amtrak and CN, any responsive, non-privileged documents from May 1, 2011 through October 31, 2013.

SPECIFIC ANSWERS AND OBJECTIONS TO INTERROGATORIES

Amtrak incorporates by reference its general objections in response to each of CN's interrogatories set forth below. To the extent an interrogatory permissibly calls for the production of documents, CN is directed to the documents referenced by Amtrak below, which will be produced in response to CN's Requests for Production at a mutually agreeable time and place. Amtrak states that the following responses are true and complete to the best of its knowledge at this time, while reserving the right to identify additional facts or documents, amend or supplement any answer, or raise additional objections during the course of this proceeding.

INTERROGATORY NO. 1:

For each Relevant Service, identify every instance in which Amtrak has considered but decided against updating PRT since the initial establishment of the train's schedule. For each such instance, include in your response (i) the month and year the update was considered; (ii) the nature and location of the update that was considered; (iii) the reason(s) the update was considered; (iv) the reason(s) the update was not implemented; and (v) the Amtrak personnel involved in the decisions.

RESPONSE TO INTERROGATORY 1:

Amtrak objects to this Interrogatory on the ground that it is overbroad, vague and unduly burdensome, including to the extent it would address information regarding Amtrak trains operating on non-CN lines. Subject to and without waiving Amtrak's foregoing general and specific objections, this Interrogatory essentially is duplicative of CN's Request for Production 2 relating to Amtrak train services on CN lines and CN may

determine the information requested from documents Amtrak will produce in response to that Request.

INTERROGATORY NO. 2:

Describe with particularity all changes made to the distribution of Recovery Time or Miscellaneous Time within schedules for the Relevant Services since October 31, 2013. For each such change, include in your response (i) the month and year the change was implemented; (ii) the nature and location of the change; (iii) the reason(s) the change was implemented; and (iv) the Amtrak personnel involved in the decisions.

RESPONSE TO INTERROGATORY 2:

Amtrak objects to this Interrogatory on the grounds that it is overbroad, vague and unduly burdensome, including to the extent that it would address information regarding Amtrak train services on non-CN lines. Amtrak also objects to this Interrogatory on the ground that Amtrak does not make alterations to Recovery Time or Miscellaneous Time unilaterally and such changes are made only by agreement between the parties or by amendment of the Operating Agreement. Amtrak further objects to this Interrogatory insofar as it seeks documents that are CN's own documents and/or in CN's possession or custody, or control or equally available to CN as to Amtrak.

INTERROGATORY NO. 3:

Describe with particularity the "new operating practices [implemented by Amtrak] to facilitate on-time departures from Chicago Union Station even when trains arrive late" referenced in the Report of the Amtrak Chicago Gateway Blue Ribbon Panel (October 2015) at page 23 (Attachment 1, hereto), and all projected, anticipated,

or actual effects of such practices on the ASOTP or Endpoint OTP of any Relevant Service.

RESPONSE TO INTERROGATORY 3:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will provide responsive information, which may include responsive, non-privileged documents.

INTERROGATORY NO. 4:

Describe with particularity the "additional equipment sets [added by Amtrak] to Chicago-based routes during periods when delays have been so severe that trains arrive too late to be serviced in time for same day departures" referenced in the Report of the Amtrak Chicago Gateway Blue Ribbon Panel (October 2015) at page 23, and all projected, anticipated, or actual effects of those additions on the ASOTP or Endpoint OTP of any Relevant Service.

RESPONSE TO INTERROGATORY 4:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will provide responsive information, which may include responsive, non-privileged documents.

INTERROGATORY NO. 5:

Describe with particularity all data and calculations that provided the basis for, or that support, the estimates of freight delay in the following statement that appears on page 3 of "Amtrak Chicago Gateway Railway Capacity Constraints: An analysis of

current National economic effects and consequences of failure to act” (September 2015), a link to which may be found on Amtrak’s website at

www.amtrak.com/ChicagoGateway: “Failure to act on the Chicago problem would increase freight delay from 46 to 143 minutes per 100 freight train-miles in 20 years.”

RESPONSE TO INTERROGATORY 5:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving Amtrak’s foregoing general and specific objections, the information is available on a fact sheet on the following website: http://createprogram.org/factsheets/rail_Operations_benefits.pdf.

Furthermore, since CN, like Amtrak, is one of the CREATE partners, (see page 3 of http://createprogram.org/linked_files/2014_1_16_CREATE%20Overview.pdf) CN has the same access to the calculations underlying the statistic and this information is equally available to CN as to Amtrak.

INTERROGATORY NO. 6:

Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the relationship between ASOTP and (i) Endpoint OTP; (ii) Host-Responsible Delay minutes; (iii) Amtrak-Responsible Delay minutes; or (iv) Third Party-Responsible Delay minutes, either generally or for one or more of the Relevant Services.

RESPONSE TO INTERROGATORY 6:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Amtrak further objects on the grounds that it seeks information that is neither relevant nor reasonably calculated to lead to the

discovery of admissible evidence relevant to issues in this proceeding. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will provide responsive information, which may include responsive, non-privileged documents.

INTERROGATORY 7:

Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the relationship between ASOTP and "performance within tolerance" as measured under the CN-Amtrak Operating Agreement.

RESPONSE TO INTERROGATORY 7:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak will provide responsive information, which may include responsive, non-privileged documents.

INTERROGATORY 8:

Identify and describe with particularity all studies or analyses conducted by you or on your behalf since October 31, 2013 that discuss the value of ASOTP, including without limitation the effect of changes in ASOTP on Amtrak revenues, ridership, public benefits, or costs associated with the Relevant Services.

RESPONSE TO INTERROGATORY 8:

Amtrak objects to this Interrogatory on the grounds that it is overbroad and unduly burdensome. Subject to and without waiving Amtrak's foregoing general and

specific objections, Amtrak will provide responsive information, which may include responsive, non-privileged documents.

INTERROGATORY 9:

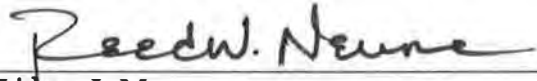
Describe with particularity all capital expenditures and investments that Amtrak has made, planned, or considered since 1971 to improve its On-Time Performance or reduce delays on the Relevant Services.

RESPONSE TO INTERROGATORY 9:

Amtrak objects to this Interrogatory on the grounds that it is compound, overbroad and unduly burdensome. As noted in its Response to Request for Production No. 11, subject to and without waiving Amtrak's foregoing general and specific objections, Amtrak previously provided to CN in response to Document Requests 8, 9 and 10 of CN's First Set of Discovery Requests a number of documents from 2008 to 2013 related to capital expenditures or investments to improve, facilitate or reduce costs associated with Amtrak trains operating on CN's lines.

Dated: October 30, 2015

/s/ Reed W. Neuman



Lida J. Morgan
Kevin M. Sheys
Reed W. Neuman
Justin Marks
Puja Bhatia
Nossaman LLP
1666 K Street, NW, Suite 500
Washington, DC 20006
(202) 887-1400

*Counsel for National Railroad
Passenger Corporation*

Respectfully submitted,

/s/William H. Herrmann

William H. Herrmann
Managing Deputy General Counsel
National Railroad Passenger Corporation
60 Massachusetts Avenue, NE
Washington, DC 20002

VERIFICATION OF CORPORATE EMPLOYEE

On behalf of the National Railroad Passenger Corporation ("Amtrak"), I have read the foregoing responses to the Second Set of Discovery Requests of IC and GTW. The responses were prepared with the assistance of Amtrak employees and with the assistance and advice of counsel. The answers are based on Amtrak's review of the records and information currently available. I reserve the right to make changes in or additions to any of these responses if at any time it appears that errors or omissions have been made or if more accurate or complete information becomes available. Subject to these limitations and reservations, these responses are true to the best of my present knowledge, information, and belief.

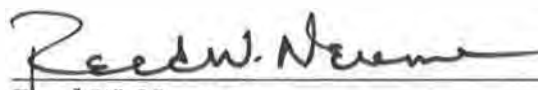
A handwritten signature in dark ink, appearing to read "C. E. Lanza", is written over a horizontal line.

Christine E. Lanza
Senior Associate General Counsel
National Railroad Passenger Corporation

CERTIFICATE OF SERVICE

I certify that I have this 30th day of October 2015, served the foregoing Responses and Objections to Second Set of Discovery Requests of IC and GTW by sending a copy by e-mail, as indicated below, to the following:

David A. Hirsh
HARKINS CUNNINGHAM LLP
1700 K Street, N.W., Suite 400
Washington, D.C. 20006-3804
(202) 973-7600

A handwritten signature in dark ink, appearing to read "Reed W. Neuman", is written over a horizontal line.

Reed W. Neuman
Nossaman LLP
1666 K Street, NW, Suite 500
Washington, DC 20006
(202) 887-1400

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EXHIBIT 3

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REDACTED

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EXHIBIT 4

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REDACTED

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EXHIBIT 5

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EXHIBIT 6
(without appendices)

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PUBLIC VERSION REDACTED

BEFORE THE SURFACE TRANSPORTATION BOARD

APPLICATION OF THE NATIONAL
RAILROAD PASSENGER
CORPORATION UNDER 49 U.S.C. §
24308(A) – CANADIAN NATIONAL
RAILWAY COMPANY

FINANCE DOCKET NO. 35743

VERIFIED STATEMENT
OF

BENJAMIN SACKS

ON BEHALF OF

NATIONAL RAILROAD PASSENGER CORPORATION

September 4, 2015

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I. Identity of Expert

Benjamin Sacks
Principal
The Brattle Group
1850 M Street NW, Suite 1200
Washington, DC 20036

II. Qualifications of Expert Witness

1. I have over 15 years of experience providing expert advice and testimony on the application of economics, corporate finance and statistics to valuations, the estimation of damages and determination of liability. Statistical regression analysis is among my areas of expertise.
2. I received my B.A. in mathematical economics from Columbia University, and my M.A. in economics from the University of Chicago.
3. Since 1997, I have been a testifying expert or consulting expert in numerous litigations and arbitrations. My recent representative experience includes the following:
 - a. In *ACS Shareholder Litigation*, Delaware Court of Chancery, Consolidated C.A. No. 4940-VCP I served as a testifying expert and critiqued the Defendant's expert's regression analysis.
 - b. In *Eastbanc, Inc. v. Georgetown Park Assoc. II L.P., et al.* (Sup. Ct. D.C. 2006), I served as a testifying expert and conducted regression analyses to understand the expected sales per square foot in a proposed shopping mall development.
 - c. I served as a consulting expert on behalf of the Russian Federation in three parallel arbitrations under UNCITRAL Rules in The Hague brought by former majority shareholders of Yukos Oil Company for alleged violations of the Energy Charter Treaty. I ran regression analyses on the relationship between valuation multiples and criteria posed by the Claimant's expert as predictors of those multiples.
 - d. In an international arbitration involving the value of mining concessions in Latin America, heard at the Permanent Court of Arbitration, I served as a consulting expert and performed regressions examining changes in the relationship between news events and the price of publicly traded shares.
 - e. In *PBM Products LLC v. Mead Johnson Nutrition Company and Mead Johnson & Company*, Eastern District of Virginia, C.A. No. 3:09CV269, I served as a consulting

expert and performed regression analysis on the relationship between sales, advertising and other factors.

- f. In *Coleman (Parent) Holdings, Inc. v. Morgan Stanley & Co. Inc.* CA 03-5045 AI (Fla. Cir. Ct.) I served as a consulting expert and performed a regression analysis of terminated mergers to determine whether the stock price of the target company was higher or lower than expected.
 - g. In an international arbitration involving the value of a Russian oil company, heard at the Stockholm Chamber of Commerce, I served as a consulting expert and performed regressions examining the relationship between news events and changes in the price of publicly traded shares.
 - h. In *Lehman Brothers Holdings Inc. and Official Committee of Unsecured Creditors of Lehman Brothers Holdings, Inc. Et al. v. United States of America* (U.S. District Court for the Southern District of New York) concerning tax-shelter transactions, I served as a consulting expert and provided statistical analyses showing that the way in which certain financial transactions were being structured were not cost-minimizing.
4. My resume, which contains a more complete explanation of my background, is attached as Appendix A.

III. Background for Analysis

5. To begin, I provide some background pertaining to my analysis:
- a. My analysis looks at data from the period July 1, 2011 through June 30, 2015 (the “Analysis Timeframe”).
 - b. My analysis relates only to Amtrak trains that operate for a portion of their route on Canadian National Railway Company (“CN”) rail lines. Thus, to differentiate between CN rail lines and rail lines operated by other companies on which a given Amtrak train may run, I will refer to “train miles” and “CN Train Miles.”
 - c. There are 24 Amtrak trains that operate on six routes over CN rail lines: the City of New Orleans, Illini/Saluki, Wolverine, Blue Water, Lincoln, and Texas Eagle routes (the “Amtrak Trains” running on “Amtrak Routes”). I have excluded the Sunset Limited which operates over CN in the New Orleans area for only approximately two miles.

- d. Conductors on Amtrak Trains record any delays that occur on each trip of their train, as well as the cause of those delays, and include this information in a report called an electronic Delay Report (“eDR”).¹
- e. Amtrak uses codes to categorize delays that occur while operating on host railroads. Responsibility for these delays is attributed to either the host railroad (“Host Responsible Delays” or “HRD”), Amtrak (“Amtrak Responsible Delays”) or a third party (“Third-Party Responsible Delays”). For purposes of my analysis and testimony Amtrak defines the following types of delays as Host Responsible Delays:

Freight Train Interference (“FTI”)
Passenger Train Interference (“PTI”)
Commuter Train Interference (“CTI”)
Slow Orders (“DSR”)
Signals (“DCS”)
Routing (“RTE”)
Maintenance of Way (“DMW”)

I adopt this definition.

- f. In addition to measuring Host Responsible Delays, Amtrak also measures the on-time performance of each Amtrak Train at each station on each Amtrak Route (“All Stations OTP”).²
- g. CN made a proposal to Amtrak dated July 20, 2013, attached as Appendix G and referred to herein as the “CN Proposal.”

IV. Scope of Opinions

- 6. I was asked to determine, using data provided to me by Amtrak (described below), the number of HRD minutes that correlate with 80% All Stations OTP (the “80% Point(s)”) for each Amtrak Route.
- 7. I was asked to develop an implementable Penalty System based on these 80% Points with the following goal: To negate CN’s perception that providing Amtrak service with HRD above the 80% Point (and hence expected All Stations OTP below 80%) creates a net cost savings for CN.

¹ I understand that Amtrak has transitioned from paper delay reporting to electronic delay reporting. For purposes of my analysis, these systems are equivalent because they record the same information.

² Amtrak records minutes late or early, which I use to determine All Stations OTP. See Section V.A.2.

8. Amtrak also asked me to demonstrate how their proposed Quality Payment system would integrate with the proposed Penalty System.

V. Substance of Opinions

9. I use standard statistical methods to calculate the 80% Points. I first discuss the data that I use for this analysis. I then explain my analysis, its results and how these results are used to determine the 80% Points. I then explain the Penalty System that is based on the 80% Points.
10. Throughout this report, when I discuss HRD minutes I will generally discuss them as HRD minutes *per 10,000 Amtrak train miles* (“HRD/10K”) or as CN HRD minutes *per 10,000 CN Train Miles* (“CN HRD/10K”). I do this for three main reasons:
 - a. First, as a convenience to the reader. Much of the analysis in this report deals with the impact of HRD on All Stations OTP. Routes differ significantly in length and the impact of a minute of HRD on All Stations OTP will generally be smaller for longer routes. But, the impact of a minute of HRD *per unit length* is generally of the same order of magnitude across Routes. It is easier for the reader to compare the impact of HRD on All Stations OTP across routes if HRD is normalized to account for the length of the Route.
 - b. Second, it is my understanding that Amtrak reports delays to the Federal Railroad Administration and others in increments of minutes of delay per 10,000 train miles, so this was a natural way to normalize across routes.
 - c. Third, this normalization has no effect on the determination of the 80% Point, or on any of the statistical properties of the analyses leading to it, or on the Penalties, if any, that CN might incur if this system is implemented.
11. Results calculated using HRD/10K can be converted to HRD by multiplying by the total Amtrak train miles for the Amtrak Route, and then dividing by 10,000. Similarly, results calculated using CN HRD/10K can be converted to CN HRD by multiplying by the CN Train Miles for the Amtrak Route, and then dividing by 10,000.

V.A. THE DATASET SUPPORTING MY ANALYSIS

V.A.1. Host Responsible Delays

12. To calculate HRD/10K for each of the six Amtrak Routes in each month during the Analysis Timeframe, I first summed the total number of HRD minutes on every train on

each Amtrak Route in each month, separately for each Amtrak Route and month.³ I then calculated HRD per train mile, for each Amtrak Route and each month, by dividing each HRD figure by the total train miles on that Amtrak Route in that month.⁴ The formula for this is:

$$\text{HRD / train mile}_{r,m} = \frac{\text{All HRD minutes on route "r" in month "m"}}{\text{All Amtrak train miles on route "r" in month "m"}} \quad (1)$$

13. As an illustrative example, in June 2015, the total minutes of HRD on the City of New Orleans route (“CONO”), summing across all City of New Orleans route trains that month, was 5,183. Total Amtrak train miles on the City of New Orleans route in June 2015 were 56,076. Applying the above calculation, the resulting HRD minutes per train mile on the City of New Orleans route for June 2015 was 0.0924.

$$\text{HRD / train mile}_{\text{CONO},6/15} = \frac{\text{All HRD minutes on CONO in 6/15}}{\text{All Amtrak train miles on CONO in 6/15}} = \frac{5,183}{56,076} = 0.0924 \quad (2)$$

14. I calculated HRD/10K by multiplying the numbers resulting from the division discussed above by 10,000.

$$\text{HRD/10K}_{r,m} = \frac{\text{All HRD minutes on route "r" in month "m"}}{\text{All Amtrak train miles on route "r" in month "m"}} \times 10,000 \quad (3)$$

15. Looking again at the City of New Orleans route in June 2015, the total minutes of HRD was 5,183, and total Amtrak train miles was 56,076. Therefore, the HRD/10K for the City of New Orleans route in June 2015 was:

$$\text{HRD/10K}_{\text{CONO},6/15} = \frac{5,183}{56,076} \times 10,000 = 924 \quad (4)$$

V.A.2. On-Time Performance

16. For purposes of this analysis, an Amtrak Train was considered on-time at each station if (i) for the origin station, it departed from the station within 15 minutes of its scheduled departure time, and (ii) for all other stations, it arrived at the station within 15 minutes of its scheduled arrival time (“On-Time” means within 15 minutes of the scheduled time). Any trains that departed more than 15 minutes after their scheduled departure time from their origin station or arrived more than 15 minutes after their scheduled arrival time for all other stations were not considered On-Time at that station for the purpose of this

³ This data was supplied in the eDR Dataset, see Appendix F. I only consider non-temporary trains.

⁴ This data was supplied in the Train Miles Dataset, see Appendix F.

analysis. I calculated All Stations OTP as the fraction of all station stops on the entire Amtrak Route at which Amtrak Trains were On-Time, and I calculated this measure for each Amtrak Route in each month during the Analysis Timeframe.

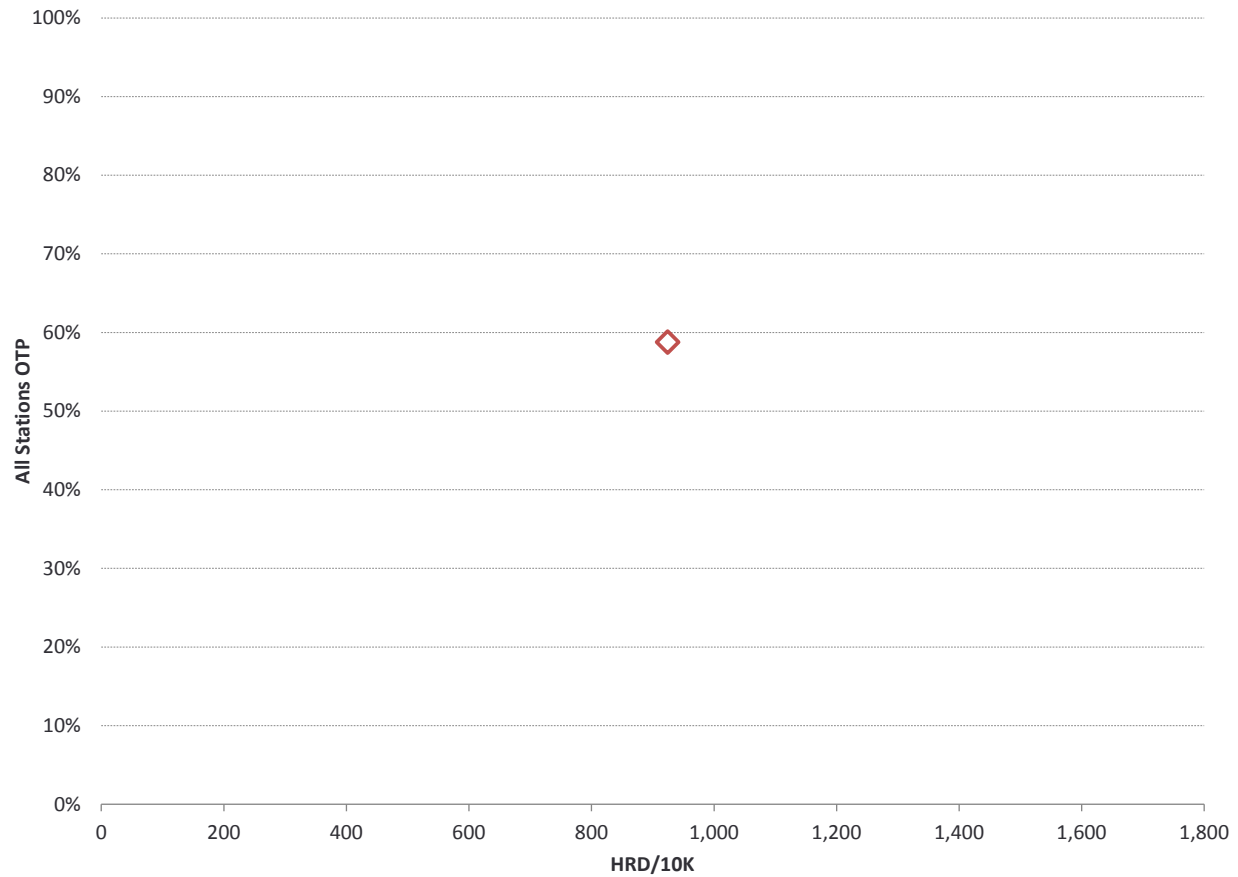
17. As an illustrative example of the All Stations OTP calculation, in June 2015 Amtrak Trains on the City of New Orleans route were On-Time at 670 out of 1,140 total station stops. Therefore, All Stations OTP for the City of New Orleans route in June 2015 was 58.8%, as calculated below.

$$\text{All Stations OTP}_{\text{CONO},6/15} = \frac{670}{1,140} = 0.588 \text{ or } 58.8\% \quad (5)$$

V.B. FINDING THE 80% POINT

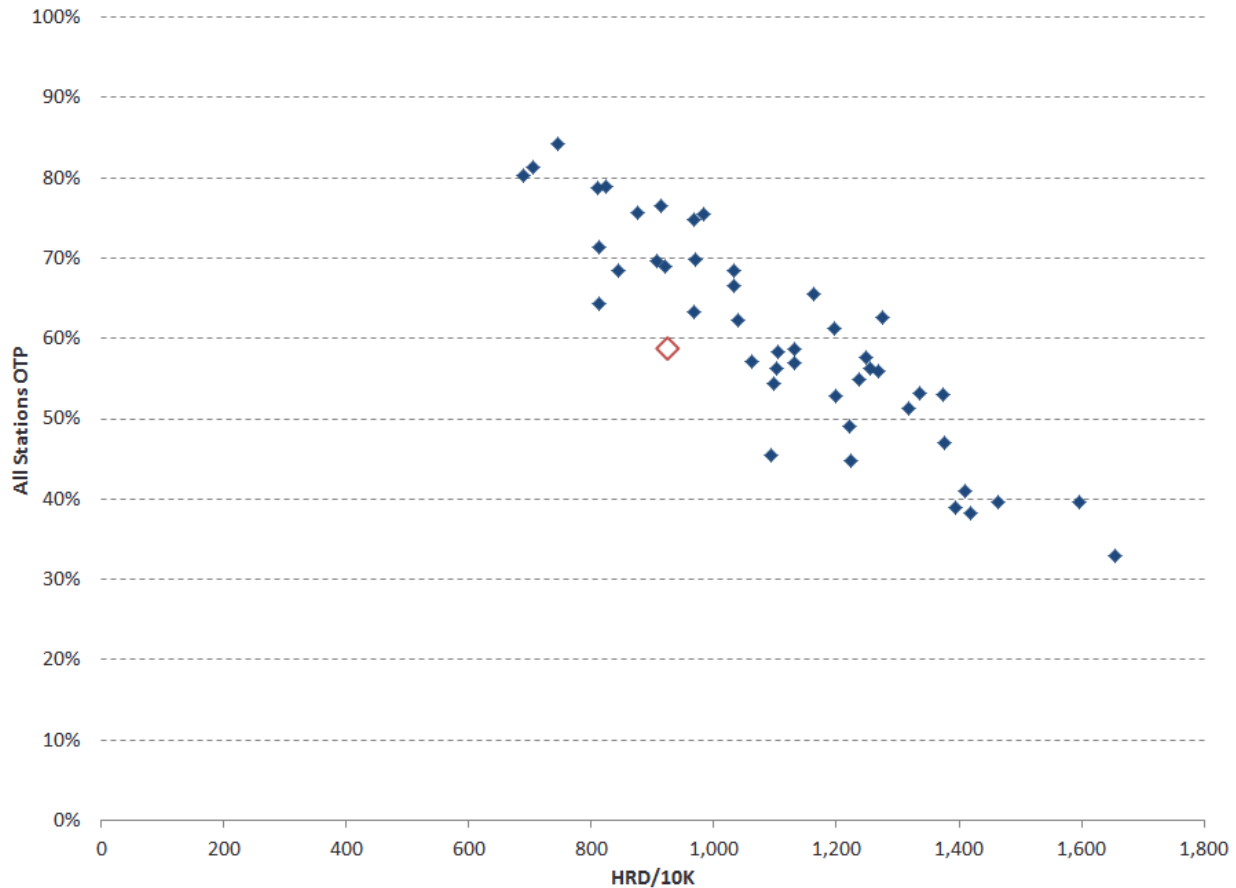
18. I next discuss how I use standard statistical methods to find the 80% Point. Before presenting the statistics, I first demonstrate and explain the common sense observation that I will analyze rigorously with statistics: more HRD/10K leads to lower All Stations OTP in a largely predictable fashion.
19. I do so with a graph. I first explain how the graph works, and then plot the data on the graph, allowing the reader to observe the relationship between HRD/10K and All Stations OTP.
20. In Figure 1 below, the vertical axis represents the All Stations OTP percentage, and the horizontal axis represents HRD/10K. I have plotted the data point for Amtrak Trains on the City of New Orleans route during June 2015: 924 minutes of HRD/10K and a 58.8% All Stations OTP.

**Figure 1: Data Point for City of New Orleans Route in June 2015
(924 minutes of HRD/10K and 58.8% All Stations OTP)**



21. In Figure 2, I plot, with solid diamonds, the data points for the other months of the City of New Orleans route during the Analysis Timeframe. June 2015 remains as a hollow diamond.

Figure 2: All Stations OTP and HRD/10K for the City of New Orleans Route during the Analysis Timeframe



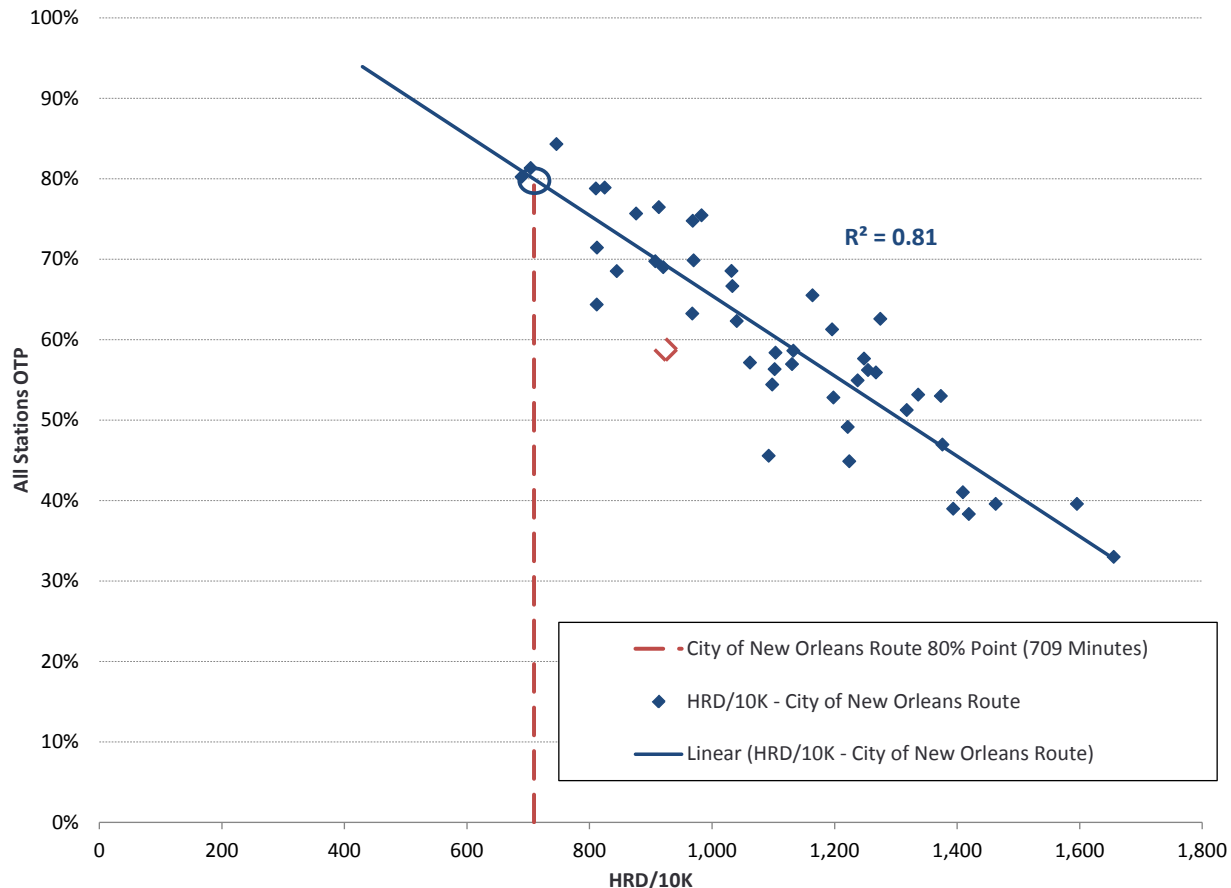
22. The data in Figure 2 shows that All Stations OTP decreases as HRD/10K increases. This is the common sense observation that I analyze rigorously with standard statistical methods.
23. I used a statistical method called ordinary least squares regression (“OLS”) to estimate *by how much* All Stations OTP decreases as HRD/10K increases. That relationship is represented in Figure 3 as the solid downward sloping line (technically called the “line of best fit”) which has been added to same data points as contained in Figure 2.⁵
24. The level of HRD/10K at which All Stations OTP should average 80% (the “80% Point”) is determined by the line of best fit.⁶ As can be seen in Figure 3, the 80% Point is the point

⁵ The “line of best fit” is the line that fits the data best according to the OLS regression. OLS determines the line of best fit, also called the regression line, as the line that minimizes the sum of the squares of the vertical distances between each point and the line.

⁶ In statistical language, the 80% point is the level of HRD/10K at which the expected All Stations OTP is 80%.

on the line of best fit where it crosses the 80% All Stations OTP threshold. This point is circled on the graph. The vertical line (dashed) connecting this point to the horizontal axis shows the minutes of HRD/10K at which All Stations OTP is expected to be 80%. For the City of New Orleans route this occurs at 709 minutes of HRD/10K.

Figure 3: Statistical Analysis of the Relationship between HRD and All Stations OTP for the City of New Orleans Route



25. The relationship between HRD/10K and All Stations OTP determined by OLS—represented by the line of best fit—was statistically significant and had substantial explanatory power.⁷ Statistical significance means that the relationship observed was unlikely to be due to random chance. The technical meaning is that—at the conventional 5% level of significance which I use—if there was no actual relationship between HRD/10K and All Stations OTP, then there would be a 5% or less chance of observing an apparent relationship as large as that actually observed in the data.⁸

⁷ See Appendix C.

⁸ See, for example, Kennedy, Peter. *A Guide to Econometrics*. 5th ed. Cambridge: MIT Press, 2003. 246.

26. The explanatory power was high because monthly differences in HRD/10K explain 81% of monthly differences in All Stations OTP for this Route.⁹ In layman’s terms this means that, on average, for any two points, 81% of the difference between their levels of All Stations OTP was explained by differences in their minutes of HRD/10K. So, for the City of New Orleans route during the Analysis Timeframe, *most* (i.e., 81%) of the month to month variation observed in All Stations OTP was explained by month to month variation in HRD/10K.
27. I analyzed each Route separately. Data plots for other Amtrak Routes using the same methodology are similar in that All Stations OTP declines in a largely predictable manner as HRD/10K increases. These data and plots are provided in Appendix B. Detailed regression results are in Appendix C. All regressions used to determine the 80% Points were statistically significant at the conventional 5% level.
28. For each regression, the dependent variable (what needs to be explained) was All Stations OTP, calculated on a monthly basis as discussed above.¹⁰ The independent variable (the factor doing the explaining) was HRD/10K. The regression equation is given in equation (6):

$$OTP_{r,m} = \alpha_r + \beta_r * HRD/10K_{r,m} + e_{r,m} \quad (6)$$

where $OTP_{r,m}$ is All Stations OTP for Route r in month m ; $HRD/10K_{r,m}$ is minutes of HRD/10K for Route r in month m ; $e_{r,m}$ are the “residuals” meaning the variations in All Stations OTP that are not explained by changes in HRD/10K; and α_r and β_r are parameters to be estimated for Route r . The regression chooses the α_r and β_r parameters that minimize the sum of the squares of the residuals.¹¹

29. To determine the 80% Point, I ran the regression for the entire Analysis Timeframe on each Amtrak Route, with the following exceptions:
- Permanent schedule changes: There were permanent schedule changes on the Blue Water and Wolverine routes in September 2012 that altered the relationship between

⁹ The statistical measure of explanatory power, R^2 , is 0.81.

¹⁰ There is a separate regression for each route to determine the 80% Point.

¹¹ For ease of notation, I suppress the r (route) subscripts in the remainder of the discussion. α and β refer to the parameters from a given route, and each route has its own set of parameters.

HRD/10K and All Stations OTP.¹² For those routes, I used only data after these permanent schedule changes.

- b. Temporary schedule changes due to track work: I did not include days in which any train on the relevant Amtrak Route had a schedule change due to track work.
 - c. Incomplete routes: I did not include a given Route on a given day if any of the trains on that Route on that day failed to reach the end-point station, or did not start at the first station normally scheduled for that Route. This affected only a small fraction of days.
 - d. Outliers: There are seven data points that appear to be outliers with exceptionally high HRD/10K. To be conservative, I remove these from the analysis. Had I included them, the 80% Points would be lower, meaning penalties would generally be higher.¹³
30. If there were 10 or more days affected by (b) or (c) on an Amtrak Route in a month, I omitted the Route for that month.¹⁴
31. Based on the α and β parameters estimated in the regression for Route r , denoted as $\hat{\alpha}$ and $\hat{\beta}$, the All Stations OTP expected for any given level of HRD/10K is given by equation (7):

$$E\{OTP\} = \hat{\alpha} + \hat{\beta} * \text{HRD/10K} \quad (7)$$

where $E\{OTP\}$ means the expected value of All Stations OTP.

¹² See Appendix B. There were also additional permanent schedule changes on these Routes and on other Routes during the Analysis Timeframe, but those did not significantly alter the relationship between HRD/10K and All Stations OTP.

¹³ A data point is a monthly {HRD/10K, All Stations OTP} observation on a Route. I remove these points as outliers for two related reasons. First, the linear relationship between All Stations OTP and HRD/10K which holds over the range of HRD/10K that I analyze and that is relevant for the Penalty System does not hold at very high values of HRD/10K. Second, these outliers have a large impact on the regressions. Since these points should not be included in a linear regression and have a large impact if they are included, I drop them.

¹⁴ See Appendix F for the list of Routes and days with temporary schedule changes due to track work. Note that this list does not include Routes and days dropped due to an incomplete Route not covered by a temporary schedule change due to track work.

32. For each Route, the 80% Point is the minutes of HRD/10K that yields an All Stations OTP of 80% when inserted into this equation. Simple algebra yields the following formula for the 80% Point, given in equation (8):

$$\text{HRD/10K at 80\% Point} = \frac{(80\% - \hat{\alpha})}{\hat{\beta}} \quad (8)$$

33. A summary of the 80% Points (and supporting regression results) is provided in Figure 4.

Figure 4: Regression Results and 80% Points by Amtrak Route¹⁵

Amtrak Route	Y-Intercept Estimate [1]	Coefficient Estimate [2]	R-Squared [3]	80% Point [4]
Blue Water	1.18	-0.000406	0.63	936
City of New Orleans	1.15	-0.000499	0.81	709
Illini/Saluki	0.94	-0.000329	0.84	432
Lincoln	1.17	-0.000342	0.95	1,073
Texas Eagle	1.00	-0.000322	0.63	615
Wolverine	0.90	-0.000246	0.57	411

Source: Analysis of Amtrak Data

Notes:

[4]: $(0.8 - [1]) / [2]$.

34. As shown in Figure 4, the 80% Point for the City of New Orleans route is 709 minutes of HRD/10K. The corresponding figures for the Blue Water, Illini/Saluki, Lincoln, Texas Eagle, and Wolverine routes are 936, 432, 1073, 615, and 411 respectively. In each case the proportion of the variation in All Stations OTP that is explained by variation in minutes of HRD/10K is significant, as indicated by the R². All of the parameters are statistically significant at the conventional 5% level.¹⁶

V.C. PENALTY SCHEDULE

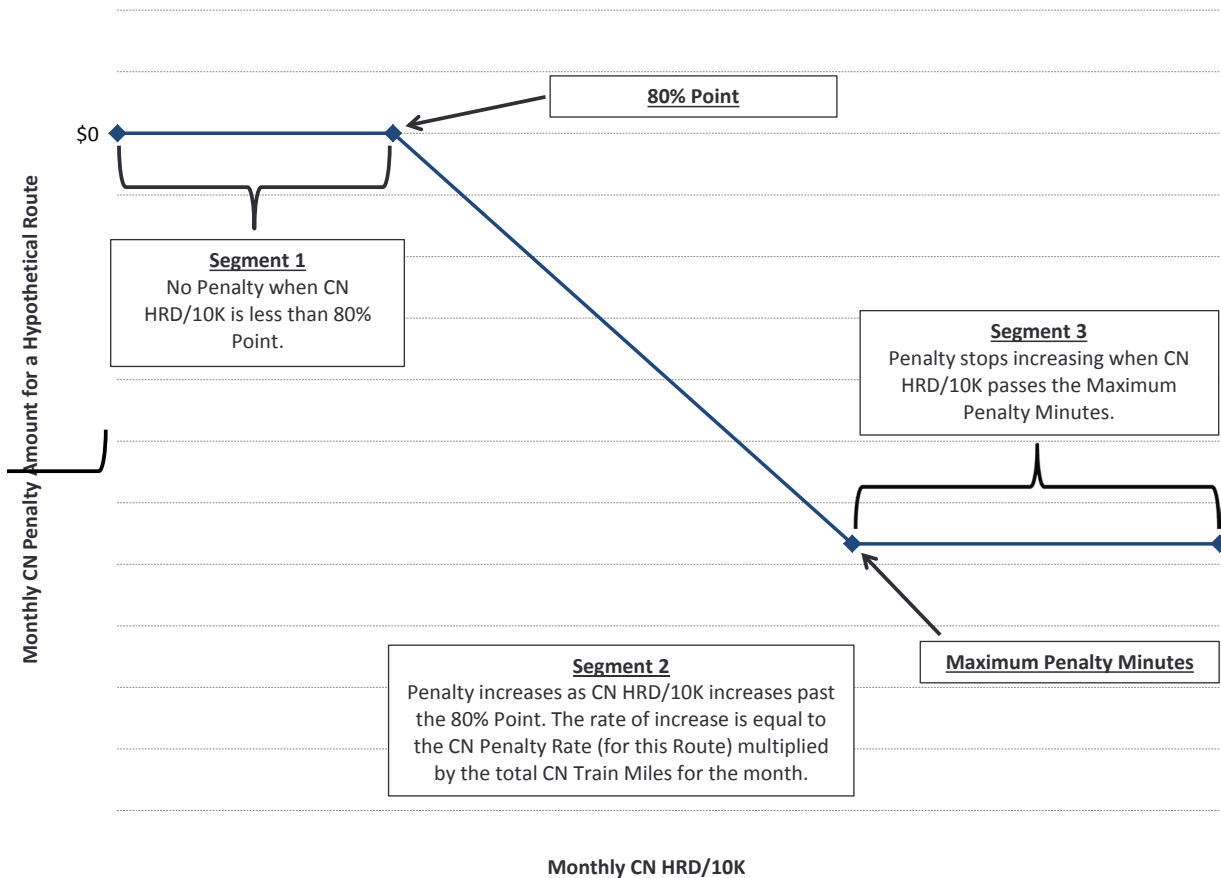
35. As noted above, Amtrak asked me to develop an implementable Penalty System based on the 80% Points with the following goal: To negate CN's perception that providing Amtrak service with HRD above the 80% Point (and hence expected All Stations OTP below 80%) creates a net cost savings for CN. I do so using information from the CN Proposal, which indicates how CN believes its costs change as the service it provides to Amtrak changes.

¹⁵ Detailed regression results are in Appendix C.

¹⁶ See Appendix C.

36. The essence of the Penalty Schedule is explained in Figure 5. Note that penalties are represented as negative numbers, so that the line representing the penalty to CN goes down as the amount of the penalty increases. As shown in Figure 5, the essence of the Penalty Schedule is to:
- a. Apply a penalty to CN only if the minutes of HRD on CN track exceed the threshold of the 80% Point. If minutes of CN HRD/10K (defined above as minutes of CN HRD per 10,000 CN Train Miles) are less than or equal to those given by the 80% Point, there is no penalty. This corresponds to “Segment 1” in Figure 5.
 - b. Increase that penalty as minutes of CN HRD increase in a manner that negates CN’s perceived cost savings from providing worse service to Amtrak. This rate of increase is given by the “CN Penalty Rate”. This corresponds to “Segment 2” in Figure 5. On this segment the penalty assessed would be the CN Penalty Rate multiplied by CN Train Miles in that month multiplied by the difference between the minutes of CN HRD/10K and the 80% Point.
 - c. Stop increasing the penalty at minutes of CN HRD/10K beyond which CN no longer perceives a cost savings from providing worse service to Amtrak, the “Maximum Penalty Minutes.” This corresponds to “Segment 3” in Figure 5. The penalty in this segment remains at the CN Penalty Rate multiplied by CN Train Miles in that month multiplied by the difference between the Maximum Penalty Minutes and the 80% Point.

Figure 5: Illustrative Example of Penalty Schedule



37. The CN Penalty Rate and the Maximum Penalty Minutes are calculated separately for each Route. I first describe the calculations for each, at a conceptual level, and then provide details. At a conceptual level, the CN Penalty Rates are calculated as follows:
- First, I identified from the CN Proposal the periods of relatively better and worse service for which CN states what it believes its additional costs to be.
 - Second, I used that information to determine the difference in annual costs per CN Train Mile that CN believes it incurs at those two different service levels.
 - Third, for each Route I used information on how CN's service to Amtrak actually differed in the two service periods to determine what CN believes to be its costs per CN Train Mile per additional minute of CN HRD/10K for each Route. This is the CN Savings Rate.
 - Fourth, to ensure that CN is not indifferent as between providing poor service and incurring the penalty, versus providing good service to avoid the penalty, I multiplied the CN Savings Rate by 1.2 to obtain the CN Penalty Rate for each Amtrak Route.

38. At a conceptual level, the Maximum Penalty Minutes are calculated, separately for each Route, based on the level of service that CN's statements imply correlate to zero additional costs on that Route (i.e., a level of service so poor that CN perceives it incurs no additional cost to carry Amtrak Trains).
39. I explain each of these steps below.

V.C.1. Costs CN Reports Incurring for Relatively Better vs. Worse Service

40. The CN Proposal included information on annualized additional costs that CN attributes to the provision of relatively better Amtrak service during a period which began in February 2013, and which I refer to as the "February 2013 Level of Service."¹⁷ For this service level, the additional costs¹⁸ CN attributes to providing relatively better Amtrak service on the CN lines used for the City of New Orleans and Illini/Saluki routes are \$7.8 million per year.¹⁹ CN said this represented 80% of Amtrak's total train miles on CN and estimated the additional costs it attributes to providing relatively better service to all Amtrak Routes on CN lines to be \$9.7 million per year.²⁰
41. CN stated that the additional costs it attributes to providing relatively worse service to Amtrak Routes on the CN lines would be \$2.4 million per year if CN returned to the level of service CN provided to Amtrak prior to February 2013.²¹ I refer this as the "Pre-February 2013 Level of Service."

¹⁷ CN did not specify the end date for the freight train delay cost information it provided. I assumed the relevant period for this higher level of service is February to April (inclusive) of 2013. The CN Proposal was dated July 2013, so it is possible that CN considered the period from February to July as representing the February 2013 Level of Service. The total penalties CN would face would likely be higher if the February 2013 Level of Service were assumed to refer to this longer period. See Appendix D.

In addition, Amtrak has informed me that it does not accept or agree with the additional costs CN attributes to the provision of relatively better Amtrak service. I use the information CN provided—which indicates what CN believes—given that my assignment is to account for CN's beliefs.

¹⁸ CN said these costs were conservative because they included only "crew costs, fuel, locomotive, and freight car use..." See Appendix G at 2. If CN included additional attributed costs, the calculations I made would likely lead to a higher CN Savings Rates (defined below), which would lead to higher penalty levels. Thus, my calculations and analysis are conservative.

¹⁹ See Appendix G at 2.

²⁰ See Appendix G at 2.

²¹ See Appendix G at 2, footnote 1. CN did not specify the start date of the service period used to calculate this cost, but I know when it ended and that CN considers it an annual cost, so I assumed the relevant period for this higher level of service is the year ending January 31, 2013.

V.C.2. Per Train Mile Costs for Relatively Better vs. Worse Service

42. CN converted its \$9.7 million *per year* estimate for its perceived additional costs for the February 2013 Level of Service to a perceived additional *cost per CN Train Mile* of \$6.94 by dividing the \$9.7 million of annual perceived additional costs by annual CN Train Miles.²²
43. Similarly, I converted CN's \$2.4 million *per year* estimate for its perceived additional costs for the Pre-February 2013 Level of Service to a perceived additional *cost per CN Train Mile* of \$1.72 in the same manner.²³
44. The difference in CN's perceived additional cost per CN Train Mile between the February 2013 Level of Service and the Pre-February 2013 Level of Service is \$5.22 (= \$6.94 – \$1.72).

V.C.3. CN's Perceived Cost Savings Per CN Train Mile for Each Additional Minute of CN HRD/10K

45. The CN Proposal shows that CN perceives that it saved \$5.22 per CN Train Mile by operating Amtrak trains at higher levels of HRD in the Pre-February 2013 Level of Service than in the February 2013 Level of Service. I quantify *by how much* CN believes that its costs are reduced as HRD rises by relating this perceived savings to the observed difference in minutes of CN HRD/10K between those two Levels of Service.
46. For each Route I calculated the additional costs per CN Train Mile that CN perceives that it saves for each *additional minute of CN HRD/10K* (the "CN Savings Rate") as the ratio of (i) the difference in such costs per train mile between the February 2013 Level of Service and the Pre-February 2013 Level of Service (calculated above as \$5.22) to (ii) the difference in average minutes of CN HRD/10K for the same two periods on the given Route. For a given Route, the formula is:²⁴

$$\text{CN Savings Rate} = \frac{\$5.22}{\text{CN HRD}_{\text{pre-2013}} - \text{CN HRD}_{2013}} \quad (9)$$

²² See Appendix G at 2. It appears that CN used CN Train Miles for 2012 to make this calculation: \$9.7 million / 1.399 million CN Train Miles = \$6.93. Note that this slightly differs from the \$6.94 that CN reports. I use the \$6.94 figure that CN reports.

²³ I divided the \$2.4 million of annual additional costs by annual CN Train Miles. \$2.4 million / 1.399 million CN Train Miles from 2/1/12 to 1/31/13 = \$1.72 per CN Train Mile.

²⁴ The Penalty Schedule thus implicitly assumes that CN's cost saving per CN Train Mile between the February 2013 Level of Service and the Pre-February 2013 Level of Service is the same on all Routes.

where $CN\ HRD_{2013}$ is the CN HRD/10K averaged over February-April 2013 on a given Amtrak Route and $CN\ HRD_{pre-2013}$ is the CN HRD/10K averaged over the year ended January 31, 2013 on that same Amtrak Route.

47. For example, on the Illini/Saluki route there were 837 minutes of CN HRD/10K in the February-April 2013 period and 1,140 minutes of CN HRD/10K in the year ended January 31, 2013. Applying formula (9), the CN Savings Rate is \$0.0172 ($= \$5.22 / (1,140 - 837)$) per CN Train Mile per minute of CN HRD/10K. Based on the CN proposal, CN perceives that its costs per CN Train Mile on the Illini/Saluki route are reduced by \$0.0172 for every additional minute of CN HRD/10K that Illini/Saluki trains incur. For example, if minutes of CN HRD/10K increase by 100 on the Illini/Saluki route, CN perceives that its costs will decrease by \$1.72 for every train mile that the Illini/Saluki trains operate on CN.
48. In order to ensure that CN's perception that providing Amtrak service below the 80% Point does not create a net cost savings, the penalty at any given service level below the 80% Point must exceed the amount CN would expect to save as compared to providing service at the 80% Point. If the penalty exactly equaled the expected cost savings, then CN will be indifferent between the perceived cost savings and the penalty avoidance. For this reason, I calculate the CN Penalty Rate by multiplying the CN Savings Rate by 1.2, meaning that CN's penalty will be 20% higher than its perceived savings. In my opinion, 20% is the lowest number that adequately ensures that, even if I have underestimated the actual CN Saving Rate for a given Route, the penalty rate should still be above the actual CN Savings Rate.
49. Figure 6 shows the CN Savings Rate and CN Penalty Rate for each Amtrak Route.

Figure 6: CN Savings Rate and CN Penalty Rate by Route²⁵

Route	CN Savings Rate [1]	CN Penalty Rate [2]
Blue Water	\$0.0122	\$0.0146
City of New Orleans	\$0.0171	\$0.0206
Illini/Saluki	\$0.0172	\$0.0206
Lincoln	\$0.0078	\$0.0094
Texas Eagle	\$0.0234	\$0.0281
Wolverine	\$0.0111	\$0.0133

Source: Analysis of Amtrak Data and the CN Proposal

Notes:

[1]: Units are dollars per CN Train Mile per minute of CN HRD/10K.

[2]: [1] * 1.2. Same units as [1].

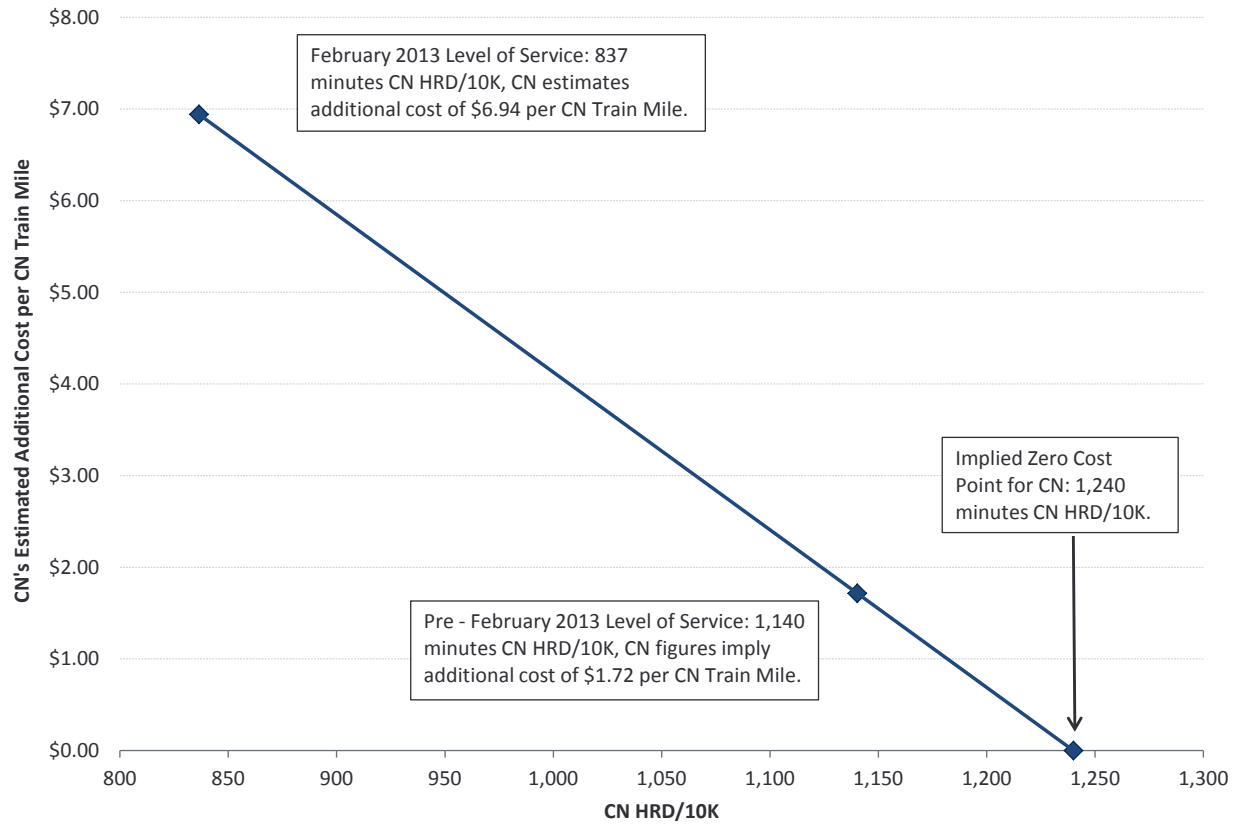
V.C.4. Maximum Penalty Minutes

50. As described above, CN perceives that as CN HRD/10K increases on a given Route, the additional costs per CN Train Mile declines (*i.e.*, CN thinks that providing worse service to Amtrak is cheaper for CN). The CN Savings Rate (see Figure 6) shows *by how much* CN's statements imply it perceives that its cost decreases for each additional minute of CN HRD/10K, on a Route by Route basis.
51. On each Route, the Maximum Penalty Minutes is the CN HRD/10K at which the additional costs CN believes it incurs for carrying Amtrak Trains reaches zero. The Penalties Schedule stops increasing once CN HRD/10K reaches the Maximum Penalty Minutes. The calculation of the Maximum Penalty Minutes for the Illini/Saluki route is illustrated graphically in Figure 7.²⁶

²⁵ These calculations are provided in more detail in Appendix E.

²⁶ See Appendix E for derivation of the Maximum Penalty Minutes.

Figure 7: The Maximum Penalty Minutes for the Illini/Saluki Route



52. Figure 8 displays the Maximum Penalty Minutes for each Amtrak Route.

Figure 8: Maximum Penalty Minutes²⁷

Route	Maximum Penalty Minutes [1]
Blue Water	1,163
City of New Orleans	1,145
Illini/Saluki	1,240
Lincoln	1,680
Texas Eagle	1,604
Wolverine	1,609

Source: Analysis of Amtrak Data and the CN
Proposal

Notes:

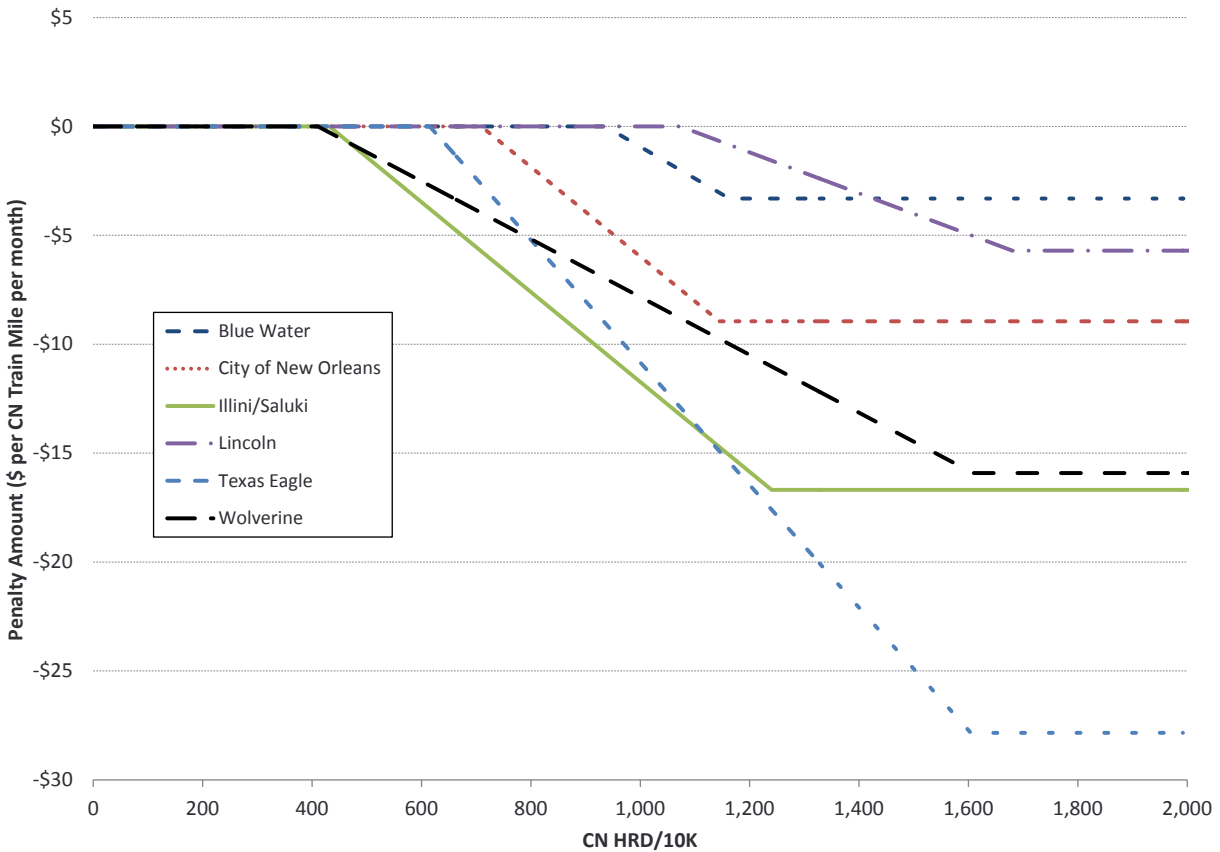
[1]: Units are minutes of CN HRD/10K.

V.C.5. Penalty Rates

53. For each Route, Figure 9 shows the monthly CN Penalty Rate Schedule, which is a function of minutes of CN HRD/10K. As discussed in ¶36 the Penalty Schedule is zero when CN HRD/10K is below the 80% Point, and then increases as CN HRD/10K increases past the 80% Point, capping out at the Maximum Penalty Minutes. The Maximum Penalty Minutes differ by Route because the difference (in terms of CN HRD/10K) between the February 2013 and Pre-February 2013 Levels of Service were not the same on all Routes.

²⁷ See Appendix E for derivation of the Maximum Penalty Minutes.

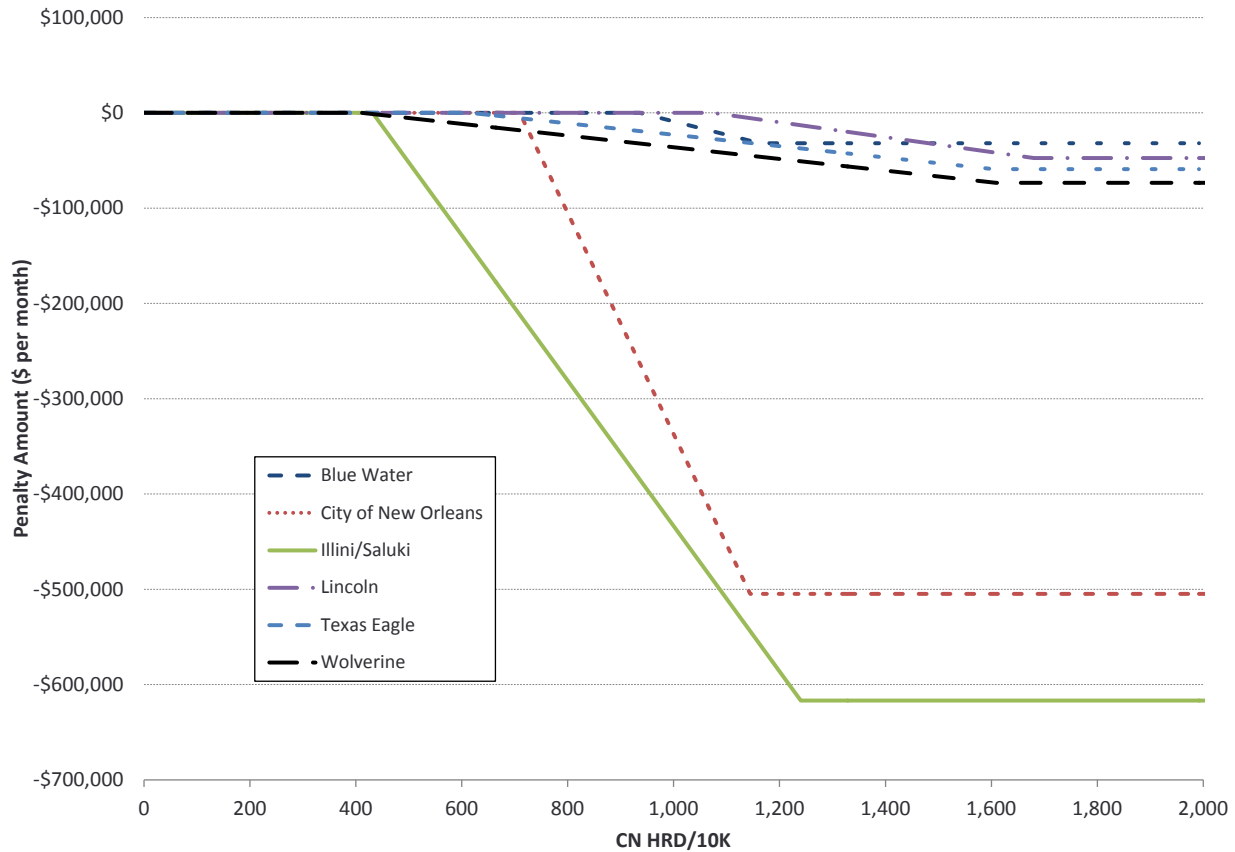
Figure 9: CN Penalty Rate Schedule by Route



54. The CN Penalty Rate shown in Figure 9 is a rate per CN Train Mile. To obtain total CN Penalties in a month, one must multiply the CN Penalty Rate by CN Train Miles for a given Route on a given month. Figure 10 shows, for each Amtrak Route, the total monthly penalties to CN at different levels of CN HRD/10K, calculated at the average monthly CN Train Miles on each Route.²⁸

²⁸ Monthly averages are over calendar year 2013.

Figure 10: Total Monthly CN Penalty as a Function of CN HRD/10K, by Route



VI. Integrating Quality Payments

55. Amtrak asked me to demonstrate how their proposed Quality Payment system would integrate with the proposed Penalty System. The Quality Payment system provides quality payments to CN, on a Route by Route and month by month basis, for service that is better than the 80% Point – that is, when CN HRD is less than the level of CN HRD at the 80% Point on a given Route.
56. These Quality Payments increase as CN HRD decreases at the same rate as the penalties increase in the Penalty System. As shown in Figure 11, the monthly Quality Payments for each Route cap out at certain levels,

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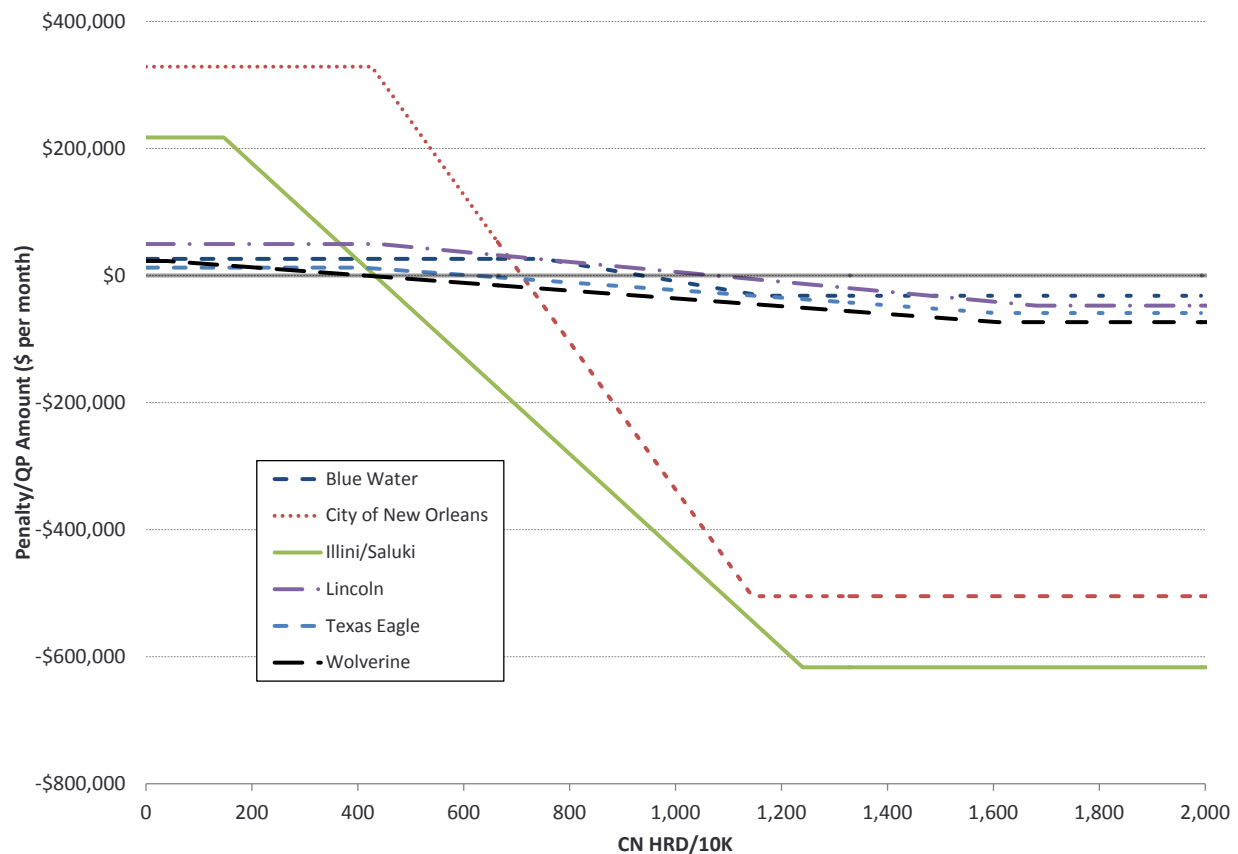
Figure 11: Monthly Maximum Incentive Payments, by Route

Route	Maximum Monthly Incentive Payment
Blue Water	\$26,131
City of New Orleans	\$328,632
Illini/Saluki	\$217,269
Lincoln	\$49,447
Texas Eagle	\$12,362
Wolverine	\$22,754

Source: Provided by Amtrak

57. Figure 12 shows how the Quality System integrates with the Penalty System. Note that Quality Payments are represented as positive numbers on the graph, and penalties as negative.

Figure 12: Total Monthly CN Penalty and Quality Payment as a Function of CN HRD/10K, by Route



Signed,

A handwritten signature in blue ink, appearing to read "Ben Sacks", with a long horizontal flourish extending to the right.

Benjamin Sacks

September 4, 2015

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EXHIBIT 12

1 **IMPACT OF ON-TIME PERFORMANCE AND FUEL PRICES ON AMTRAK**
2 **RIDERSHIP AND REVENUE**

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ABSTRACT

Due in part to the expiration in 2013 of the Passenger Rail Investment and Improvement Act (PRIIA), on-time performance (OTP) levels have decreased on many Amtrak routes in the past two years. This has led to longer train delays, on average, than have been experienced since 2008, prior to PRIIA's initial passage. These delays could lead in turn to passengers becoming frustrated with their travel experience, and ultimately choosing to travel by other modes. In addition, recent downward trends in gas prices have raised the possibility that lower prices may continue into the near- and longer-term future. This has raised concern within Amtrak that current rail passengers may switch to automobiles, decreasing Amtrak ridership and revenue. Amtrak asked Steer Davies Gleave (SDG) to analyze the impacts of reduced OTP levels and sustained lower fuel prices on its system-wide ridership and revenue. Accordingly, SDG developed a series of econometric models of these relationships. The models found statistically significant ridership responses both to changes in OTP and in fuel price. SDG estimated separate models for 10 different segments of the Amtrak market, and obtained intuitive differences between the markets' sensitivities to OTP and fuel price. Amtrak staff is already using the models as a tool for short term budgeting and operations planning.

Keywords: Transit Planning, Rail, Econometric Models

INTRODUCTION

Trends in OTP

The Passenger Rail Investment and Improvement Act of 2008 (PRIIA) implemented metrics and standards for Amtrak's on-time performance (OTP). PRIIA provided financial incentives for host railroads to prioritize passenger trains, and was successful in improving performance across the Amtrak system. Concurrent with the expiration of PRIIA, Amtrak's OTP decreased significantly from fiscal year (FY) 2013 to FY 2014, and has remained lower in FY 2015.

Table 1 shows the two measures of lateness used in the models (average minutes late and 80th percentile minutes late), experienced before, during, and after PRIIA, by the four aggregate Amtrak business lines: Northeast Regional service (NER), Acela service, combined state-supported routes, and combined long-distance routes. All four business lines experienced improvements in OTP during the PRIIA years (except for Acela, which remained the same but was already performing well); and all of the measures worsened for each market after PRIIA's expiration. Although there may be other factors such as extreme winter weather, increased train passenger loading times and/or increased freight traffic as an effect of economic recovery, it is widely believed at Amtrak that the expiration of PRIIA is the primary reason for recent decreases in OTP.

TABLE 1 Trends in Amtrak OTP

OTP Metric	Market	Before PRIIA (FY 2005-08)	During PRIIA (FY 2009-13)	After PRIIA (FY 2014-15)
Average Minutes Late	NER	11	9	11
	Acela	5	5	8
	State-Supported	18	11	16
	Long Distance	73	34	60
	Systemwide	35	18	30
80th Percentile Minutes Late	NER	15	12	16
	Acela	6	6	11
	State-Supported	29	17	24
	Long Distance	119	51	98
	Systemwide	57	28	48

As a result of this recent trend, there has been increasing interest at Amtrak in quantifying the ridership and financial impacts of poor OTP, and in updating a prior study of these impacts carried out by Charles River Associates (1).

Trends in Fuel Prices

In addition to the recent downward trends in OTP, Amtrak is concerned about recent decreases in retail fuel prices. Beginning in October 2014, fuel prices decreased by more than one-third, hitting

1 a nationwide average low of \$2.12 / gallon in January of 2015. Although prices have partially
2 rebounded since then, the US Energy Information Administration (EIA) predicts that prices will
3 remain below \$3 / gallon for the foreseeable future (2). The availability of cheaper gasoline could
4 make driving a more attractive option over passenger rail. Furthermore, there has been
5 considerable variation in fuel prices per gallon over the past decade, making it possible to cover
6 behavioral responses to a large range of price points.

7
8 Thus, this presented a unique opportunity to estimate the sensitivity of ridership to fluctuations in
9 fuel prices, as well as OTP.

10 **Rationale for Updating 2007 Study**

11 In December 2007, Charles River Associates (CRA) developed a series of econometric models (1)
12 that estimated the ridership and revenue impacts of FY 2006 Amtrak OTP compared to various
13 higher levels of performance. Although the CRA models provided a well-accepted picture of the
14 OTP impacts at the time, the current SDG models enhance the 2007 study in several ways,
15 including:

16
17
18 •Updated data: the data used to develop the 2007 models (from fiscal years 2001-06) is
19 now relatively old, and thus would be increasingly difficult to defend as an indicator of current
20 customer responses to OTP.

21 •Inclusion of fuel price sensitivity: the 2007 models did not include analysis of fuel prices
22 •Greater number of market segments: the updated models capture differing sensitivities to
23 OTP of the markets for trains of varying combinations of frequency, service class, and trip
24 distance. There are 10 models in total, whereas the previous study had 7 models.

25 •Non-constant elasticities: the SDG models have the property that passenger response to
26 incremental changes in OTP is greater when OTP itself is worse. This is an intuitive result.
27 Similarly, the passenger response to fuel price changes is greater when fuel prices are higher. The
28 previous study assumed linear responses.

29
30 In summary, the authors believe that the models developed in the current study offer considerably
31 more flexibility and long term usability for Amtrak to provide accurate estimates of ridership,
32 revenue and operating cost responses to changes in OTP and/or fuel prices.

33 **DATA PROCESSING**

34 Amtrak staff provided extensive train performance and ticketing data for this project. Fuel price
35 data was obtainable from the U.S. Energy Information Administration (EIA). Prices were adjusted
36 to September 2014 dollars using Consumer Price Index data from the Bureau of Labor Statistics.
37 The data were then processed and summarized for analysis in econometric models.

38
39
40 The core models in this study followed standard panel regression statistical techniques, where a
41 “panel” defines a series of observations of a specific unit across time. Since Amtrak typically
42 reports OTP and forecasts ridership in monthly format, we chose the month as the time unit for the
43 observations. The observations were the monthly on-time performance, fuel prices for competing
44 auto trips, and ridership, and the panels were each a specific route/origin/destination/ticket class
45 combination.

Market Segmentation

The routes outside of the Northeast Corridor (NEC) were segmented based on daily frequency, trip distance, and/or service class. This, rather than Amtrak's internal classification system (state-supported vs. long distance routes), was chosen as a way to separate markets; in addition to all of the long distance routes, some state-supported routes run only once per day, and passenger response to train delay will be more strongly influenced by service frequency than by how their route is classified by Amtrak. Table 2 illustrates the final set of market segments corresponding to the 12 different models developed.

TABLE 2 Definitions of Individual Model Market Segments

Model	Data Set	Market Segment
L1	Non-NEC 1 Train Per Direction Per Day	Coach + Business, <250 miles
L2		Coach + Business, 250-550 miles
L3		Coach + Business, ≥550 miles
L4		Sleeper, <550 miles
L5		Sleeper, ≥550 miles
S1	Non-NEC >1 Train Per Direction Per Day	Coach, 4-9 Trains / Day (both directions)
S2		Coach, 10-19 Trains / Day (both directions)
S3		Coach, >19 Trains / Day (both directions)
S4		Coach, Virginia Routes
S5		Business

The two NEC routes, Northeast Regional (NER) and Acela, make up approximately half of Amtrak revenue; it was therefore desirable to develop individual models for these two routes. To this point, however, final models have not yet been developed in the NEC. The reason for this is, as Table 1 illustrates, NER and Acela have had considerably lower average and 80th percentile minutes late than the other routes in the Amtrak system, so there are limited observations available of passenger response to excessive lateness. Data from FY 2015, during which OTP fell considerably for both NEC routes due to weather issues, may help with this effort.

Data Composition

Because some origin-destination pairs on specific trains have extremely low ridership, we limited the data set to panels with ridership high enough to ensure that the relationships developed were statistically meaningful.

The number of station pairs per route were distributed across routes primarily by ridership. So the routes with the highest ridership were represented more heavily in the set of station pair observations.

The final dataset had the following attributes:

- All Amtrak routes included except Northeast Regional and Acela
- Between 4 and 120 station pairs per route (low value is for Auto Train, only two O/D pairs and two service classes)

In total, there were 1,175 panels included, each of which was associated with up to 10 years of monthly ridership data.

Variables Tested

Each data record was assigned a national average and a regional average fuel price for the year and month in which it occurred. Long distance trips which cross regional boundaries were given the average regional prices of their origin and destination stations.

The monthly train performance data enabled us to calculate metrics such as average and 80th percentiles of minutes late over the course of the month, both as absolute measures and as percentages of the scheduled travel time.

Both national and regional average fuel prices were downloaded from the US EIA website. The seven regions followed Census Bureau definitions.

Fuel price data was combined with trip distance to estimate the cost of fuel for a competing auto trip. This was also compared to the average Amtrak ticket yield to create a variable which estimated the relative costs of the train and auto trips. Ultimately, fuel price per gallon turned out to be a much more significant predictor of passenger response to changing fuel prices.

Compared to those on urban transit systems, many Amtrak passengers are relatively infrequent travelers, and would thus have a delayed reaction between changes in train performance and/or fuel prices and subsequent decisions to change their travel habits. Thus, for both OTP and fuel price variables, moving average values over the current and several trailing months were used, with the number of averaged months varying between 3 and 12.

MODEL DEVELOPMENT AND OUTPUT

General Form Of Models

Regardless of which set of routes, trip distances, frequencies, or service classes the models were representing, they all took the general form:

$$\ln(\text{rid}_{ij,r,m}) = \alpha + \beta_1 * (\text{OTP Variable}_{ij,r,m}) + \beta_2 * (\text{Fuel Price Variable}_{ij,m}) + \beta_3 * (\text{Economic Variable}_{ij,m}) + \gamma_{ij,r} + S_m$$

where,

$\text{rid}_{ij,r,m}$ = total ridership from station i to station j on route r in month m .

α = a constant.

β_1 , β_2 and β_3 are regression coefficients.

“OTP Variable” is a quantitative measure of on-time performance for trips from station i to station j on route r for month m .

“Fuel Price Variable” is a measure of fuel price for driving trips from station i to station j for month m working as a proxy for changes in auto price competition.

“Economic Variable” is a measure of economic cycles, averaged between stations i and j for month m and controls for other time-varying factors affecting ridership.

$Y_{ij,r}$ is a dummy variable or “fixed effect” for each station pair ij on route r . It controls for factors that causes the mean level of ridership to vary across station pairs.

S_m (for $m=1, 2, \dots, 12$) is a dummy variable that captures seasonality effects for month m .

The final models did not include a measure of the train fare. While fares vary substantially across station pairs, they vary only infrequently in the time series for a single panel, and are likely to be adequately represented by the station pair specific constant. The combination of fixed station pair effects together with a station pair specific time-varying economic variable largely eliminates potential bias introduced by omitting fare.

The following discussion presents the definitions of the “OTP Variable” and “Fuel Price Variable” in the different models, and presents the ridership elasticity to these independent variables. Elasticity is the percent change in ridership that the model would predict, in relation to the percent change in the independent variable, if all other variables are held constant.

Ridership Models

The ridership models consisted of the subsets of the Non-NEC Amtrak system shown in Table 2:

- Trains which run once per direction per day
- Trains which run more than once per direction per day

Trains which run once per direction per day

These models cover 26 different routes, with the following segmentation:

- Model L1: Coach and Business Trips (combined), <250 miles
- Model L2: Coach and Business Trips (combined), 250-549 miles
- Model L3: Coach and Business Trips (combined), >=550 miles
- Model L4: Sleeper Trips, <550 miles
- Model L5: Sleeper Trips, >=550 miles

It should be noted that the mileage ranges apply to each *individual* trip, as opposed to the route end-to-end distance. For example, if a trip is made on Empire Builder between Chicago and Minneapolis, it is classified as a trip between 250 and 550 miles, even though Empire Builder runs more than 550 miles end to end. Coach and Business trips were combined due to the small number of business trips on these routes. Table 3 shows the characteristics of these models and the resulting elasticities.

The OTP variable that performed best for the Coach and Business Trips markets was the average minutes late in the past 3 or 6 months. The OTP variable which best explained ridership for the Sleeper Trips was the 80th percentile minutes late in the past 6 or 9 months.

The models were run in Stata 10.1, using maximum likelihood estimates for the coefficients and the Wald Chi-Squared test for statistical significance.

TABLE 3 One Train Per Direction Per Day Models

Model	L1	L2	L3	L4	L5
Market Segment	Coach / Business <250 miles	Coach / Business 250-549 miles	Coach / Business ≥550 miles	Sleeper <550 miles	Sleeper ≥550 miles
Observations (Number of OD pairs)	13,249 (122)	10,719 (97)	11,384 (103)	3,482 (32)	13,333 (122)
Key Variables:					
OTP	Avg Min Late, past 3 months	Avg Min Late, past 6 months	Avg Min Late, past 6 months	80 th Percentile Min Late, past 6 months	80 th Percentile Min Late, past 9 months
Fuel Price	Avg \$/gallon, past 6 months	Avg \$/gallon, past 6 months	Avg \$/gallon, past 3 months	Avg \$/gallon, past 6 months	Avg \$/gallon, past 9 months
Coefficients:					
OTP	-0.00343***	-0.00280***	-0.00074***	-0.00195***	-0.00061***
Fuel Price	0.0526***	0.101***	0.00944**	0.0974***	0.0223**
OTP Elasticities:					
10 min	-0.034	-0.028	-0.007	-0.020	-0.006
20 min	-0.069	-0.056	-0.015	-0.039	-0.012
30 min	-0.103	-0.084	-0.022	-0.059	-0.018
45 min	-0.154	-0.126	-0.033	-0.088	-0.027
60 min	-0.206	-0.168	-0.044	-0.117	-0.037
120 min	-0.412	-0.336	-0.089	-0.234	-0.073
Fuel Price Elasticities:					
\$2.50/gal	0.132	0.253	0.024	0.244	0.056
\$3.00/gal	0.158	0.303	0.028	0.292	0.067
\$3.50/gal	0.184	0.354	0.033	0.341	0.078
\$4.00/gal	0.210	0.404	0.038	0.390	0.089

Note: *** p<0.01, ** p<0.05, * p<0.1. These are measures of statistical significance.

Some of the key observations of these results include:

- OTP elasticity is higher for shorter trips, and decreases for longer trips. This is an intuitive result, because a given minute of lateness is a smaller percentage of the schedule trip length as the trip length increases.

- OTP elasticity is lower for sleeper car trips than for coach and business trips. This could be due to the greater comfort level of sleeper car trips.

- Fuel price elasticity is highest in the 250-550 mile range. It is lower for trips less than 250 miles. It is far lower for trips longer than 550 miles. These differences are also intuitive; high fuel prices are likely perceived as more of a burden for 250-550 mile trips than for short distance trips, because the actual cost of driving becomes comparable to the train fare, and it is necessary to refuel at least once. However, for trips above 550 miles, where it would require more than a day to drive, driving becomes a less attractive option, because of lodging costs and the increasing competitiveness of air travel. Passengers who choose to ride Amtrak for those long distances are likely doing so for the experience of riding a train, and therefore are less prone to changing their mode to automobile as fuel prices change.

Trains which run more than once per direction per day

These models cover 18 different routes, segmented by a combination of train frequency, service class, and geography, as follows:

- Model S1: Coach class trips, <10 trains / day, both directions
- Model S2: Coach class trips, 10-19 trains / day, both directions
- Model S3: Coach class trips, ≥ 20 trains / day, both directions
- Model S4: Coach class trips, Virginia routes
- Model S5: Business Class trips (all routes above)

The Virginia routes, all of which run less than 10 trains per day, were separated because they were found to behave differently than other routes in that group. Table 4 shows the characteristics of these models and the resulting elasticities.

The OTP variable which best explained ridership for most of these trains was the 80th percentile minutes late, averaged over the past 3 months, for all models except for model S1, where the average minutes late over the past 3 months was used.

Some of the key observations of these results include:

- OTP elasticities are generally similar to those for the coach trips in the one train per direction per day models.

- OTP elasticity is sometimes lower for business trips than for coach trips. This is not entirely intuitive. It could be due to the greater comfort level of business car trips. There could also be some commuting on these trains among the business class riders, and those trips tend to be less elastic to changes in the performance of trains.

- Fuel Price elasticities are similar to those for the shorter distance one train per direction per day markets. They are lower for the business market because of its lower cost sensitivity.

TABLE 4 More Than One Train Per Direction Per Day Models

Model	S1	S2	S3	S4	S5
Market Segment	Coach <10 trains / day	Coach 10-19 trains / day	Coach ≥20 trains / day	Coach Virginia Routes	Business (all combined)
Observations (Number of OD pairs)	8,831 (76)	16,403 (145)	22,296 (191)	2,020 (28)	8,831 (76)
Key Variables:					
OTP	[Avg Min Late, past 3 months]	[80 th percentile Min Late, past 3 months]	[80 th percentile Min Late, past 3 months]	[80 th percentile Min Late, past month]	[80 th percentile Min Late, past 3 months]
Fuel Price	Avg \$/gallon, past 3 months	Avg \$/gallon, past 3 months	Avg \$/gallon, past 3 months	Avg \$/gallon, past 3 months	Avg \$/gallon, past 3 months
Coefficients:					
OTP	-0.00395***	-0.00351***	-0.00406***	-0.00139***	-0.00241***
Fuel Price	0.0588***	0.0345***	0.0482***	0.0709***	0.0324***
OTP Elasticities:					
10 min	-0.040	-0.035	-0.041	-0.014	-0.024
20 min	-0.079	-0.070	-0.081	-0.028	-0.048
30 min	-0.119	-0.105	-0.122	-0.042	-0.072
45 min	-0.178	-0.158	-0.183	-0.063	-0.108
60 min	-0.237	-0.211	-0.244	-0.083	-0.145
120 min	-0.474	-0.421	-0.487	-0.167	-0.289
Fuel Price Elasticities:					
\$2.50/gal	0.147	0.086	0.121	0.177	0.081
\$3.00/gal	0.176	0.104	0.145	0.213	0.097
\$3.50/gal	0.206	0.121	0.169	0.248	0.113
\$4.00/gal	0.235	0.138	0.193	0.284	0.130

Note: *** p<0.01, ** p<0.05, * p<0.1. These are measures of statistical significance.

Bootstrapping

Bootstrapping is a widely used statistical technique that simulates the process of repeating an experiment many times over and observing the outcome each time. The repeated outcomes can then be used to characterize a confidence band for the results. In practice, SDG implemented bootstrapping by sampling up to 250 times from the regression data set, and repeating our analysis

for each of the 250 resulting samples. We used the results to characterize a 95% confidence band.

Table 5 shows the lower and upper bounds of the 95% confidence intervals for the OTP and fuel price variable coefficients in each of the 12 models.

TABLE 5 Bootstrap Intervals For Ridership Models

Model	Market Segment		OTP Variable Coefficient			Fuel Price Variable Coefficient		
			Value	Lower Bound	Upper Bound	Value	Lower Bound	Upper Bound
L1	Non-NEC 1 Train / Direction / Day	Coach/Business <250 miles	-0.00343	-0.00437	-0.00233	0.0526	0.0351	0.0744
L2		Coach/Business 250-550 miles	-0.00280	-0.00322	-0.00247	0.1010	0.0809	0.1242
L3		Coach/Business >550 miles	-0.00074	-0.00092	-0.00060	0.0094	0.0012	0.0229
L4		Sleeper <550 miles	-0.00195	-0.00217	-0.00161	0.0974	0.0579	0.1321
L5		Sleeper >550 miles	-0.00061	-0.00072	-0.00048	0.0223	0.0062	0.0400
S1	Non-NEC >1 Train / Direction / Day	Coach 4-9 Trains/Day	-0.00395	-0.00463	-0.00348	0.0588	0.0465	0.0707
S2		Coach 10-19 Trains/Day	-0.00351	-0.00394	-0.00312	0.0345	0.0271	0.0436
S3		Coach 20+ Trains/Day	-0.00406	-0.00522	-0.00326	0.0482	0.0390	0.0590
S4		Coach VA Routes	-0.00139	-0.00179	-0.00096	0.0709	0.0448	0.1084
S5		Business Class	-0.00241	-0.00331	-0.00194	0.0324	0.0125	0.0544

Revenue Calculations

The econometric models discussed in prior sections relate ridership to fuel prices, train performance, economic conditions, and other fixed effects. Revenue was not a direct model output but instead a post-processing step. Estimated ridership at the route, station pair, and ticket class level was multiplied by the observed average yield in the benchmark month selected, and adjusted for future months based on historical seasonality patterns of average yield per passenger by route.

SENSITIVITY TESTS

In addition to different market segments exhibiting different sensitivities to OTP and fuel prices, the models recognize that the incremental value of a minute of train delay or a penny of retail gasoline price is very different depending on the point from which one starts.

Intuitively, one would not expect passengers to react adversely to a train which is precisely on time becoming 10 minutes late, because that is still more or less on time. However, one would expect a very different reaction if a train that was typically 30 minutes late were 40 minutes late instead.

Similarly, it is widely believed that demand for automobile travel is not affected significantly by rising fuel prices if fuel prices are still low afterwards, e.g. an increase from \$2 to \$2.50 / gallon. However, if fuel prices are higher, an increase such as one from \$3.50 to \$4.00 / gallon would influence more people to reduce their automobile travel and/or buy more fuel-efficient vehicles.

The models' sensitivity of ridership to OTP and fuel prices is non-constant, and varies in the way described above. Figures 1 and 2 illustrate this feature of the model by performing a series of sensitivity tests on minutes late and fuel price, respectively.

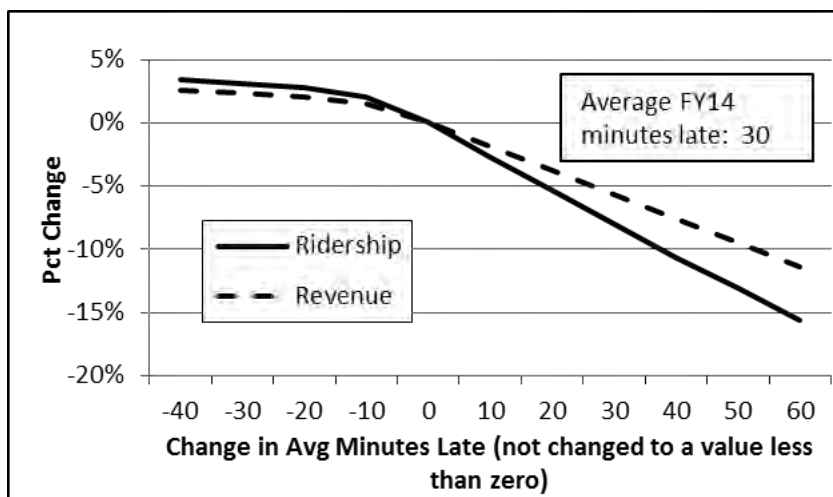


FIGURE 1 Sensitivity Tests – Changes to FY 2014 Minutes Late.

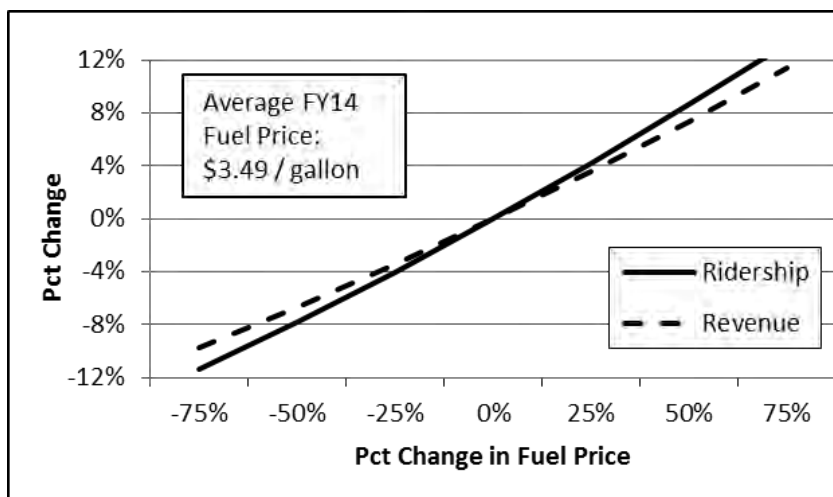


FIGURE 2 Sensitivity Tests – Changes to FY 2014 Fuel Price.

1 The non-linearity of Figure 1 illustrates the ability of these models to impact ridership and revenue
2 more per minute late when trains are later, and less when trains are comparatively on time.
3 Similarly, although the relationship for fuel price is closer to linear than for OTP, Figure 2
4 illustrates that the models are slightly more sensitive to a given change in fuel prices at higher fuel
5 price levels.

7 **COMPARISON TO PREVIOUS RESEARCH**

9 **On-Time Performance**

10 Although the Amtrak passenger reactions to on-time performance are limited to this study and the
11 earlier CRA study (1), estimates of the elasticity values of passenger demand to train delay from
12 revealed preference (RP) data have been done for the UK rail system. One of the earliest studies
13 (3) showed overall elasticities ranging from -0.126 (short term) to -0.340 (long term), with
14 commuter trips showing lower elasticity than long distance trips. These are of similar magnitude
15 to those obtained for the shorter distance Amtrak market segments studied here at delays of 30
16 minutes and above. A follow-up study (4) suggested an asymmetry where riders were more
17 sensitive to a rise in delay than to an equal and opposite fall in delay, also similar to the models
18 developed in this study. A study using more detailed operator performance data (5) found much
19 lower elasticities, ranging from -0.03 to -0.06. It is not surprising that considerable variation will
20 exist between studies; other transit travel demand elasticities such as response to train fares,
21 frequency, and speed have been studied far longer and vary considerably among transit systems.

23 **Fuel Prices**

24 A considerably larger volume of previous research exists on relationships between fuel prices and
25 transit ridership in the United States, primarily for regional transit systems. A nationwide study (6)
26 found heavy rail elasticities to fuel prices to be 0.17-0.19, and light rail elasticities to be 0.27-0.32.
27 A study of major U.S. cities' transit systems during the high fuel price period of the mid-2000s (7)
28 found that in most systems there were statistically significant increases in transit ridership
29 concurrent with the rise in fuel prices, with average elasticities of 0.24. Recent models of the
30 metropolitan Philadelphia transit system (8) produced elasticities between 0.15 and 0.23 for urban
31 transit and between 0.27 and 0.38 for regional rail services, with the elasticity values increasing as
32 the fuel prices themselves increased. Models of the New Jersey transit system (9) found elasticities
33 between 0.12 and 0.22, with the highest correlation coming from lags of 3-4 months between
34 changes in fuel prices and responding changes in ridership. The general magnitudes of all of these
35 elasticities are consistent with the values in this study for shorter distance Amtrak trips. The
36 Philadelphia study is also consistent with this study's findings that travelers are more sensitive to a
37 change in fuel price at higher price points, and at trip lengths below 550 miles, elasticity to fuel
38 price increases as trip length increases. The New Jersey study is consistent with the 3 month lag
39 that was found to be optimal in this study.

41 **CONCLUSIONS**

43 **Key Observations on Differences between Amtrak Market Segments**

44 Although there are several factors which contribute to different market segments having different
45 levels of sensitivity to OTP and/or fuel price, the most evident trends with respect to OTP are:

1 •Longer trips are less sensitive to OTP, because a given minute is a smaller percentage of
2 the overall trip.

3 •Sleeper class trips are less sensitive to OTP than coach and business class trips.

4 •The most sensitive routes to OTP are the trains which run frequently, such as Capitol
5 Corridor, Keystone, Hiawatha, and Pacific Surfliner. These trains are more frequently used for
6 commuting; thus it makes sense that passengers on these trains will more readily switch to driving
7 when OTP problems occur.

8
9 The most evident trends with respect to fuel prices are:

10
11 •The least sensitive trips to fuel prices are those greater than 550 miles; at distances this
12 long, driving is a less attractive mode, due to the associated driving time and lodging costs.

13 •The trips most sensitive to fuel prices are medium length trips, i.e. 250-550 miles,
14 particularly on less frequent trains which are typically not used for commuting. These trips are
15 more likely to be made by occasional train users, traveling for non-business reasons, and are long
16 enough that fuel prices are a major factor in the decision whether to take a train or to drive.

17 18 **Model Application**

19 After testing the model's functionality and sensitivities and concluding they were appropriate,
20 SDG ran two scenarios of policy interest to Amtrak to estimate the effects of the recent fuel price
21 decreases and OTP decreases individually.

22 23 *Impact of FY 2014 to FY 2015 Decrease in Fuel Prices on FY 2015 Ridership and Revenue*

24 Since the recent drop in fuel prices coincided almost precisely with the beginning of Amtrak's FY
25 2015 (October 2014), a comparison of annual ridership and revenue from FY 2014 to a projected
26 FY 2015 is an appropriate indicator of the annual impact of the current lower fuel prices. To use the
27 models to estimate the effect that the current low fuel prices are likely to have had on Amtrak
28 ridership and revenue, SDG input actual fuel price data through April of 2015 and US Energy
29 Information Administration (EIA) predictions of fuel prices for the remainder of FY 2015.
30 Forecasts were run for one year as if it were the beginning of FY 2015, and compared to a baseline
31 forecast scenario where fuel prices were equal to FY 2014 levels throughout FY 2015.

32 33 *Impact of Decreasing OTP from FY 2013 to FY 2014*

34 It is also of interest to predict how much higher Amtrak ridership and revenue would have been in
35 FY 2014 if OTP had been as high as it was in FY 2013, before the expiration of PRIIA. Thus, the
36 models were used to "backcast" FY 2014, using the OTP levels from FY 2013 for each route.

37
38 Table 6 presents the models' estimates of the two scenarios discussed above: the annual percent
39 impact of FY 2015 fuel prices (actual through April, predicted for the remainder) compared to FY
40 2014 fuel prices, and the annual percent impact of FY 2014 OTP compared to FY 2013 OTP.

41
42 The models predict that, excluding the NEC:

•The impact of the change from FY 2014 to FY 2015 fuel prices was a decrease of about 4 percent in both ridership and ticket revenue annually.

•The decreases in on-time performance from FY 2013 to FY 2014 caused Amtrak to lose about 2.7% of its riders and 4.1% of its ticket revenue.

TABLE 6 Model Applications

	State-Supported	Long Distance	Overall Non-NEC
Impact of Decrease in Fuel Prices From FY 2014 to FY 2015 on Annual Ridership and Revenue*			
Ridership	-4.1%	-4.4%	-4.2%
Ticket Revenue	-4.3%	-3.7%	-4.0%
Impact of Decreasing OTP from FY 2013 to FY 2014 on Annual Ridership and Revenue**			
Ridership	-1.5%	-6.5%	-2.7%
Ticket Revenue	-2.2%	-6.0%	-4.1%

Notes:

* On average, fuel prices decreased by 28% from FY 2014 to the partially-projected FY 2015, from a national average of \$3.50 / gallon to \$2.53 / gallon

** On average, OTP decreased from 85% in FY 2013 to 73% in FY 2014, and average minutes late increased from 17 minutes to 30 minutes over the same period.

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EXHIBIT 13
(without exhibits)

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

Docket No. FD 35743

APPLICATION OF THE NATIONAL RAILROAD PASSENGER CORPORATION UNDER
49 U.S.C. § 24308(a) – CANADIAN NATIONAL RAILWAY COMPANY

VERIFIED STATEMENT OF ROBERT D. WILLIG

My name is Robert D. Willig. I am Professor of Economics and Public Affairs at the Woodrow Wilson School and the Economics Department of Princeton University. From 1989 to 1991, I served as Deputy Assistant Attorney General for Economics in the Antitrust Division of the U.S. Department of Justice, where I led the development of the 1992 Merger Guidelines. I have served as a consultant and adviser for the Federal Trade Commission and the Department of Justice on antitrust policy, for OECD, the Inter-American Development Bank, and the World Bank on global trade, competition, regulatory, and privatization policy, and for governments of diverse nations on microeconomic reforms. I have advised many corporations on antitrust and regulatory issues, and on consumer pricing, transfer pricing, costing, and business organization. I have testified about economic issues before Congress and State, Federal, and international courts and administrative agencies.

I have become especially familiar with railroad economics. I began work in the industry in the late 1970s when I was retained to help Conrail determine the most efficient way for railroads to be regulated consistent with the public interest. Since then, I have been consulted by many industry participants on a wide variety of general and specific railroad issues and have testified often before this agency and its predecessor on railroad economics at the request of

various carriers and the Association of American Railroads. A copy of my curriculum vitae is attached to this statement.

In this proceeding I was asked by counsel to CN to analyze, from the perspective of economics, the proper compensation structure for freight railroads hosting Amtrak's passenger services, consistent with applicable law. I present my analysis and conclusions below.

I. ELEMENTS OF AN EFFICIENT COMPENSATION STRUCTURE

A. Overall Agreement Structure and Potential Improvements

The public interest – and the interests of Amtrak, host carriers, passengers, and freight shippers – in a vital, market-responsive freight rail system and in the optimum amount and quality of intercity passenger rail service are best served by a host railroad compensation system consistent with sound economic principles. No other approach is as likely to assure the provision of sustainable freight and passenger service. A compensation agreement structured to cover incremental costs of a base level of performance (which I will refer to as “base compensation”), plus performance standards and incentives that properly induce higher levels of performance desired by both host railroads and Amtrak, would be economically efficient and would serve all these interests while avoiding any cross-subsidization of such services either by the host carrier or by other users or beneficiaries of the rail network.

As I understand it, the existing Amtrak-CN Operating Agreement (“Agreement”), as regards Amtrak services operating over Illinois Central Railroad, follows this structure. (I offer no opinion about the structure of the Agreement regarding Amtrak’s services over the lines of Grand Trunk Western Railway, which I understand CN is not seeking to perpetuate.) However, several deficiencies in the Agreement should be addressed to further conform the Agreement to

fundamental economic requirements. CN is proposing amendments to the Agreement that would help achieve that goal.

One deficiency that warrants special emphasis is that Amtrak's consumption of CN's network capacity imposes incremental costs on CN for which CN is not compensated. Some of these incremental costs can practicably be quantified (*e.g.*, a portion of the cost of delay to freight trains) and some cannot (*e.g.*, certain adverse impacts on CN's freight business and operating efficiency). Absent agreement on or acceptance of an estimated value of CN's full incremental costs, CN can be fully compensated for all incremental costs only if any practicably unquantifiable costs are reduced by Amtrak (i) investing in additional CN capacity; (ii) reducing or modifying its use of CN's lines to eliminate its interference and limitation on CN's operations; or a combination of both.

By understanding and adhering to the essential principles outlined in this statement, the parties will have the correct incentives to negotiate the details of any such revised agreement. Amtrak will have a much improved understanding of the true costs of various levels of performance it might consider and would be able to make a more reasoned determination of the optimal level of service to seek, balancing changes in public and private benefits against anticipated costs.

B. Compensation for Incremental Costs

The incremental cost standard for base compensation, which I understand is embodied in the law and has been interpreted by this agency and its predecessor as being equivalent to avoidable cost (a term that economics applies to costs avoidable over any period of time), permits base compensation to host railroads to be established in a manner that would be fully consistent with the principles of economic efficiency and sustainability.

Sound economics and the public interest require that Amtrak compensate host railroads for all incremental costs attributable to Amtrak operations, and that compensation not be reduced by the imposition of net performance penalties. Incremental cost compensation a) requires Amtrak to internalize all costs that the host could avoid absent Amtrak, giving Amtrak the incentive to make efficient decisions concerning the amounts and levels of service it demands from the host; and b) eliminates the net burden Amtrak's operations would otherwise impose on the host's freight service and its capacity to meet its common carrier obligation to freight service customers. If Amtrak did not have to bear the full incremental costs it imposes on hosts, other parties – including the host carrier and its shippers – would have to subsidize Amtrak's operations. Conversely, there is no economic basis for sacrificing the benefits of having Amtrak bear the full incremental costs associated with its service. As discussed below, incentivizing host performance does not require penalties that could deprive the host carrier of recovery of its full incremental costs for base performance, since host behavior can and should be induced with net positive incentives.

Incremental costs in this context include all the direct and indirect costs that the host railroad experiences and incurs because of Amtrak's operations on its lines, *i.e.*, all the costs the host could avoid if Amtrak did not require service. These include more obvious costs, such as the costs of added wear and tear on railroad infrastructure, services required by Amtrak's operations (*e.g.*, clearing wrecks), CN-owned station facilities used by Amtrak, and CN personnel performing functions for Amtrak. They also include any costs of freight service capacity lost to Amtrak's presence (which I refer to as "delay and interference costs"), including (i) increased operational costs; (ii) lost business; (iii) reduced demand for additional service; (iv) any resulting price suppression; and (v) the costs of additional capacity required to replace

capacity utilized to accommodate hosting requirements. Many railroad incremental costs will depend upon the level of service required by Amtrak. Changes to Amtrak train schedules, train frequency, and desired levels of predictability of train performance can substantially change the host's incremental costs (as can Amtrak's performance on and off the host railroad (*e.g.*, Amtrak delays on either the host railroad or another railroad)).

The host railroad's delay and interference costs may be best understood as belonging to one of three basic categories.

- Costs that are practicably measurable.
- Costs that are not practicably measurable.
- Costs to add capacity, such as those estimated through engineering modeling, needed to mitigate or eliminate elements of delay and interference costs, recognizing that such capacity costs would only be efficiently charged to Amtrak to the extent they would not exceed the delay and interference costs they would be incurred to prevent.

There will be an optimal mix of measures intended to compensate or eliminate all host costs caused by Amtrak's consumption of capacity, including (i) non-Host-funded capacity additions to replace lost capacity; (ii) adjustments to Amtrak schedules and service requirements to reduce or eliminate the costs of lost capacity; and (iii) payment by Amtrak for the freight delay and interference costs it causes. Where CN's witnesses demonstrate additional incremental costs due to Amtrak's consumption of capacity that cannot be practicably measured, the quantifiable costs for freight delay and capacity loss will not fully cover CN's incremental costs. Instead, an available feasible way to assure that CN does not bear uncompensated incremental costs would be for the Agreement to address those uncompensated costs through a mix of the first two means noted above – changes to Amtrak's service demands to reduce or

eliminate freight delay and interference costs, or the provision of the funds for infrastructure investment to replace any additional capacity to eliminate delay and interference costs that cannot be practicably quantified.

Outside of arm's-length bargaining, in which either party can walk away from the negotiations, establishing the optimal mix by objective measurement may prove, for some costs, to be unreasonably difficult. I understand, however, that CN has modeled the cost of replacing capacity consumed by Amtrak. Such modeling can estimate a reasonable proxy for the outer bound of total incremental delay and interference costs Amtrak should bear. The lower bound will be defined by CN's practicably quantifiable delay and interference costs. Costs that remain between these outer and lower limits would, absent agreement, have to be established by the Board on the basis of evidence adduced by the parties. In reviewing that evidence, the Board should determine whether the cost of offsetting the overall direct and opportunity costs of delay and interference experienced by CN, its customers, connections, and the private and public interests in commerce generally warrant the capacity cost CN would charge Amtrak to eliminate those costs.

C. Compensation to Incentivize Optimum Passenger Train Performance

As I understand it, the Agreement includes a level of base compensation intended to cover CN's incremental costs at a base level of performance, and a system of performance compensation (incentives and penalties) to encourage performance above the "base" level of performance implicitly established in the Agreement, which is the level of service at which CN neither earns positive incentives nor incurs penalties. Performance compensation is structured around the principles that it should be based on matters within CN's reasonable control and that penalties over any 12-month period cannot reduce CN's overall compensation below incremental

costs (which the Agreement accomplishes through a so-called “lookback” provision). The lookback provision has rarely been invoked because CN’s past performance as measured under the Agreement has generally been within the positive or neutral performance range specified by the Agreement, which has generally resulted in the payment of positive net incentives.

If the levels of the positive and negative elements of the incentive payments are consistent with the social benefits and costs of the incremental performance levels (which, in the absence of contrary evidence, the Board may presume them to be), the Board can mandate the continuation of this principled approach to performance-based compensation and penalties in any new agreement with confidence it will be adhering to sound economics.

The statute requires any scheme of compensation to include penalties. Improperly structured, penalties could reduce the host’s compensation below its incremental costs; that result, as discussed above, would contravene essential economic principles. The lookback provision precludes that result. If that limit were removed, the public interest in efficient, sustainable rail freight and passenger transportation would require additional base compensation to cover the incremental cost of the risk that penalties would reduce the host railroad’s net compensation below incremental costs. Approaching this issue through such an addition would significantly complicate the calculation of base compensation and provide no benefit not provided by the system embodied in the Agreement as it has been functioning.

Maintaining the availability of incentive payments is important as it provides the motivation for the host to provide service above the base level when it is efficient to do so. Positive incentives provide the only economic reason that Amtrak can expect CN to further adapt its freight operations and to divert management resources to achieve performance for Amtrak over the base level. In keeping with the principles discussed above, within the Agreement’s

broader framework, the goals of performance compensation are therefore best met by a system that offsets the risk of penalties with the opportunity for the host to profit by earning positive incentives over otherwise compensated costs.

Absent agreement between the parties, such as that reflected in the Agreement, the specific level of performance payments should be established by reference to the public and private benefits realized through service performance sought by Amtrak above the base level. If the otherwise uncompensated incremental cost to the host of an additional increment of service is less than the incentive payment, the host will be financially motivated to accomplish the extra service. And, because the performance payment is calibrated to be no greater than the public and private benefits of the extra service sought by Amtrak, it will enhance total welfare for the additional service to be provided. Conversely, if the uncompensated cost to the host is larger than the performance payment, the host will not be motivated to perform the extra service, and this would be the economically efficient outcome since that cost would also exceed the public and private benefit of the extra service sought by Amtrak.

By this same logic, absent agreement among the parties, the level of penalties for service below the base performance level should be calibrated referring to the public and private harms expected to result from service shortfalls that would trigger penalties. The host will be motivated to incur the costs of avoiding the service deficit when they are less than the penalty, and welfare will be enhanced because the performance costs are less than the harms resulting from substandard service. At times, the costs to the host of avoiding substandard service will outweigh the penalty, leading to the host underperforming the base level. This would be the economically efficient result because at such times the costs of providing better service would exceed the benefits.

When the parties cannot agree, the proper measure of the benefits and costs to Amtrak and the public from service above or below the base level cannot be limited to Amtrak's private benefits. Amtrak may well strive to limit the level of the losses it incurs as an entity in providing passenger rail services, but Amtrak was created and is required by statute to provide passenger rail services to the public with the recognition those services cannot be solely sustained by a private, for-profit entity. Instead, those services are subsidized by governments, and railroads are forced to provide basic service to Amtrak at incremental costs – which is not economically profitable compensation – because Amtrak's services are deemed to confer public benefits. Those public benefits together with Amtrak's private benefits should be considered in establishing the level of incentives and penalties for service above or below the base performance.

For any system of host performance payments to function efficiently, it must be based on performance within the host's reasonable control. The Agreement appropriately provides that delays not within CN's responsibility or not reasonably controlled by CN are not to be penalized. I understand CN is proposing several amendments to the Agreement that would more definitively delineate CN's responsibility for delays to matters within its reasonable control. Such amendments should improve the efficient operation of the Agreement.

Conversely, requiring that CN be penalized for delays not within its responsibility or reasonable control would inefficiently skew the costs and incentives for CN's freight and Amtrak's passenger operations. Penalties for events beyond CN's control serve only to transfer the risk of certain costs from Amtrak to CN and serve no socially useful function. Any such transferred risk would require compensation that would otherwise be unnecessary, and thus raise

the cost of the commercial relationship of the parties and the cost of the beneficial activities that underlie it.

Likewise, performance compensation arrangements should recognize any costs to or effects on CN's performance caused on or off CN's lines either by Amtrak's performance or by the actions of any railroad or other third party to the Amtrak-CN arrangements. The basic principle that incentive compensation can only promote better performance by a party that can act in response to the incentive bars any effort that might be made to deny incentive payments (or impose penalties) for events that are beyond the direct control of the party eligible for performance compensation. This principle extends in this case to events that are within Amtrak's control – such as late arrival at CN's lines because Amtrak left its Chicago station late – or within the control of a third party to the Amtrak-CN arrangements, such as another railroad delaying Amtrak or CN by a failure to afford CN or Amtrak movement through an interchange controlled by that railroad.

Finally, one circumstance not addressed by these arguments for an efficient system of compensation to stimulate optimum performance is where there is a risk that performance of one party to the Agreement will be so poor it disappoints the reasonable expectations of the parties in establishing the Agreement. Given the lengthy course of dealing of the parties under the existing Agreement and the amendments proposed by CN, which should enhance performance, the level of that risk would appear to be small. Nonetheless, a means of addressing that risk may be desirable. If so, the risk should be addressed independent of the incentive system. I understand CN is proposing to address this risk through an amendment to the Agreement allowing for remedial measures to address this issue independent of the incentive system. This would be an efficient means of addressing unforeseen risks without impairing the essential system of

incentives and penalties designed and calibrated to incentivize behavior within the range contemplated by both parties.

In summary, incentives and penalties should a) be tailored exclusively to performance within the control of the party to which they apply; b) reflect the costs incurred by or benefits to the party (including the public whose interests are served by Amtrak) not in control but affected by the performance at issue; c) be calibrated to performance above or below a base performance level set simultaneously with base compensation intended to cover the incremental costs of base performance; and d) preclude the risk that penalties could erode base compensation. If there is further arm's-length bargaining between the parties, and it is governed by these principles, the parties would be likely to set base performance levels and their corresponding incremental cost compensation, with their corresponding systems of service penalty and positive incentive payments, at levels that reflect their mutual expectation as to the most likely, predictably sustainable, balance of costs and benefits.

II. THE AGREEMENT, WITH CN'S PROPOSED AMENDMENTS, WOULD EFFICIENTLY COMPENSATE CN AND PROMOTE AMTRAK'S SERVICE GOALS

With CN's proposed amendments, the Agreement would serve the public interest by efficiently and sustainably compensating CN and incentivizing the performance sought by Amtrak under the Agreement.

- The amendments proposed by CN to assure compensation for incremental costs follow economic principles:
 - CN should receive at a minimum its practicably measured costs of freight train delays and interference attributable to Amtrak operations as part of its base compensation.

- o To the extent CN's witnesses demonstrate there are costs related to Amtrak's consumption of capacity that cannot be otherwise compensated, the Board can only assure that CN is compensated for its full incremental costs of hosting Amtrak by requiring Amtrak to enter arrangements with CN that, by modifying Amtrak's service demands, compensating CN for the cost of replacing its lost capacity, or some combination of both, efficiently eliminate those costs. The Board should recognize that a reasonable proxy for an outer bound of CN's incremental delay and interference costs would be the cost of replacing the capacity consumed by Amtrak.
- The amendments proposed by CN to preserve and enhance the fundamental performance payment structure of the Agreement follow economic principles:
 - o Performance would be measured against an agreed-upon schedule, and that schedule would be periodically reviewed and updated to assure that it is reasonably achievable in the context of the Agreement. I understand Amtrak's schedules have not been thoroughly updated or validated in many years and that CN is proposing a change to the Agreement to address this issue. Such a change is warranted because any effort to enhance on-time performance and reliability must have as a predicate operating schedules that are realistically achievable, given physical and practical operating limitations; no reasonable operating agreement can otherwise be expected to result in strong Amtrak performance.
 - o Performance incentives and penalties would be tied more closely to actual performance within CN's control, by recognizing additional delays on and off

CN's lines that are outside CN's reasonable unilateral control and by providing for a methodology to determine responsibility for the root causes of delay.

- The amendments proposed by CN to increase the ability of the parties to negotiate modified performance requirements follow economic principles:
 - The structure of the Agreement, with CN's proposed amendments, provides flexibility to accommodate the specification of modified performance goals. This can be accomplished, for example, by raising or lowering the neutral point in the performance standards or modifying the rates of compensation for varying performance.
 - The parties would be required periodically to review and revise underlying Amtrak schedules, which might otherwise be a barrier to levels of desired, sustainable performance.
 - The Agreement would provide remedial measures in the event CN consistently performs below base level expectations. This would allow the risk of such outlying performance to be addressed without modifying the basic structure of the Agreement's otherwise efficient incentive system.

VERIFICATION

I, Robert D. Willig, declare under penalty of perjury that I have read the foregoing Verified Statement, that I know the facts asserted therein, and that the same are true as stated.

Further, I certify that I am qualified to and authorized to submit this Verified Statement.

Executed on September 3, 2015

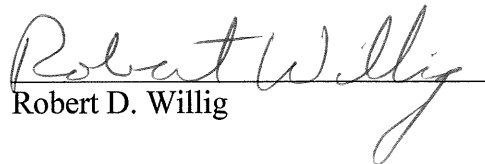

Robert D. Willig

EXHIBIT 14

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

Docket No. FD 35743

APPLICATION OF THE
NATIONAL RAILROAD PASSENGER CORPORATION
UNDER 49 U.S.C. § 24308(a)
— CANADIAN NATIONAL RAILWAY COMPANY

JOINT DISCOVERY PROTOCOL

The following Joint Discovery Protocol (“Protocol”), dated this 30th day of January 2014, shall apply to all documents, including but not limited to electronically stored information and other electronically stored discovery materials (hereinafter “ESI”), maintained and/or exchanged by the Parties (“Parties” or “Party”) in this proceeding, and to certain other issues relating to discovery in this proceeding. The obligations in this Protocol are in addition to those set forth in the Protective Order entered by Surface Transportation Board (“Board”) on December 16, 2013. The purpose of this Protocol is to facilitate the conduct of discovery and the resolution of disputes. Compliance with this Protocol may be considered by the Board in resolving discovery disputes.

1. **Searches for Responsive Documents.** In response to a request for document production, a Party shall search both the paper files and the reasonably accessible ESI of custodians who are reasonably likely to possess responsive documents that are not duplicative of documents that would be possessed by other custodians already being searched. In order to search such reasonably accessible ESI, each Party shall apply the relevant time frame and search terms reasonably necessary to satisfy all non-objectionable parts of document production requests. Each Party shall produce on a rolling basis non-privileged, relevant, and responsive

documents and information, including ESI, in the format provided for under Paragraph 3 and within a time frame agreed by the Parties or otherwise ordered by the Board.

(a) Search Dates and Methodology.

(i) The Parties have agreed that the starting date for selection of responsive documents will be May 1, 2011 (encompassing documents created, revised, sent, in force, in effect, or in operation from that date forward), with the exception of: (1) documents relating to actual and potential capital expenditures and investments in rail lines and infrastructure/capacity funding issues with respect to rail lines; and (2) documents relating to general discussions or analyses of public policy issues or PRIIA metrics. The ending date for selection of responsive documents will be October 31, 2013 (the date of the first document request in this proceeding).

(ii) The use of search terms appears to be reasonably necessary to identify emails and email attachments, and may be reasonably necessary to identify other ESI, likely to contain discoverable information. Prior to document production, the Parties shall exchange search terms and try to reach agreement on them, but agreement shall not be a precondition to searching for and producing documents. The Parties shall fully document their use of search terms, including which search terms are used for which custodians and for which ESI sources. If a Party discovers that the search terms it is using are failing to collect non-privileged documents that are within the non-objectionable scope of document requests, it shall broaden its search to the extent reasonably necessary to collect such documents.

(b) Custodians. Prior to document production, the Parties shall exchange initial lists of custodians whose files they propose to search, including the custodian's title, the date the custodian assumed the position, and the names of any persons within the company who,

at any time after May 1, 2011, had prior responsibility for one or more of the custodian's present responsibilities respecting an area or subject of the other party's discovery requests. The Parties shall supplement and update their list of custodians as their search and production progresses.

(c) Disputes. Either before or after production, the Parties after conferring may seek resolution at the Board of any remaining disputes regarding search terms, custodians, or other discovery issues. Each party agrees to promptly raise concerns with the producing party concerning its list of search terms or list of custodians.

2. **ESI Not Reasonably Accessible.** ESI may not be reasonably accessible where the requirements in order to search that ESI involve undue burden and costs. For purposes of this Protocol, ESI available from a live, readily accessible source shall be considered "reasonably accessible." ESI maintained on voicemail systems and mobile phones, and ESI which cannot be retrieved without great effort and cost, including ESI maintained on obsolete or "legacy" systems no longer in use, or on backup tapes and other archival media, shall be considered "not reasonably accessible." Neither Party shall have an affirmative obligation to investigate whether ESI that is not reasonably accessible contains potentially responsive and non-duplicative information.

(a) Each Party shall provide the opposing Party with a list and description of any ESI that a Party considers not reasonably accessible, setting forth (i) a description of the nature of the ESI (*e.g.*, email communications, account payable information, etc.); (ii) the type of media in which the not reasonably accessible data is contained, to the extent it is known or can reasonably be ascertained; and (iii) the reasons the ESI is considered not reasonably accessible. If, after conferring, the Parties are unable to resolve their disagreement as to whether the ESI is

or is not reasonably accessible, the Party contesting the designation of the ESI as not reasonably accessible may seek resolution of that issue from the Board.

(b) Each Party shall promptly notify the other Party if it learns of responsive, non-privileged documents that are not duplicative of documents already being produced that are contained in ESI that is not reasonably accessible. Upon such notification, the Parties shall promptly meet and confer to determine what steps, if any, should be taken with respect to such not reasonably accessible ESI. If, after conferring, the parties are unable to agree on what steps should be taken with respect to such ESI, then the Party seeking the search and production of such ESI may seek resolution from the Board.

3. **Production.** Unless the Parties agree otherwise, the provisions set forth in this Section shall govern the format for the production of all documents. To the extent that issues arise in the course of productions that are not fully addressed in this Protocol, the parties shall immediately confer to resolve them. In all instances, the producing Party shall make all reasonable efforts to insure that documents are produced in a manner that is easily reviewable and not inconsistent with modern e-discovery techniques.

(a) Bates Numbering and Confidentiality Designations. Each Tagged Image File Format (“TIFF”) image of a produced document (see Subsection 3(b), below) shall contain a legible Bates number that: (i) is unique across the document production; (ii) has a constant length across the production; and (iii) is sequential within a given document. Each page shall be numbered such that it can be uniquely identified and will include before the Bates number an acronym identifying the producing Party (*e.g.*, “CN” or “ATK”) followed by the zero-filled sequential number (*e.g.*, CN0000000987 or ATK0000019931). Rather than skipping Bates numbers within the range of production, the Parties shall use placeholders (marked “No

Document For This Bates Number”). In addition, a producing Party designating a document for confidential treatment shall place the appropriate confidentiality designation –

“CONFIDENTIAL” or “HIGHLY CONFIDENTIAL” – on each TIFF image of that document.

Both the Bates number and confidentiality designation shall be placed on the page image in a manner that does not conceal or interfere with any information contained on the page. The producing Party shall not place any stamp or information on a document it produces that is not on the original, other than the Bates number, any confidentiality designation, or an indication of any redactions. The provisions of this Subsection 3(a) notwithstanding, Bates numbering and the confidentiality designations of documents produced in native format shall be in accordance with Subsections 3(b) and 3(i).

(b) Format for Production.

(i) Except for ESI produced in native format, the Parties shall electronically produce any non-privileged, relevant, and responsive document in electronic format as a single-page black and white Group IV TIFF image with a minimum resolution of 300 dpi. Receiving Parties shall have the right to request that a document be produced in color if they have a reasonable basis to believe that color will significantly improve their understanding of the document, and such a request shall not be unreasonably denied.

(ii) For each document produced, the Parties shall provide a document level or multipage text file containing Optical Character Recognition (“OCR”) text (for documents without extractable text) or extracted text (where available). Each such text file shall be named to correspond with the beginning Bates number of the produced document from which the text was obtained. All text files shall be provided in separate folder titled “Text.” For each produced document, the Concordance .DAT file (or similar load file if provided in another

format) shall contain a field named “OCR PATH,” which shall be populated with the path to the corresponding OCR/Extracted text file.

(iii) The producing Party shall also provide both a metadata load file and an image load file. Those load files shall be produced in Concordance format (.DAT file using Concordance standard delimiters for the metadata load files, and .OPT file using Concordance standard fields for the image load files). The producing Party shall also provide image load files in a format viewable in or readily convertible to the IPRO Image Viewer, with extracted text files at the document level having the same file name as its corresponding image file, unless a document has otherwise been redacted. The image load file shall provide image and document break information for the TIFF files produced that correspond to the beginning Bates numbers contained in the metadata load file. Every TIFF file in each production must be referenced in the production’s corresponding image load file, and the total number of TIFF files referenced in a production’s image load file shall match the number of TIFF files in the production. The metadata load file for each production shall provide the Bates numbers and the Bates number attachment range for email or other documents containing attachments and any applicable confidentiality designation.

(iv) The producing Party shall also provide a multipage searchable OCR text file for the unredacted portions of each redacted document as well as for the entirety of each document that does not contain redactions. The OCR text files and image load files should indicate page breaks, to the extent possible.

(v) Paper documents shall be imaged and produced in digital form, including an OCR file and a TIFF file for each document. When scanning paper documents, distinct documents shall not be merged into a single record, and single documents shall not be

split into multiple records. The Parties shall use physical bindings as document boundaries, such that the smallest binding shall be the document, and the largest binding shall be the attachment group.

(vi) In order to minimize any delays that may arise from conflicts or incompatibilities between the software used by each Party, the parties shall exchange sample image load files, metadata load files, OCR text files, and TIFF files within seven (7) calendar days of the date of this Protocol, which shall be representative of the principal file formats in which the Parties expect to produce documents.

(c) Metadata.

(i) ESI. During the process of converting ESI from the electronic format of the application in which the ESI is normally created, viewed and/or modified to TIFF, metadata values shall be extracted and produced in a metadata load file, unless one or more of the metadata fields would reveal information that has otherwise properly been redacted, in which case that specific information may be redacted from the pertinent metadata field. To the extent they are available in collected data, the metadata values that are to be extracted and produced in the metadata load files are:

1. BEGBATES
 - (a) Starting production number
2. ENDBATES
 - (a) Ending production number
3. BEGATTACH
 - (a) Starting production number of attachment range
4. ENDATTACH
 - (a) Ending production number of attachment range
5. CUSTODIAN
 - (a) Name of individual custodian. Where not reasonably available, identify company custodian (e.g., "CN" or "ATK")
6. ATTACHMENT COUNT
 - (a) Number of attachments
7. ATTACHMENT NAMES
 - (a) Names of attachments, delimited by ";"
8. MD5 HASH
9. ELECTRONIC DOCUMENT TYPE/FILE EXTENSION

10. FILE SIZE
11. FILE NAME
12. FILE LOCATION
13. NATIVE FILE PATH
14. DATE SENT/CREATED
15. TIME SENT/CREATED
16. DATE LAST MODIFIED
17. TIME LAST MODIFIED
18. FROM/AUTHOR(S)
19. TO
20. CC
21. BCC
22. SUBJECT
 - (a) Subject line of email
23. COMMENTS
 - (a) Any comments recorded in document properties (not internal comments within the document)
24. IMPORTANCE FLAG
 - (a) Marked as YES if an email was sent with high importance
 - (b) Marked as NO if not

(ii) Attachments. In addition, for every document that includes an attachment, to the extent available, the following fields should be produced and populated as part of the metadata load file record for both parents and attachments to provide the parent/child or parent/sibling relationship:

- 1) BEGBATES
 - a) Starting production number
- 2) ENDBATES
 - a) Ending production number
- 3) BEGATTACH
 - a) Starting production number of attachment range
- 4) ENDATTACH
 - a) Ending production number of attachment range

(iii) Paper Documents. With respect to images of paper files, the producing Party shall provide in the metadata load file information corresponding to items 1-5 in the list in subparagraph (i) above and information relating to attachments in accordance with subparagraph (ii) above.

(d) Logical Unitization for Images. The producing Party shall make reasonable efforts to split image-based electronic files (scanned PDFs and multi-page TIFFs) into logical files (known in the information technology industry as logical unitization).

(e) Spreadsheets and Database Data.

(i) Spreadsheets are defined as MS-Excel and other application programs whose primary function is the organization, display and processing of data in a row/column format. Each spreadsheet shall be produced in native format unless the spreadsheet is to be redacted and redacting the spreadsheet in native format would be unduly burdensome as compared to redaction not using native format. The producing Party shall retain for the duration of this proceeding (including any appeals, judicial review and or proceedings on remand) unredacted originals of any spreadsheets that are produced with information redacted. When producing redacted spreadsheets in other than their native formats, the producing Party shall legibly display all unredacted data including all hidden rows, columns, cells, worksheets, comments, formulas, and metadata, as well as any associated headers or footers.

(ii) The Parties shall identify any databases containing non-duplicative relevant and responsive information. If any such information exists, the Parties shall confer to determine what data is contained in each database, and to agree upon the method and format for producing any such relevant and responsive information. The Parties shall also confer with respect to the most reasonable form of production for any other data contained in any other format that cannot reasonably be produced and understood in single-page TIFF format or where the review of native data by the receiving Party would require the use of a proprietary or non-standard file viewer or media player.

(iii) If after conferring the Parties are unable to resolve a production issue discussed in this Subsection 3(e), the Party seeking production may seek resolution of that issue from the Board.

(f) Media Files. Media files shall be produced in the native media file format in which they were maintained in the ordinary course of business, unless redactions are needed. If redactions are needed, the redacted media file may be produced in either the original native format or a standard media format.

(g) System and Program Files. System and program files defined as such in the National Software Reference Library need not be processed, reviewed, or produced. Additional files may be added to the list of excluded files by mutual agreement of the Parties.

(h) Native File Production. Any file produced in its native format shall be assigned a single Bates number and shall be named with its Bates number and producing Party acronym, and shall be assigned any applicable confidentiality designation, following the format conventions of Subsection 3(a). The load file entry for any file produced in native format shall include a field containing the file's original file name and a link to the produced file. For every file produced in native format there shall be a single TIFF image containing the words "File Produced in Native Format," the name of the file as produced, and the corresponding Bates number and any confidentiality designation for the file. The Parties reserve the right to request production of additional ESI in native format after review of data produced as TIFF images rather than in native format. The Party from whom native files are requested shall not unreasonably deny a request to produce the native files if the other Party has shown a particularized and substantial need for such information. Should the Parties not reach agreement after conferring, the requesting Party may file with the Board a motion to compel the production of such ESI in native format.

(i) Physical Production of Documents. The Parties shall produce all documents in electronic format to the requesting Party on CD, DVD, flash drive, via secure ftp,

or hard drive, as appropriate for the size of the production. Multiple small media (*e.g.*, several CDs) shall not be provided where one larger medium (*e.g.*, a DVD) can reasonably be produced.

(j) Redactions. If the producing Party redacts a document, such redaction shall be clearly marked on the TIFF image of the document. For each redacted document, the producing party shall also either (i) provide a list identifying by Bates number those pages that have been redacted or that contain redactions and the reason(s) for such redactions or (ii) a database field populated with an indicator of redaction and the reason(s) for redaction. A failure to redact information shall be subject to the provisions of Section 10.

(k) De-duplication. A Party is only required to produce a single copy of any responsive document. A Party may de-duplicate ESI across each Party's custodians or sources, but is not required to do so. A Party may only de-duplicate "exact duplicate" documents as identified by MD5 hash and not de-duplicate "near duplicate" documents. Hard copy documents may not be eliminated as duplicates of responsive ESI if the hard copy document contains any distinguishing writings, markings, or other features not evident from an otherwise duplicate version of the document.

4. **Costs.** The costs of discovery, including ESI, shall be borne by each respective Party. However, the Board may, upon application by a Party, consider apportioning the costs of discovery where appropriate and upon a showing of good cause.

5. **Applicable Provisions.** Except as otherwise expressly addressed in this Protocol, each Party's discovery and ESI production obligations shall be subject to the obligations, limitations, and protections contained in the Board's rules governing discovery, 49 C.F.R. Part 1114, Subpart B, and in the Protective Order entered by the Board on December 16, 2013.

6. **Expert Materials.** The Parties agree not to seek discovery of any experts' notes, drafts of expert reports or communications with counsel, unless that expert had involvement with

the factual issues in this proceeding (outside that expert's role in preparing to advise or testify) and such materials are otherwise discoverable. However, counsel may inquire at any expert's deposition about any facts provided to the expert by counsel and upon which the expert is relying in formulating the expert's opinions.

7. **Meet and Confer.** The Parties shall meet and confer to agree upon the timing for beginning and completing the rolling production of relevant and responsive documents and information.

8. **Confidential Documents.** Documents that contain Confidential Information (as defined in the Protective Order) shall be handled according to the procedures set forth in that Order. If a Party converts native files or other ESI designated "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" under the Protective Order to hard copy form, it shall mark the hard copy with the appropriate designation.

9. **No Privilege Logs, Absent Order.** Except as the Board may provide by specific order in this proceeding, no privilege logs shall be required in this proceeding, and the failure to provide a privilege log shall not be relied upon in any way in support of any claim of waiver of attorney client privilege or of attorney work product protection. The Parties reserve the right, however, to challenge before the Board any claims of privilege or work product protection.

10. **Handling of Privileged Documents.**

(a) Each Party shall make reasonable efforts to identify and withhold from production all information that it claims to be privileged or subject to work product protection. If information subject to a claim of attorney-client privilege or work product protection or otherwise immune from discovery is inadvertently or mistakenly disclosed or produced by a Party (such information hereinafter referred to as "Inadvertently Disclosed Information"), such disclosure or production shall in no way constitute a waiver or forfeiture of, or estoppel as to, any claim of privilege or work product protection or immunity for such information and its subject matter.

(b) If a Party intends to produce a document marked as privileged or as subject to work product protection, the producing Party shall so notify the receiving Party, identifying the document by Bates number, at the time of production. Subparagraphs (c) and (d) below shall not apply to such documents. In the event that a receiving Party discovers that a producing Party has produced a document that is marked as privileged or otherwise bears indicia of attorney-client privilege or work product protection the receiving Party shall promptly cease reading the document and so notify the producing Party through its counsel, specifically identifying such document by its Bates number. The producing Party shall promptly respond to any such notification, stating whether it claims attorney-client privilege or work product protection with respect to the document. If the producing Party states that it makes such a claim, the document shall be treated as Inadvertently Disclosed Information in accordance with subparagraph (e) below. If the producing Party does not state within seven (7) days that it makes such a claim, any such claim with respect to that document shall be deemed waived, and the receiving Party shall be free to retain and resume reading and otherwise use the document, subject to such confidentiality restrictions as may apply.

(c) No receiving Party shall assert that the fact that it has been permitted to review or receive Inadvertently Disclosed Information constitutes a waiver of any right, privilege, or other protection that the producing Party had or may have had. In thereafter seeking production of the Inadvertently Disclosed Information, the receiving Party shall not assert waiver or estoppel as a ground for such production. Nor shall the producing Party use the Inadvertently Disclosed Information as a basis for arguing for disqualification of counsel for the receiving Party.

(d) If the producing Party asserts that Inadvertently Disclosed Information was privileged or otherwise protected from discovery, the receiving Party shall destroy all copies of, and any electronic records, notes or memoranda that reflect the substance of, such Inadvertently Disclosed Information within ten (10) business days of such request, except that portions of backup tapes may instead be destroyed in accordance with standard retention

policies. The receiving Party shall promptly provide a certification of counsel that all such Inadvertently Disclosed Information has been destroyed. If Inadvertently Disclosed Information to be destroyed was not produced to the receiving party in a format permitting destruction of the Inadvertently Disclosed Information without also destroying other documents or data that have been produced, then the producing party shall provide a replacement set for such other documents or data and the receiving party need not destroy the Inadvertently Disclosed Information until that replacement set has been received. The producing Party will maintain copies of all Inadvertently Disclosed Information until the later of (1) 60 days following its request to the receiving Party for the destruction or return of the Inadvertently Disclosed Information, or (2) the resolution by the Board of any and all challenges to the producing Party's assertions of privilege regarding such Inadvertently Disclosed Information that are brought within those 60 days.

11. **Motions.** The Parties agree that all discovery-related motions in this proceeding should be determined on an expedited basis. To that end, unless otherwise agreed to by the Parties or ordered by the Board, replies to discovery-related motions shall be due within seven (7) days of the filing and service of the motion.

Read and approved by:

1/30/14
Date:

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EXHIBIT 15

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BEFORE THE
SURFACE TRANSPORTATION BOARD

Docket No. FD 35743

APPLICATION OF THE NATIONAL RAILROAD PASSENGER
CORPORATION UNDER 49 U.S.C. § 24308 (a) –
CANADIAN NATIONAL RAILWAY COMPANY

**NOTICE OF DEPOSITION TO NATIONAL RAILROAD PASSENGER
CORPORATION**

To: Counsel for National Railroad Passenger Corporation

Respondents Grand Trunk Western Railroad Company (“GTW”) and Illinois Central Railroad Company (“IC”) (together, “CN”) request, pursuant to 49 C.F.R. § 1114.22 and Rule 30(b)(6) of the Federal Rules of Civil Procedure, that National Railroad Passenger Corporation (“Amtrak”) make available one or more representatives for deposition by CN’s counsel in this proceeding, at 10:00 a.m. on November 24, 2015, at the offices of Harkins Cunningham LLP, 1700 K Street, N.W., Suite 400, Washington, D.C. 20006-3804. The deposition will be taken before a person duly authorized to administer oaths.

If more than one person is designated by Amtrak to testify on its behalf, CN requests that counsel for Amtrak notify CN’s counsel, in advance, of the subject matters on which each person designated shall testify. These representatives should be prepared to identify and discuss any and all documents pertaining to Amtrak’s responses to the Topics listed below. The representative shall also bring with him or her to the deposition all documents and tangible items pertaining to the Topics, below.

DEFINITIONS AND INSTRUCTIONS

For purposes of this Notice, the definitions and instructions in the Second Set of Discovery Requests of IC and GTW, dated October 14, 2015, apply.

TOPICS

Amtrak shall designate one or more officers, directors, managing agents, or other persons to testify on its behalf about the subject matters set forth below. Each person so designated shall be qualified and prepared to testify as to matters known or reasonably available to Amtrak involving the subject matter for which the person has been designated. Amtrak shall designate the person or persons most knowledgeable of the following subject areas:

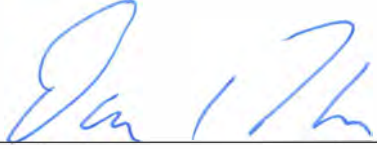
1. Capital expenditures and investments that Amtrak has made, planned or considered since 1971 to improve its OTP or reduce delays on the Relevant Services.
2. The content, calculation and derivation of all elements (including, but not limited to, PRT, dwell time, Recovery Time, and Miscellaneous Time) of the schedules for the Relevant Services.
3. Amtrak proposals or consideration since January 1, 2008, of adjustments to the schedules for the Relevant Services, including, but not limited to, proposals or consideration of redistribution of recovery time to improve Amtrak's All-Stations On-Time Performance.
4. The methods, programs, criteria, processes, or models used by Amtrak to determine all elements of its train schedules on routes hosted by freight railroads.
5. The steps taken by Amtrak "aimed at improving the performance and reliability of Amtrak trains serving Chicago, and of the tracks and facilities in and around Chicago Union Station that Amtrak controls," as referenced at pages 22-23 of the Report of the Amtrak Chicago

Gateway Blue Ribbon Panel (October 2015), and their expected or projected effects on departure times, delays, and on-time performance for the Relevant Services.

6. Assessments by Amtrak of the financial and/or public value of improved OTP or reduced delays on the Relevant Services.

7. Amtrak's eDR system, including (i) its functions and uses, (ii) the training of Amtrak employees to enter data in eDR, (iii) quality control procedures (including audits), and (iv) errors by, or inaccuracies in, the eDR system, including but not limited to errors or inaccuracies in logging the correct arrival, departure, or passing time at stations or other locations, and in calculating the correct number of minutes of delay above PRT.

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and Illinois Central Railroad Company*

October 14, 2015

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