Spread throughout northwestern Indiana is a full spaghetti of rail lines, many that were located in the region over 100 years ago to service newly constructed steel mills and refineries, and to support east-west through traffic. As the local representatives of the people of northwest Indiana, we are often the first persons contacted by citizens and businesses who are facing growing vehicular delay problems resulting from the disproportionately high number of highway/rail crossings over active rail lines located in our districts. Without the cooperation of the railroads, there is little that we can do about the severe air quality, vehicle delays, and safety problems that are associated with the high amount of train operations flowing through our communities.

We are disappointed by the lack of action taken by the Applicants in the above-referenced proceeding to mitigate the negative congestion impacts of their operations in our region. The federal government, through the Surface Transportation Board, has primary jurisdiction over railroad mergers and interstate operations. We are pleased that the Cities of Gary, East Chicago, Hammond, and Whiting, located in northwest Indiana (known as the Four Cities) have become actively involved as a Party of Record in this merger proceeding. We have been apprised of the Four Cities efforts, and we support their proposal to slightly shift the Applicants' proposed local train patterns in a manner that will minimize area congestion problems.
The General Assembly of the State of Indiana is on record in this proceeding as supporting the joint application of CSX and NS to acquire and divide the routes and assets of Conrail. We do not disagree that the proposed merger could potentially benefit northwestern Indiana through merger efficiencies, service improvements, improved railroad competition, etc. However, we are disappointed that the Applicants have not taken a stronger interest in developing transportation patterns through the region that will promote our mutual goal of creating transportation efficiencies while minimizing congestion related problems. We respectfully request that the STB adopt the Four Cities Alternative Routing Plan being proposed in this proceeding as a fair and minimal step that will help mitigate the problems associated with the Applicants' plan.
Verification

State of Indiana

County of Lake

Earl L. Harris, being duly sworn, deposes and says that he has read the foregoing Statement, knows the contents thereof, and that the same are true as stated to the best of his knowledge, information and belief.

Subscribed and sworn to before me this 15th day of October, 1997:

Kimberly K. Anderson
Notary Public in and for the State of Indiana

KIMBERLY K. ANDERSON
Notary Public-Indiana
Lake County
Commission No. 402657
Comm. Expires February 2, 2001
Verification

State of Indiana

County of

Jesse M. Villalobos, being duly sworn, deposes and says that he has read the foregoing Statement, knows the contents thereof, and that the same are true as stated to the best of his knowledge, information and belief.

Subscribed and sworn to before me this 17 day of October, 1997:

Notary Public in and for the State of Indiana
Verification

State of Indiana

County of __________

I, ________________, being duly sworn, depose and say that I have read the foregoing statement, know the contents thereof, and that the same are true as stated to the best of my knowledge, information and belief.

[Signature]

Subscribed and sworn to before me this ___ day of October, 1997.

Notary Public in and for the State of Indiana
October 16 1997

Mr. Vernon A. Williams
Secretary
Surface Transportation Board
STB Finance Docket No. 33388
1925 K Street, N.W.
Washington, D.C. 20423-0001

RE: STB Finance Docket No. 33388, CSX Corporation, et al. -- Control and Operating Leases/Agreements
-- Conrail Inc., et al.

Dear Mr. Secretary:

Through this letter, the Northwestern Indiana Regional Planning Commission (NIRPC) hereby expresses its support for the relief being requested in the above-referenced proceeding by the Cities of East Chicago, Indiana; Hammond, Indiana; Gary, Indiana; and Whiting, Indiana, (known as the Four Cities Consortium or FCC).

NIRPC is an areawide planning agency representing local governments in a 1,500 square mile planning area, covering three counties, including the Four Cities, in the northwestern part of Indiana. NIRPC serves as the Metropolitan Planning Organization for transportation planning in the region, and our functions include the planning, coordination, and advocacy of cooperative areawide transportation strategies. In this capacity, NIRPC has conducted several feasibility studies on the benefits and costs of implementing improved rail traffic flow alignments to help mitigate rail congestion problems plaguing communities in Northwest Indiana.

NIRPC is well-aware of existing problems associated with the high number of highway/rail crossings in the Four Cities, including substantial motorist delays, unfavorable air quality impacts, and high accident rates. We understand that the Norfolk Southern Corporation (NS) would increase rail traffic over lines that already experience significant vehicular congestion problems. The application apparently also proposes the reinstatement of an out-of-service line in Gary that would result in an additional 20 highway/rail grade crossings in the Four Cities.
We have discussed with the Four Cities their Alternative Routing Plan, and we support their proposal. We believe that the FCC’s plan would reduce incremental congestion problems associated with the Applicants’ plan while eliminating the need to add numerous additional highway/rail grade crossings. At the same time, the FCC’s alternative plan would accommodate the full volume of traffic anticipated by the Applicants.

We encourage the Surface Transportation Board, as a condition to the approval of the proposed Conrail acquisition by CSX and NS, to accept and implement the FCC’s Alternative Routing Proposal. On behalf of NIRPC, we appreciate your consideration of this letter of support on behalf of the Four Cities’ alternative plan.

Sincerely,

Samie Maletta
Chairperson
Transportation Policy Committee
BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.,
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
— CONTROL AND OPERATING LEASES/AGREEMENTS —
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

Verified Statement
of
Philip H. Burris
Vice President
L. E. Peabody & Associates, Inc.

On Behalf of
Four Cities Consortium

Due Date: October 21, 1997
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>I. INTRODUCTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. BACKGROUND</td>
<td>2</td>
</tr>
<tr>
<td>III. SUMMARY AND CONCLUSIONS</td>
<td>3</td>
</tr>
<tr>
<td>IV. TRAIN DELAY STUDY</td>
<td>11</td>
</tr>
<tr>
<td>V. DEVELOPMENT OF FCC'S ALTERNATIVE ROUTING PLAN</td>
<td>13</td>
</tr>
<tr>
<td>VI. ECONOMIC IMPACT OF APPLICANTS' PROJECTED INCREASE IN RAIL TRAFFIC</td>
<td>17</td>
</tr>
<tr>
<td>VII. COMPARATIVE ANALYSIS OF APPLICANTS' PROPOSAL AND FCC'S ALTERNATIVE ROUTING PLAN</td>
<td>23</td>
</tr>
</tbody>
</table>
# LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>EXHIBIT NO. (1)</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualifications of Philip H. Burris</td>
</tr>
<tr>
<td>2</td>
<td>Graphical Depiction of the Rail Lines in the Central Portions of the Four Cities</td>
</tr>
<tr>
<td>3</td>
<td>Graphical Depiction of CSX Willow Creek to Calumet Park and the IHB/Conrail Porter Branch</td>
</tr>
<tr>
<td>4</td>
<td>Graphical Depiction of the Hobart to Clarke Jct. PRR Line and FCC’s Proposed Alternative Routing via NS &amp; EJE</td>
</tr>
<tr>
<td>5</td>
<td>Cost to the Public of Applicants’ Projected Traffic and Operating Plan</td>
</tr>
<tr>
<td>6</td>
<td>Comparison of Annual costs for Applicants’ Proposal and FCC’s Alternative Routing -- Willow Creek to Calumet Park</td>
</tr>
<tr>
<td>7</td>
<td>Calculation of Railroad Operating Costs for Applicants’ Proposal and FCC’s Alternative Routing Plan</td>
</tr>
<tr>
<td>8</td>
<td>Comparison of Annual Costs for Applicants’ Proposal and FCC’s Alternative Routing -- Hobart to Pine Jct.</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

My name is Philip H. Burris. I am a vice president of the economic consulting firm of L.E. Peabody & Associates, Inc. The firm's offices are located at 1501 Duke Street, Alexandria, Virginia 22315. My qualifications are attached as to this statement as Exhibit PHB-1.

I have been requested by the Cities of East Chicago, Indiana, Hammond, Indiana, Gary, Indiana and Whiting, Indiana (hereinafter referred to as the "Four Cities", "Four Cities Consortium" or "FCC") to evaluate the impact on the Four Cities of the proposed acquisition and operation of Consolidated Rail Corporation ("Conrail") by Norfolk Southern Corporation and its rail affiliates ("NS") and CSX Corporation and its rail affiliates ("CSX"), collectively referred to as "Applicants". Based upon the results of my evaluation, which demonstrated substantial adverse incremental impacts on safety, traffic congestion, emergency service and air quality in the Four Cities, I was also asked to determine whether there was any reasonable way to take advantage of rail lines with fewer at grade crossings to alleviate the adverse impacts of the Applicants' proposed post-acquisition rail traffic routings.

My statement is organized as follows:

II. Background

III. Summary and Conclusions

IV. Train Delay Study

V. Development of FCC's Alternative Routing Plan

VI. Economic Impact of Applicants' Projected Increase in Rail Traffic

VII Comparative Analysis of Applicants' Proposal and FCC's Alternative Routing Plan

\(^1\) Including Conrail's 51 percent ownership interest in the Indiana Harbor Belt Railroad ("IHB")
II. BACKGROUND

Each of the Four Cities named above is located in Northwest Indiana, at the southern tip of Lake Michigan. This region, which is part of the greater Chicagoland area, is densely populated with industrial development and residential communities. The industries (including steel mills, oil refineries, an electric generating station and a cement plant) are served by several railroads via hundreds of miles of mainline, switch, yard and industrial tracks.

The region is a major crossroads for transcontinental rail and motor carrier freight traffic. Three Class I railroads, four terminal and switching railroads, and a regional railroad operate in the area. In addition, Amtrak provides intercity passenger service and the Northern Indiana Commuter Transportation District ("NICTD") operates a commuter passenger rail service in the region.

This rail network, combined with the dense industrial and residential population in the Four Cities area, currently causes significant safety problems and disruption of the movement of motor vehicles throughout the entire region. The present disruption of vehicular traffic at rail/highway grade crossings is barely manageable especially with regard to the provision of emergency services by the local governments. In the Four Cities alone, 243 at-grade rail crossings exist.

According to the Association of American Railroads ("AAR"), the state of Indiana has the fourth highest incidence of vehicle-train collisions and fatalities of any of the fifty states and the

---

2/ These carriers include, Conrail, NS, CSX, IHB, The Belt Railway Company of Chicago ("BRC"), the Elgin Joliet and Eastern Railway Company ("EJE"), the Baltimore, Ohio and Chicago Terminal Railroad ("BOCT"), and the Chicago SouthShore & South Bend Railroad ("CSS&SB").
District of Columbia\textsuperscript{3}. This statistic underscores the extreme concern regarding rail/highway safety by the Four Cities.

As a result of the existing, barely manageable situation, the Four Cities are deeply concerned by the potential impact of Applicants' projections of increased rail traffic on several rail lines in the Four Cities region. Their concerns are further exacerbated by the impact of the projected increase in rail traffic on the Cities' respective economic development plans which are vital to the economic recovery of the region. The public safety, emergency services, and economic development concerns of the Four Cities are described at length in the accompanying verified statements of the City Planners from each community.\textsuperscript{4}

III. SUMMARY AND CONCLUSIONS

1. Applicants' Current and Projected Rail Traffic

Exhibit PHB-2 is a map showing the rail lines in the central portions of the Four Cities, with specific rail line segments identified. Each of these segments is identified in the table below. For each segment the number of at-grade and grade separated crossings, Applicants' current and projected number of trains moving on the segment, and the increase in trains in both absolute number of trains and percent change is shown in the table below.\textsuperscript{5}

\footnotesize{\textsuperscript{2} Association of American Railroads, Overall Rail Casualty Data, preliminary 1996 FRA Data, obtained from the AAR internet web site; http://www.aar.org/comm; 9/17/97}

\footnotesize{\textsuperscript{4} These include the verified statements of Daniel A. Botich, Michael L. Cervay, Kimberly L. Gordon and Donald F. Thomas.}

\footnotesize{\textsuperscript{5} The trains per day shown in this table were derived from the Application in this proceeding (Volumes 3A of 8 and 3B of 8). The crossing information was developed from both Applicants' track charts and information provided by the Federal Railroad Administration('FRA').}
The data in the table above demonstrates that for many line segments, the Applicants project an increase in the number of trains after the Conrail transaction is consummated. The largest increases will occur on the line segments that run through the heart of East Chicago and Hammond that cross several very heavily travelled roads at-grade. Further exacerbating this problem is the fact that Applicants project that the annual tons handled on these lines will increase at a far greater rate than will the number of trains. Assuming Applicants’ projections
are accurate, this indicates that in addition to the increase in the number of trains, the length of the trains will also increase.\textsuperscript{5} The current and projected gross tons per year moving over each identified line segment, based on each Applicant’s operating plan and underlying workpapers, appear in the table below. Also shown is the absolute and percent change in Applicants’ current and projected annual gross tons for each segment.

<table>
<thead>
<tr>
<th>CSXT - Willow Creek - Pine Jct</th>
<th>CSXT - Hobart - Clarke Jct</th>
<th>NS - Porter - CP 501</th>
<th>Indiana Harbor - S. Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Jct - Calumet Park</td>
<td></td>
<td>CP 501 - Indiana Harbor</td>
<td></td>
</tr>
<tr>
<td>No. of At Grade Crossings</td>
<td>No. of Grade Separated Crossings</td>
<td>Current MGT/Year</td>
<td>Projected MGT/Year</td>
</tr>
<tr>
<td>7.0</td>
<td>7.0</td>
<td>34.0</td>
<td>70.0</td>
</tr>
<tr>
<td>20.0</td>
<td>5.0</td>
<td>41.0</td>
<td>65.0</td>
</tr>
<tr>
<td>4.0</td>
<td>5.0</td>
<td>0.0</td>
<td>12.0</td>
</tr>
<tr>
<td>2.0</td>
<td>2.0</td>
<td>85.9</td>
<td>114.3</td>
</tr>
<tr>
<td>4.0</td>
<td>5.0</td>
<td>81.3</td>
<td>99.5</td>
</tr>
<tr>
<td>CSXT-Indiana Harbor -S. Chicago</td>
<td></td>
<td>1.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>

2. Vehicle Delay at Rail/Highway Crossings

I have determined the additional vehicle delay which will occur in the central portion of the Four Cities as a result of Applicants’ projected traffic and operating plans. My analysis shows that vehicle delays will increase from current levels of 664 hours per day to 1,614 hours per day.

\textsuperscript{5} My conclusion that the length of the trains will increase is based on CSX’s responses to the FCC’s discovery requests compared with our observation of current operations. As discussed, later in this statement, a vehicle delay study was recently performed by the FCC at several rail/highway at-grade crossings. The observations from this study show a current average train size of 68.9 cars per train. Documents provided by CSX show projected cars per train of 87.0 post-acquisition for the same rail line.
based on Applicants' projected rail traffic. This is the equivalent of a 143.1 percent increase in vehicle delay in the central portion of the Four Cities. The increased delay will undoubtedly cause a significant increase in the disruption of vehicle flows and the provision of emergency services by the Four Cities, as well as a higher probability of accidents, injuries and fatalities. The Applicants' projected traffic increase will have a measurable negative economic impact on the Four Cities.

3. **FCC Alternative Routing Plan**

To mitigate the negative impact of the Applicants' proposed operating plans, we have developed an Alternative Routing Plan which permits the flow of Applicants' projected traffic through the Four Cities in a manner that maximizes use of grade separated rail lines and minimizes the required capital investment in rail line rehabilitation and upgrades.

The FCC alternative addresses two proposed routes included in Applicants' operating plans. First, FCC proposes that CSX reduce the traffic it projects to move on the Willow Creek to Pine Junction and Pine Junction to Calumet Park lines by using these lines primarily for westbound traffic, and using the IHB line for eastbound movements from Calumet Park, IL to a connection with the Conrail Porter Branch near Tolleston, IN, and thence via the Porter Branch back to Willow Creek. This will effectively result in paired mainline tracks, each with traffic moving

---

2 The analysis of vehicle delay in the Four Cities is based on actual observations of vehicle delay for a one week period in September, 1997 and application of the study results and accepted traffic flow models to the at-grade crossing characteristics for each crossing in the study area. The design and implementation of the vehicle delay study is fully described in the accompanying verified statements of Dr. Gary M. Andrew and Mr. Gregg L. Heinzman.

3 The Pine Junction to Calumet Park line is owned by the BOCT, which is a wholly owned subsidiary of CSX. I will hereinafter refer to this line as the "CSX/BOCT line".
primarily in a single and opposite direction. Exhibit PHB-3 is a map of the CSX Willow Creek to Calumet Park line via Pine Junction and the IHB/Conrail Porter Branch from Calumet Park to Willow Creek.

The CSX lines between Willow Creek and Calumet Park via Pine Junction have 27 at grade crossings, with 20 of these crossings located on the CSX/BOCT line between Pine Junction and Calumet Park. By contrast, the IHB/Conrail Porter Branch line from Calumet Park to Willow Creek has only three at grade crossings. The IHB/Conrail line also has thirteen grade separated crossings. As stated in the accompanying verified statement of Mr. Donald F. Thomas, City Planner for Hammond, the Federal, State and City governments have invested $25 million in the grade separations on the IHB corridor.

The FCC’s proposed shift of traffic from the CSX Willow Creek to Pine Junction and Pine Junction to Calumet Park lines to the IHB/Conrail Porter Branch lines will substantially reduce the number of at-grade highway crossings by the affected trains, thereby mitigating some of the most significant negative impacts on the Four Cities as a result of the Applicants’ proposed operating plans.

---

2 Based on responses to the FCC’s discovery requests, CSX has provided traffic diagrams (Bates numbers CSX 44 C0 00010-CSX 44 CO 000126) and data on computer diskettes, describing the existing CSX traffic flows within the Chicago-Northern Indiana region. This information identifies the individual trains traversing these routes and whether their direction is inbound or outbound thereby allowing for a determination as to the proportional flow of traffic in each direction.

10 If upon closer examination, it is determined that the bridges on the out of service portion of the IHB alternative line require rehabilitation that proves to be uneconomic, then traffic should be routed on the IHB line to the current connection with Conrail at Ivanhoe rather than to a new connection east of Tolleston. This alternative would also result in less disruption to the Four Cities than Applicants’ operating plan; however, it is not as favorable as FCC’s preferred route.
The second route addressed by the FCC’s Alternative Routing Plan is the former Pennsylvania Railroad (“PRR”) line between Hobart and Clarke Junction via Tolleston, which CSX proposes to place back into service. As best as can be determined from the information provided by CSX, both in its operating plan and in discovery, CSX plans to connect this line to the Conrail Porter Branch at Tolleston, the NS Wabash spur and the EJE at Dunes. The out-of-service PRR line is 11.75 miles in length and has 23 at-grade crossings, which will be reactivated under the Applicants’ proposal. Based on CSX’s responses to FCC’s September 29, 1997 questions in lieu of deposition and CSX’s responses to FCC’s Second Interrogatories and Request for Production of Documents, it appears that CSX desires to reactivate the PRR line northwest of Hobart to move coal and coke to the steel mill located on the Lake Michigan waterfront. For example, CSX’s responses to FCC’s questions indicate this coal and coke will be moved to the U.S. Steel Mill in Gary via the Hobart to Tolleston lines, then over the EJE by CSX crews.

FCC opposes the reactivation of the out-of-service PRR line between Hobart and Clarke Junction. Such reactivation would entail reopening of 23 at-grade highway crossings and would interfere with the City of Gary’s effort to develop part of the area traversed by this line for a new housing development. To accommodate the five trains per day CSX projects to move over this line, FCC proposes that these CSX trains be routed from Hobart west to Van Loon over the NS’s former Nickel Plate (“NKP”) line via a new trackage rights agreement between CSX and NS. From Van Loon, FCC proposes that the CSX trains move north over the EJE via trackage rights to the same lakefront steel mills.\footnote{According to CSX’s responses to the FCC’s questions in lieu of deposition, it is apparent that CSX has an agreement with the EJE which allows “coal and coke deliveries to U.S. steel using CSX crews.” If such an}
connection between the NS/NKP line and the EJE line at Van Loon. Exhibit PHB-4 is a map of the Hobart to Clarke Junction PRR line and the FCC’s proposed alternative routing via NS and EJE.

The FCC’s Alternative Routing Plan not only would avoid the increased rail traffic over the CSX/BOCT line, but actually results in a decrease in vehicle delay hours from current levels and allows Applicants to move all of their projected traffic through the Four Cities region in an efficient manner. The table below summarizes the current annual vehicle delay hours and those resulting from both the Applicants’ projected traffic and operating plan and FCC’s proposed Alternative Routing Plan.

<table>
<thead>
<tr>
<th>Line Segment</th>
<th>Current Delay Hours</th>
<th>Applicants’ Proposal Delay Hours</th>
<th>FCC’s Alternative Delay Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Willow Creek to Calumet Park</td>
<td>242,353</td>
<td>427,338</td>
<td>333,202</td>
</tr>
<tr>
<td>(2) Hobart to Pine Junction</td>
<td>0</td>
<td>160,939</td>
<td>30,432</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>242,353</strong></td>
<td><strong>588,277</strong></td>
<td><strong>363,634</strong></td>
</tr>
</tbody>
</table>

4. Economic Impact of Applicant’s Projected Increase in Traffic

I have quantified the economic impact related to the projected increase in Applicants’ traffic above the current traffic levels and found that the annual cost to the public living and working in the Four Cities region equals $6.8 million. The net present value of the cost to the cities for agreement is not in place and if CSX and EJE were unable to achieve such an agreement, one could presumably be imposed, as a condition of the acquisition, allowing CSX to obtain trackage rights enabling it to operate over the EJE line from Van Loon to Pine Junction to deliver this traffic to the Gary area.
a twenty year period equals $87.5 million. The discount factor used in this calculation is the Federal Railroad Administration’s ("FRA") most recent rate of 4.6 percent.

The increased costs are a result of four factors: 1) lost productivity resulting from incremental vehicle delays at rail/highway crossings; 2) additional fuel and oil consumption associated with the incremental delay; 3) the incremental emissions exhausted into the atmosphere resulting from increased delays at rail crossings; and, 4) the increase in the number of rail/vehicle accidents, injuries and fatalities at rail crossings resulting from increased rail traffic.

5. Comparative Analysis of Applicants’ Proposal and the FCC’s Alternative Operating Plan

I have performed a comparative analysis of the Applicants’ proposed operating plans for these two routes and the FCC’s Alternative Routing Plan and determined that the FCC’s Alternative results in an annual cost savings to the public and the Applicants of $6.0 million. The net present value of these savings for a twenty year period equals $77.5 million.

My comparative analysis is based on the same four factors listed in the previous section plus the change in rail operating costs and a return on investment on the capital required to implement each of the alternatives. Based on our calculations, the Applicants’ operating costs will decrease slightly using the FCC’s Alternative Routing Plan to operate between Willow Creek and Calumet Park, and slightly increase from Hobart to Clarke Junction. The required capital costs will decrease in both instances based on the FCC Alternative. The latter occurs because the railroads will avoid the expenditure of funds required to upgrade certain rail lines and to reactivate out-of-service rail lines.
IV. TRAIN DELAY STUDY

As stated previously, on site observations of vehicle delays at rail crossings in the Four Cities region were performed between September 28 and October 5, 1997. The vehicle delay study was designed by Dr. Gary M. Andrew to estimate the annual vehicle delay time experienced at specified rail crossings in the central portion of the Four Cities. The results of this study were used by Dr. Andrew, in conjunction with accepted traffic flow models, to estimate the annual vehicle delay hours in the Four Cities region.

The observations of delay time were performed by Cole Associates, Inc. under the supervision of Mr. Gregg L. Heinzman, a Professional Engineer. The study design and results, and the calculation of daily vehicle delay time are fully described in the accompanying verified statement of Dr. Andrew. Observation and data collection is described in the joint statement of Mr. Heinzman and Mr. Ronald H. Dunn, a Professional Engineer with 35 years of experience in railroad and rail transit engineering.

The table on page 9 above, summarizes the current annual vehicle delay hours computed by Dr. Andrew and those resulting from both the Applicants’ projected traffic and operating plan and FCC’s proposed Alternative Routing Plan. As described in Dr. Andrew’s statement, his computation of delay hours considers factors such as annual average vehicle crossings at each location, train speeds, and the size of the train. I have used the hours of delay information to develop the economic impact on the Four Cities as it relates to the value of lost productivity, fuel and oil consumption and emissions into the atmosphere.
1. Vehicles Around Gates

Dr. Andrew also describes an endemic occurrence in the Four Cities area of vehicles going around closed gates at rail crossings which was observed during the train delay study. This phenomenon, which occurred at all twelve crossings studied, occurred an average of 484 times each day. This delay avoidance behavior is an enormous endangerment to public safety, which will only worsen with Applicants’ projected increase in rail traffic.

The vehicles observed and recorded going around closed gates were not included in my computation of vehicle delay hours. Were those vehicles included (as they would have been if they had obeyed the safety devices), the delay hours under both current conditions and Applicants’ projected traffic would increase by approximately 5.8 percent, or 14,100 hours and 34,120 hours annually for current and projected traffic, respectively.

2. Disruption of Emergency Services

As discussed in the accompanying verified statements of the city planners from each community, current vehicle delays at rail crossings significantly impair the delivery of emergency services, such as fire, ambulance and police services. In many instances, the cities have, at significant expense, acquired duplicate facilities, equipment and emergency services personnel to minimize this disruption.

For example, the City of East Chicago incurred 9,688 delays in 1996 by police vehicles responding to emergency calls. This represents twenty percent of the total police emergency calls responded to by East Chicago in 1996. Further, of 1,594 emergency medical services responded to in East Chicago in 1996, 966, or 61 percent, were delayed at railroad crossings.
and in 241 of these instances, an additional emergency vehicle had to be dispatched to provide the needed service. These statistics are based on information provided by the City of East Chicago.

Clearly, the significant increase in the number of vehicle delay hours at railroad crossings from Applicants' projected post-acquisition traffic and operating plans will substantially worsen the already difficult situation in each of these communities.

V. DEVELOPMENT OF FCC ALTERNATIVE ROUTING PLAN

The Alternative Routing Plan devised by the FCC modifies the Applicants' post-acquisition operating plans for northwest Indiana, in two essential respects. The first involves CSX's east-west operations via Willow Creek. Under the FCC's Alternative Routing Plan, westbound CSX traffic will continue to move primarily via Willow Creek and Pine Junction, and thence via either the CSX Lakefront line or the CSX/BOCT line, as contemplated by CSX. Eastbound CSX traffic, however, would be rerouted away from the CSX/BOCT line, with its many heavily-used highway grade crossings, and onto the largely grade-separated IHB line for movement east from Calumet Park.

The IHB line has sufficient capacity to accommodate the approximately 17 additional daily eastbound CSX trains that would use this line.\footnote{This excess capacity has been confirmed by the IHB itself, which recently advised the FCC that its line between Ivanhoe and Blue Island via Calumet Park has the capacity to handle additional traffic without congesting the railroad.} Further, based on information provided by the FRA, the IHB line has a 40 mile per hour speed limit, which is greater than that currently
posted on the CSX/BOCT line. The result of this re-routing is that the number of post-acquisition train movements over the CSX/BOCT line would be reduced from the 33.3 trains per day (projected by CSX) to 16.7 per day. This also represents a reduction from the present frequency which is 27.6 trains per day.

Under the Alternative Routing Plan, CSX trains would operate eastward over the IHB to a point just east of Tolleston, where the trains would transfer to Conrail’s Porter Branch (which is to be acquired by CSX). The CSX trains would then operate over the Porter Branch back to Willow Creek, where they would use the new connection proposed by CSX to return to the CSX main line for movement to eastern points.

There is an existing connection between the IHB and the Conrail Porter Branch at Ivanhoe. East of Ivanhoe, the IHB line is used only to serve local industries. The IHB line east of Chase Street in Gary has been out-of-service for several years. The elevated right of way (including several bridges over highways) still exists, however, and under the Four Cities’ Plan 2.1 miles of track would be re-constructed on this right of way between Chase Street and a point near Virginia Street. At that point, a new connection would be built between the IHB grade elevated right-of-way and the parallel Conrail Porter Branch. The reason for using the IHB line east of Ivanhoe to the Tolleston area is that the IHB continues to be grade-separated, whereas the Porter Branch between Ivanhoe and Tolleston has nine at-grade highway crossings. The Alternative Routing Plan is designed to maximize the use of grade-separated lines and minimize the use of

---

13 The 16.7 trains per day on the CSX/BOCT line is premised on one-half of the CSX projected trains moving in each direction. Although an even balance may not be absolute, documents provided by CSX indicate that the aggregate of eastbound and westbound traffic over the CSX lines and the IHB/Conrail Porter Branch lines between Willow Creek and Calumet Park are similar.
at-grade lines in the Four Cities region. Exhibit GLH-/RHD-1 is a graphical depiction of the area where the IHB line would be restored to service and connected to the Porter Branch. This exhibit is included in the accompanying joint verified statement of Messers. Heinzman and Dunn.

The out-of-service portion of the IHB line east of Chase Street has been examined by FCC witness Heinzman, as has the area of proposed connection with the Conrail Porter Branch at Virginia Street. Based on this examination, and Mr. Heinzman's consultations with FCC witness Dunn, the proposed replacement of the out-of-service portion of the IHB and connection with Conrail is feasible from an engineering perspective. Mr. Heinzman also examined the Conrail Porter Branch from the proposed connection to Willow Creek and determined that it has the capacity to handle the traffic proposed by FCC. The Conrail Porter Branch is classified as a FRA Class 3 track with a 40 mile per hour speed limit.

The operational feasibility of using the IHB/Porter Branch combination from Calumet Park to Willow Creek is further supported by a joint study performed by the FRA and the Indiana State Highway Commission in 1980. This study offered, as an alternative to consolidate rail operations in the Four Cities region, "Alternative Plan 3BC". This plan would have rerouted traffic from the CSX/BOCT line to the IHB to reduce congestion in Hammond and East Chicago.

---


15 At the time of the study, the IHB line was still in service east of Chase Street, extending to Burns Harbor. The study ultimately rejected Alternative Plan 3BC because of the potential disruption to communities east of Virginia Street, the easternmost point at which the FCC proposes to utilize the IHB line.
The second change contemplated by the FCC Alternative Routing Plan involves the PRR line between Hobart and Clarke Junction via Tolleston. As indicated above, CSX plans to rehabilitate this line and use it primarily to serve the steel mills along the Gary/East Chicago lakefront. Under the Four Cities’ plan, this line need not be used (and thus need not be rebuilt) northwest of Hobart. Instead, CSX traffic from Fort Wayne and points east will operate, via trackage rights, over the NS/NKP line west to Van Loon, and thence north (again via trackage rights) over the EJE line to Gary via Ivanhoe. The EJE line serves the steel mills, and also connects with CSX’s Lakefront line at Pine Junction.

This aspect of the Alternative Routing Plan requires the construction of a connection between the NS/NKP line and the EJE at Van Loon and a connection from the CSX Lakefront line to the Conrail Lakefront line, just east of Pine Junction. These connections are feasible from an engineering standpoint, and would be far less expensive than rebuilding nearly 12 miles of the PRR line between Hobart and Clarke Junction.¹⁶

The conditions at Van Loon and the Conrail Lakefront line, where the connections are to be made, have been examined by Mr. Heinzman. Based on his examination and discussions with Mr. Dunn, both connections have been determined to be feasible from an engineering perspective. Further, these connections would be far less expensive than restoring to service the 11.75 miles of PRR line from Hobart to Clarke Junction and constructing connections at

¹⁶ A possible (but less desirable) alternative to the EJE connection at Van Loon is for CSX to operate further west over the NS/NKP line to Osborn, and thence north over an IHB line to a connection with CSX’s lakefront line at Indiana Harbor. This alternative would not require construction of a connection, between the NS and IHB lines at Osborn, as one currently exists at this location. The route is more circuitous than the EJE route, however, and is also less desirable because the IHB line has more grade crossings than the EJE line.
Tolleston and Dune as proposed by the Applicants.\textsuperscript{12} As discussed in the comparative analysis section, the FCC's Alternative Routing Plan is operationally feasible to provide the CSX and NS service planned for the restored PRR line.

\textbf{VI. ECONOMIC IMPACT OF APPLICANTS' PROJECTED INCREASE IN RAIL TRAFFIC}

As stated previously, I have quantified the economic impact related to the projected increase in Applicants' traffic above the current traffic levels as set forth in the CSX and NS Operating Plans and found that the annual cost to the public living and working in the Four Cities equals $6.8 million. The net present value of the cost to the cities for a twenty year period equals $87.5 million.

These costs are a result of four factors: 1) lost productivity resulting from incremental vehicle delays at rail/highway crossings; 2) additional fuel and oil consumption associated with the incremental delay; 3) the incremental emissions exhausted into the atmosphere resulting from increased delays at rail crossings, and; 4) the increase in the number of rail/vehicle accidents, injuries and fatalities at rail crossings resulting from increased rail traffic.

\textsuperscript{12} In response to FCC's Second Set of Interrogatories and Document Production Requests, Applicants, in response to Interrogatory No. 11.b., state that the PRR line east of Tolleston is in FRA Class 3 condition. This statement contradicts those made in deposition by both NS witness Mohan, pages 327 and 328, and CSX witness Orrison, pages 77 through 79. Both of these witnesses indicate this line is out of service and will require some rehabilitation. Examination of the line by Mr. Heinzman and personnel from my office indicates this rehabilitation is significant. The required rehabilitation is discussed in the joint verified statement of Messers. Heinzman and Dunn.
1. **Lost Productivity Costs**

Productivity costs associated with delay time at crossings are measured in a cost per hour for the hours individuals are prohibited from proceeding to their destination. This cost cannot be directly measured by the average delay time for individual vehicles because the costs are related to the occupants rather than the vehicles. To appropriately measure per person delay time, the accumulated hours of delay time are increased by an occupancy factor of 1.6 persons per passenger vehicles and 1.0 person per trucks. The source of the passenger vehicle occupancy factor is Timothy A. Ryan, "Roadway Vehicle Delay Costs at Rail-Highway Grade Crossings", Transportation Research Record, Volume 1262, page 36.

The occupancy factor of 1.6 was applied to delay hours for passenger vehicles including automobiles and buses, and an occupancy factor of 1.0 was applied to delay hours for trucks in order to compute per person delay hours.\(^{18}\) The delay hours were then multiplied by a cost per person hour $10.00. The source for the $10.00 per hour factor is the FRA Model Documentation for GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support Tool, Version 1.0.\(^{19}\)

The resulting annual lost productivity cost for the current traffic levels and the Applicants’ projected traffic and operating plan are shown in the table below.

---

\(^{18}\) The breakdown of vehicles between trucks and other vehicles is based on the crossing list information provided by the FRA.

\(^{19}\) A copy of the model documentation for this recently developed analytical tool is included in my workpapers.
Lost Productivity

<table>
<thead>
<tr>
<th>Line Segment</th>
<th>Current (1)</th>
<th>Applicants' Proposal (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Creek to Calumet Park</td>
<td>$3,730,191</td>
<td>$6,568,372</td>
</tr>
<tr>
<td>Hobart to Pine Junction</td>
<td>0</td>
<td>$2,426,155</td>
</tr>
<tr>
<td>Total</td>
<td>$3,730,191</td>
<td>$8,994,527</td>
</tr>
</tbody>
</table>

Source: Exhibits PHB-5, 6 & 8

2. Fuel and Oil Costs

Vehicles experiencing delay at railroad crossings consume fuel and oil idling at crossings. The gallons of fuel and oil consumed per minute of idling by type of vehicle are shown in the table below.

<table>
<thead>
<tr>
<th>Type of Vehicle</th>
<th>Fuel (1)</th>
<th>Oil (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger vehicle*</td>
<td>0.009</td>
<td>0.0003</td>
</tr>
<tr>
<td>Truck</td>
<td>0.008</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

*Includes buses

The gallons of fuel and oil consumed were calculated by multiplying the rates of consumption by vehicle type by the hours of delay by vehicle type. The resulting gallons consumed were then multiplied by the costs per gallon of fuel equal to $1.50 for fuel and $4.00 per gallon for oil. The resulting fuel and oil costs associated with the delay at railroad crossings

---

The source of the fuel consumption rates is the *Progress Report on Literature and Assessment of Procedures and Data*, Technical Memorandum for NCHRP 7-12, Texas Transportation Institute, Texas A & M University Systems, College Station, Texas, January 1990, as reported in the *GradeDec* Model.
in the Four Cities region based on current traffic levels and the Applicants’ projected traffic levels and Operating Plans are shown in the table below.

<table>
<thead>
<tr>
<th>Line Segment</th>
<th>Fuel and Oil Costs</th>
<th>Applicants’ Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Willow Creek to Calumet Park</td>
<td>$210,954</td>
<td>$371,800</td>
</tr>
<tr>
<td>Hobart to Pine Junction</td>
<td>0</td>
<td>$139,120</td>
</tr>
<tr>
<td>Total</td>
<td>$210,954</td>
<td>$510,920</td>
</tr>
</tbody>
</table>

Source: Exhibits PHB-5, 6 & 8.

3. **Vehicle Emissions Costs**

Vehicle delay hours at rail crossings also produce costs to the public related to emissions of Hydrocarbons, Carbon Monoxide and Nitrogen Oxides. These emissions are measured in grams per minute of idling by type of vehicle. The table below provides the emission rates for each pollutant by type of vehicle.21

<table>
<thead>
<tr>
<th>Type of Vehicle</th>
<th>Hydrocarbons (HC)</th>
<th>Carbon Monoxide (CO)</th>
<th>Nitrogen Oxides (NOx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Passenger vehicles*</td>
<td>0.1998</td>
<td>1.6426</td>
<td>0.1527</td>
</tr>
<tr>
<td>Truck</td>
<td>1.3986</td>
<td>45.3639</td>
<td>0.0111</td>
</tr>
</tbody>
</table>

*Includes buses

21/ The source for the emission rates by type of vehicle and pollutant is the California Air Resources Board, EMFAC7F, Version 1.1, 1995, as reported in the FRA’s GradeDec Model.
Based on the FRA GradeDec Model, the cost of emissions equals $3,000 per ton for Hydrocarbons, $4,000 per ton for Carbon Monoxide and $6,000 per ton for Nitrogen Oxides. Applying the rates of emissions to the vehicle hours of delay by vehicle type produces the grams of emissions by type of pollutant. We then converted the cost per ton to a cost per gram and applied it to the grams of pollutants emitted to yield vehicle emission costs for both the current traffic levels and the Applicants' projected traffic. The table below shows the calculated vehicle emissions costs.

<table>
<thead>
<tr>
<th>Line Segment</th>
<th>Current</th>
<th>Applicants' Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Creek to Calumet Park</td>
<td>$418,402</td>
<td>$755,468</td>
</tr>
<tr>
<td>Hobart to Pine Junction</td>
<td>0</td>
<td>$377,643</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$418,402</strong></td>
<td><strong>$1,133,111</strong></td>
</tr>
</tbody>
</table>

Source: Exhibit PHB-5.

4. Accident Incident Costs

The FRA provides formulas to predict the incidence of accidents at individual rail crossings. These formulas take into account various inputs including: annual average daily vehicle crossings, type of warning device, timetable speed, accident history, daytime trains per day and night time trains per day, number of tracks, the type of highway surface and number of highway lanes. The model is used to predict accidents, injuries and fatalities for individual crossings.

The Indiana Department of Transportation uses these formulas, with minor modifications to better reflect conditions local to Indiana, and predicts accidents for all at-grade rail crossings in the state. This information was provided to me by the City of Gary for rail crossings in the
Four Cities region. The *GradeDec* Model provides a range of costs for each type of rail crossing accident. The median values are $3,000,000 per fatality, $500,000 per injury and $50,000 per property damage accident.

Using the accident predictions provided for the rail crossings in the central portion of the Four Cities and the cost per accident shown above, we calculated the accident, injury and fatality costs at each crossing for both the current traffic and the Applicants’ projected traffic. These costs are shown in the table below.\(^{22}\)

<table>
<thead>
<tr>
<th>Accident Cost</th>
<th>Line Segment</th>
<th>Current (2)</th>
<th>Applicants’ Proposal (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Creek to Calumet Park</td>
<td>$1,090,845</td>
<td>$1,571,286</td>
<td></td>
</tr>
<tr>
<td>Hobart to Pine Junction</td>
<td>0</td>
<td>$27,760</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,090,845</strong></td>
<td><strong>$1,599,046</strong></td>
<td></td>
</tr>
</tbody>
</table>

As this table reflects, accident costs would increase by $480,441 on the Willow Creek to Calumet Park line segment and would increase from $0 to $27,760 on the Hobart to Pine Junction line.

Exhibit PHB-5 summarizes my calculation of each of the above described costs to the public which will result from Applicants’ projected traffic and Operating Plans in the Four Cities.

\(^{22}\) The prediction of accidents, by type of accident, for each rail line segment for the projected traffic is calculated by multiplying the predictions for current traffic by the percent change in the number of trains per day from current trains to projected trains.
5. Summary of Impact of Applicants’ Post-Acquisition Increase in Rail Traffic on the Four Cities

The table below summarizes the lost productivity, fuel and oil consumption, emission and accident costs for both the current and Applicants’ post-acquisition traffic levels. As shown in the table Applicants’ projected post-acquisition traffic levels will result in an annual $6.8 million cost to the public. The net present value of this cost for a twenty-year period equals $87.5 million.

<table>
<thead>
<tr>
<th>Item</th>
<th>Current Traffic</th>
<th>Projected Traffic</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vehicle Delay Hours</td>
<td>242,353</td>
<td>588,278</td>
<td>345,925</td>
</tr>
<tr>
<td>2. Lost productivity cost</td>
<td>$3,730,191</td>
<td>$8,994,527</td>
<td>$5,264,336</td>
</tr>
<tr>
<td>3. Fuel and oil consumption</td>
<td>$210,954</td>
<td>$510,920</td>
<td>$299,966</td>
</tr>
<tr>
<td>4. Emission of pollutants</td>
<td>$418,402</td>
<td>$1,133,111</td>
<td>$714,709</td>
</tr>
<tr>
<td>5. Accident Costs</td>
<td>$1,090,845</td>
<td>$1,599,046</td>
<td>$508,201</td>
</tr>
<tr>
<td>6. Total Cost to the Public</td>
<td>$5,450,392</td>
<td>$12,237,604</td>
<td>$6,787,212</td>
</tr>
</tbody>
</table>

VII. COMPARATIVE ANALYSIS OF APPLICANTS’ PROPOSAL AND FCC’S ALTERNATIVE ROUTING PLAN

As discussed previously, the FCC proffers alternative routings for two distinct segments of the Applicants’ proposed operating plans for the region. These include 1) rerouting a portion of the traffic CSX proposes to move over the lines from Willow Creek to Pine Junction and from Pine Junction to Calumet Park to the IHB and Conrail Porter Branch lines from Calumet Park to Willow Creek via Virginia Street (Gary), and 2) rather than restoring service on the former PRR line from Hobart to Tolleston and Tolleston to Clarke Junction, routing the projected traffic for this line over a combination of the NS/NKP line from Hobart to Van Loon.
and the EJE line from Van Loon to Pine Junction, thus allowing movement of coal and coke by CSX to the lakefront steel mills.²²

As stated in the Summary and Conclusion Section, I have performed a comparative analysis of the Applicants’ proposed operating plans for these two routes and the FCC’s Alternative Routing Plan and determined that the FCC Alternative results in an annual cost savings to the public and the Applicants’ of $6.0 million. The net present value of these savings for a twenty year period equals $77.5 million.

Our comparative analysis is based on the same four factors listed in the previous section plus the change in railroad variable operating costs and return on investment of the capital required to implement each of the alternatives. Based on our calculations the Applicants’ operating costs will increase slightly under the FCC’s alternatives and Applicants’ required return on investment of capital costs will be reduced.

Applicants’ required return on investment will be reduced because Applicants will be able to avoid the expenditure of funds required to reactivate the out-of-service PRR line from Hobart to Tolleston and because the volume of traffic under the FCC’s Alternative Routing Plan reduces traffic on the Willow Creek to Calumet Park line via Pine Junction. As a result, Applicants can forgo the cost of upgrading portions of this line from FRA Class 2 to Class 3 condition.

²² As discussed previously, an alternative routing would be the NS/NKP line to Osborn (west of Van Loon), and then north over the IHB (which is controlled by Conrail) to reach the Lakefront steel mills.
A comparative analysis of the Applicants' proposed operations and each element of the FCC's Alternative Routing Plan is presented below.

1. Willow Creek to Calumet Park

The FCC's Alternative Routing Plan shifts traffic off CSX's Willow Creek to Calumet Park line and makes use of the IHB and Conrail Porter Branch. The FCC proposal contemplates but does not necessarily require directional traffic flow, i.e., parallel mainline tracks with the majority of traffic on these lines operating in opposite directions. Operation of parallel mainlines with directional flow is a common and desirable practice in the railroad industry.

Operating in this manner will significantly reduce the volume of traffic moving on the CSX Willow Creek to Calumet Park line via Pine Junction. Reducing the traffic on this line, which has twenty at-grade crossings in the central business districts of East Chicago and Hammond alone, and placing a portion of the traffic on the grade separated IHB line, will significantly reduce the disruption of vehicular traffic in the Four Cities region. This alternative will significantly mitigate the adverse economic, safety and quality-of-life impacts that would otherwise affect the public in the Four Cities region.

The table below shows the annual delay costs, accident costs, mileage related railroad operating costs and return on investment for the Applicants' projected traffic using both the Applicants' proposed operating plan and the FCC's Alternative Routing Plan.

---

24 The plan would also work without directional traffic flow as a means to avoid the adverse incremental impacts of the increased traffic over the CSX/BOCT line. However, the directional flow arrangement would be significantly more efficient.
### Comparison of Annual Costs for Applicant's Proposal and FCC's Alternative Routing Plan

**Willow Creek to Calumet Park**

<table>
<thead>
<tr>
<th>Route</th>
<th>Applicants' Proposal (1)</th>
<th>FCC's Alternative (2)</th>
<th>Difference (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train Delay Cost</td>
<td>$6,568.4</td>
<td>$5,153.5</td>
<td>$1,414.9</td>
</tr>
<tr>
<td>Vehicle Fuel Consumption Cost</td>
<td>$342.1</td>
<td>$267.2</td>
<td>$74.9</td>
</tr>
<tr>
<td>Vehicle Oil Consumption Cost</td>
<td>$29.7</td>
<td>$23.3</td>
<td>$6.4</td>
</tr>
<tr>
<td>Vehicle Emissions Cost</td>
<td>$755.5</td>
<td>$526.3</td>
<td>$229.2</td>
</tr>
<tr>
<td>Accident Cost</td>
<td>$1,571.3</td>
<td>$1,366.4</td>
<td>$204.9</td>
</tr>
<tr>
<td>Rail Operating Cost</td>
<td>$16,104.1</td>
<td>$15,981.5</td>
<td>$122.6</td>
</tr>
<tr>
<td>Rail Capital Investment</td>
<td>$1,116.1 (^1)</td>
<td>$265.7 (^2)</td>
<td>$850.4</td>
</tr>
<tr>
<td><strong>Net Savings</strong></td>
<td></td>
<td></td>
<td><strong>$2,903.3</strong></td>
</tr>
</tbody>
</table>

\(^1\) The required investment is estimated to equal $6,565,000 with a pre tax return on investment equal to 17 percent. The derivation of the $6,565 million is shown in footnote 26 below.

\(^2\) Assumes capital investment to rehabilitate IHB abandoned line and construct connection to CSX (CR) equals $1,562,762 with a pre tax return on investment equal to 17 percent.

The productivity cost, fuel and oil costs, emissions costs and accident cost shown in the above table for both the Applicants’ proposal and the FCC’s Alternative Routing Plan were calculated in the same manner as described in the previous section. The calculation of these costs are shown in Exhibit PHB-6. The calculation of the railroad’s mileage related operating costs and the return on investment for both the Applicants’ proposal and the FCC’s Alternative Routing Plan are discussed below.
a. **Mileage Related Operating Costs**

Using unit costs specific to the CSX based on the Surface Transportation Board’s ("STB") Uniform Rail Costing System ("URCS") and the CSX 1995 annual expense data as reported in CSX’s Annual R-1 Report, we have calculated the mileage related operating costs for the Applicants’ projected traffic moving under both the Applicants’ proposal and the FCC’s Alternative Routing Plan. Non-mileage-related costs were not used in this analysis because only mileage related costs for the projected traffic will be affected by the Applicants’ and FCC’s alternative routing plans. For example, the origin and destination terminal costs associated with the projected traffic will be the same regardless of which routing plan is used.

The mileage-related costs included in the comparative analysis include gross ton-mile costs, locomotive unit-mile costs, train-mile costs and car-mile costs. CSX’s 1995 URCS unit costs for each of these items were applied to the gross ton-miles, locomotive unit-miles, train-miles and car-miles for the projected traffic over both alternative routes. The table below shows our calculation of CSX’s variable cost by category of cost for the projected traffic using both the Applicants’ proposed operating plans and the FCC’s Alternative Routing Plan.

---

25 The 1995 CSX URCS unit costs used in my analysis have been adjusted to reflect changes in operating costs and traffic resulting from CSX’s ownership of 42 percent of Conrail. The unit costs have also been increased to reflect the difference between Applicants' appraisal value of Conrail assets and the book value of Conrail assets. CSX 1995 URCS unit costs are used because it is the base year in Applicants' filing and the year for which Applicants made the required improvements to perform this analysis available.
The units of production and variable costs by category of cost and line segment are shown in Exhibit PHB-7 for Applicants’ projected traffic for both the Applicants’ proposed operating plan and the FCC’s Alternative Routing Plan.

b. **Return on Investment**

As shown previously, under FCC’s Alternative Routing Plan the volume of traffic, stated in both millions of gross tons per year and trains per day moving on CSX’s line between Willow Creek and Pine Junction will decrease slightly from current levels, and the annual gross tons and trains per day moving on the CSX/BOCT line between Pine Junction and Calumet Park will decrease significantly.

As a result, the significant capital investment planned by CSX to upgrade the track and signaling on this line will not be required. We have estimated, based on Applicants’ filing before the STB, that the upgrade costs associated with this portion of the line, which can be avoided through implementation of FCC’s Alternative Routing, equals $6,565,000.\(^2\)

\(^2\) Our estimate is based on a reported investment to upgrade CSX’s line from Greenwich Ohio to Chicago, Illinois of $110 million. Prorating this amount on a mileage basis to the miles from Willow Creek to Calumet Park yields an estimated capital expenditure of $6,656,000 for this portion of the line. In its discovery requests, the
The FCC's Alternative Routing Plan maximizes utilization of the grade separated IHB line from Calumet Park to Virginia Street in Gary. This plan requires the restoration to service of 2.1 miles of out-of-service IHB track and the construction of a connection between the IHB grade separated line and the Conrail Porter Branch in the vicinity of Virginia Street. Currently, the IHB and Conrail lines connect at Ivanhoe. The FCC proposal takes advantage of the substantial sunk investment in rail/highway grade separations along the IHB/Conrail line. As a result crossing delays in the Central Business Districts of East Chicago and Hammond would be significantly reduced.

As discussed in the accompanying joint verified statement of Messers Heinzman and Dunn, the estimated cost of the restoration of the 2.1 miles of IHB track and the construction of the connection with Conrail at Virginia Street equals $1,562,762. Accordingly, the net reduction in capital cost using FCC's Alternative Routing Plan equals $5.0 million. Applying the STB's pre-tax cost of capital of 17% to the net reduction in capital costs results in an annual reduction in CSX's required return on investment equal to $850,380.

As demonstrated above, the FCC's Alternative Routing Plan for the movement of Applicants' projected traffic between Willow Creek and Calumet Park results in a net annual reduction in public and railroad costs equal to $2.9 million.

---

FCC asked CSX to describe the work to be performed and the amount to be spent to upgrade the CSX's Chicago to Greenwich "line(s)" west of Willow Creek. In response, CSX provided an amount to be spent for projects west of Willow Creek without specifying which line segments (and what specific work) were involved. Bates Number CSX 44 HC 000101. Because CSX did not provide the specific information requested, we estimated the capital expenditure required to upgrade the line west of Willow Creek in the manner described above.
2. **Hobart to Tolleston and Clark Junction**

Applicants' propose to reactivate the former PRR out-of-service rail line from Hobart to Tolleston and Tolleston to Clarke Junction. This out-of-service line has 23 at-grade crossings and two grade separated crossings. Applicants' operating plan and supporting documents indicate two distinct uses for this line. First, CSX intends to move five trains per day, representing 12 million gross tons per year over this line.

CSX's responses to FCC's questions in lieu of deposition, indicate that CSX trains will use this line to move coal and coke to Pine Junction, then over the EJE, using CSX crews for delivery to U. S. Steel. The train weights included in Applicants' filing before the STB for the Hobart to Tolleston segment are heavier than those provided for any other CSX line segment and are consistent with a combination of coal and coke shipments. (The average train weight for this segment equals approximately 6,600 gross tons as compared with 5,000 to 5,300 gross tons for other CSX line segments.)

The second use Applicants intend for this line involves NS' service to the Gary Sugar Works on the former Wabash spur. According to the deposition of NS witness Mohan, NS plans to construct a connection between the Wabash spur and the Tolleston to Clarke Junction portion of the PRR line in order to permit, "through a series of reverse moves" the NS to move traffic originating or terminating at Gary Sugar Works from the Wabash spur to the Tolleston to Clarke Junction PRR line, across the CSX Lakefront line onto what is currently the Conrail Lakefront.

---

22/ See September 17, 1997 Deposition transcript of NS Witness Mohan, at pages 330 to 331.
line. This traffic can then move in an easterly direction on the existing Conrail Lakefront line to Burns Harbor, IN.

The FCC's Alternative Routing Plan for reactivating the Hobart to Tolleston and Clark Junction line permits movement of the two shipments described above, without the reactivation of the out-of-service PRR line and its 23 at-grade crossings.

The FCC's Alternative Routing Plan contemplates the movement of the CSX coal and coke traffic from Hobart over the NS NKP line to Van Loon where a connection would be constructed to the EJE. From EJE the CSX trains would be operated by CSX crews through Pine Junction to the U.S. Steel Mill in Gary and other lakefront steel mills in the area. As stated previously, use of CSX crews to operate over the EJE is consistent with CSX's current plan for the movement of traffic from Pine Junction to the Gary lakefront.

The FCC's Alternative Routing Plan accommodates the NS Gary Sugar Works traffic through the construction of a connection between the CSX Lakefront line and the existing Conrail Lakefront line just east of Pine Junction. This connection would permit NS to move traffic originated at the Gary Sugar Works along the Wabash spur, in a reverse move, to its current connection with the CSX Pine Junction to Calumet Park line. Once on the CSX Pine Junction to Calumet Park line, the traffic can move forward through Pine Junction onto the CSX Lakefront line then through the new connection with the existing Conrail Lakefront line and east to Burns Harbor, IN.
The table below shows the delay costs, accident costs, mileage related railroad operating cost and return on investment for the Applicants’ projected traffic using both the Applicants’ proposed operating plan and the FCC’s Alternative Routing Plan for the planned movements on the out-of-service PRR line.

<table>
<thead>
<tr>
<th>Item</th>
<th>Applicants’ Proposal</th>
<th>FCC’s Alternative</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train Delay Cost</td>
<td>$2,462.2</td>
<td>$469.8</td>
<td>$1,956.4</td>
</tr>
<tr>
<td>Vehicle Fuel Consumption Cost</td>
<td>$128.1</td>
<td>$24.4</td>
<td>$103.7</td>
</tr>
<tr>
<td>Vehicle Oil Consumption Cost</td>
<td>$11.0</td>
<td>$2.1</td>
<td>$8.9</td>
</tr>
<tr>
<td>Vehicle Emissions Cost</td>
<td>$377.6</td>
<td>$49.8</td>
<td>$327.8</td>
</tr>
<tr>
<td>Accident Cost</td>
<td>$27.8</td>
<td>$241.6</td>
<td>($213.8)</td>
</tr>
<tr>
<td>Rail Operating Cost</td>
<td>$1,202.8</td>
<td>$1,378.5</td>
<td>($175.7)</td>
</tr>
<tr>
<td>Rail Capital Investment</td>
<td>$1,192.9</td>
<td>$94.5</td>
<td>$1,098.4</td>
</tr>
</tbody>
</table>

**Net Savings (Cost)**

$3,105.7

1️⃣ Includes trackage rights payment of 3 mills per gross ton-mile.

2️⃣ Assumes capital investment to rehabilitate PRR abandoned line and construct connections at Tolleston, Wabash and Dunes equals $7,017,167 with a pretax return on investment equal to 17 percent.

3️⃣ Assumes capital investment to construct connections at Van Loon and Pine Jct equal $555,866 with a pretax return on investment equal to 17 percent.

As with the comparative analysis of the Willow Creek to Calumet Park lines, the productivity cost, fuel and oil costs, emissions cost and the accident cost shown in the above table for both the Applicants’ proposal and the FCC’s Alternative Routing Plan were calculated...
in the same manner as described in the previous section. The calculation of these costs are shown in Exhibit PHB-8.

The calculations of the railroads' variable operating costs and the capital investment requirements for both the Applicants' proposal and the FCC's Alternative Routing Plan are discussed below.

a. **Mileage Related Variable Operating Expense**

The mileage related variable operating expense for the Applicants' operating plans related to traffic moving on the restored PRR line were calculated in precisely the same manner as described for the Willow Creek to Calumet Park alternatives.

Variable operating costs for the FCC's Alternative Routing Plan using the NS and EJE to move CSX coal and coke to the lakefront steel mills have been calculated using a modified procedure to account for trackage rights payments to both NS and EJE for use of their facilities. This procedure removes from the CSX gross ton-mile unit costs the portion of expense related to return on road property and maintenance of way and structures, before applying the unit cost to the gross ton-miles shipped. These expenses were removed from the CSX gross ton-mile unit cost because CSX will not incur either of these expenses while moving on NS and EJE. In doing so, we have calculated CSX's mileage related "above the rail" costs for this traffic.

In addition to the above adjustment, we have included a trackage rights payment from CSX to NS and EJE for use of their facilities. The trackage rights payment has been calculated based on the payment of 3.0 mills per gross ton-mile on unit train traffic by Burlington Northern Santa Fe ("BNSF") to Union Pacific Railroad Company ("UP") as approved by the STB in the recent
UP acquisition of Southern Pacific Railroad Company ("SP"). The table below shows our calculation of CSX’s variable cost by category of cost for the projected traffic using both the Applicants’ proposed operating plan and the FCC’s Alternative Routing Plan.

<table>
<thead>
<tr>
<th>Hobart to Clarke Jct. Operating Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Gross Ton-Mile</td>
</tr>
<tr>
<td>Locomotive Unit Mile</td>
</tr>
<tr>
<td>Train Mile</td>
</tr>
<tr>
<td>Car Mile</td>
</tr>
<tr>
<td>Trackage Rights</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The units of production and variable costs by category of cost and line segment are shown in Exhibit PHB-7 for Applicants’ projected traffic for both the Applicants’ proposed operating plan and the FCC’s Alternative Routing Plan.

b. Return on Investment

The FCC Alternative Routing Plan eliminates the need to reactivate the out-of-service PRR rail line between Hobart and Clarke Junction through Tolleston and the need to construct connections between the Wabash spur and the PRR rail line, between the PRR rail line and the Conrail Porter Branch, and between the PRR line and the EJE line at Dunes. It does require, however, construction of connections between the NS and EJE at Van Loon and between the CSX and existing Conrail Lakefront lines.
Messers Heinzman and Dunn have estimated the capital investment that will be avoided by CSX and NS, assuming the PRR line is not restored to service and the associated connections are not constructed. This amount is estimated to equal $7,017,167.

Messers Heinzman and Dunn have also observed the conditions at both the Van Loon and Pine Junction connection locations to determine the feasibility of constructing connections at both of these locations. As described in their statements these connections are feasible, and the construction costs for these connections are estimated to total $555,866.

The FCC’s Alternative Routing Plan affords a $6,461,301 reduction in capital requirements compared with the Applicants’ proposed operating plan. Applying the STB’s pre-tax cost of capital of 17% to the net reduction in capital costs results in an annual reduction in CSX’s required return on investment equal to $1,098,421 for the Hobart to Tolleyton and Clark Junction line.

As demonstrated above, the FCC’s Alternative Routing Plan for the movement of Applicants’ projected traffic between Hobart and Tolleyton and Clarke Junction results in a net annual reduction in public and railroad costs equal to $3.1 million annually. When combined with the net annual reduction of $2.9 million for movement of the traffic between Willow Creek and Calumet Park, this produces a total net savings for the FCC’s proposal of $6.0 million a year as compared to the Applicants’ plans.
QUALIFICATIONS OF PHILIP H. BURRIS

PROFESSIONAL EXPERIENCE

Mr. Burris has nineteen (19) years experience in the field of transportation economics as it pertains to transportation supply alternatives, plant location analysis, regulatory policy and dispute resolution before regulatory agencies as well as state and federal courts. He has designed, directed and executed analyses of the costs of moving various commodities by different modes of transportation including rail, barge, truck, pipeline and intermodal. The commodities considered in these studies included coal, grain, automobiles, cold rolled steel, iron ore, limestone, copper coil and sheet, pulpwood, woodchips and water.

Mr. Burris has performed economic analyses of maximum reasonable rate levels for the movement of coal, grain and water using the Interstate Commerce Commission’s ("ICC" or "Commission") Constrained Market Pricing ("CMP") standard and specifically the stand-alone cost constraint. Mr. Burris has submitted evidence regarding maximum reasonable rate levels using the stand-alone cost constraint to both the ICC and the State of Colorado District Court for the City and County of Denver. Mr. Burris’ firm, L. E. Peabody & Associates, Inc. participated in the development of the stand-alone cost constraint and has submitted testimony to the Commission using the stand-alone cost constraint on behalf of electric utilities in numerous ICC proceedings subsequent to the development of CMP by the Commission.
QUALIFICATIONS OF PHILIP H. BURRIS

In addition to development of cost of moving various commodities by different modes of transportation, Mr. Burris has performed evaluations of the economic viability and financial health of short line railroads. These studies were performed on behalf of state agencies to determine the financial viability of the railroads or on behalf of investors considering the purchase and operation of short line railroads. Mr. Burris has also conducted studies of railcar lease and purchase options and negotiated rate reductions on behalf of shippers resulting from the use of shipper provided equipment. He has determined both the costs and profits attributable to the performance of services subject to specific transportation contracts.

Mr. Burris has performed studies and written draft reports for the Railroad Accounting Principles Board, an independent body created by Congress to establish cost accounting principles for use in implementing the regulatory provisions of the Staggers Act of 1980.

The transportation studies designed and executed under Mr. Burris' direction have been commissioned for the purpose of negotiating with transportation companies, for use in dispute resolution before various regulatory agencies and state and federal courts and on behalf of electric utility companies in prudency examination. Mr. Burris has testified before the Commission, the Railroad Commission of Texas, the Colorado Public Utilities Commission, the Illinois Commerce Commission, the Public Service Commission of Nevada and various state and
QUALIFICATIONS OF PHILIP H. BURRIS

federal courts. Mr. Burris has also negotiated transportation rates and service on behalf of shipper clients.

Previous Related Experience - Mr. Burris has worked in the consulting industry for a period of nineteen years. In addition to his current position as a Vice President of L. E. Peabody & Associates, Inc., Mr. Burris has been an employee of the following consulting firms: A. T. Kearney, Wyer Dick & Associates, Inc. and George C. Shaffer & Associates.

EDUCATION

Mr. Burris received a BS in Business Administration from Virginia Polytechnic Institute and State University in 1971 and a MBA from the American University in 1978, specializing in transportation.
QUALIFICATIONS OF PHILIP H. BURRIS

Testimony and Publications

Finance Docket No. 33290, Nevada Public Service Commission, Sault Ste. Marie Bridge Co... Acquisition Exemption — Lines of Union Pacific Railroad Company; January and September 1997


U.S. District Court for the Northern District of Iowa, Easter Division, Case No. C91-2086; Rail Intermodal Specialist, Inc. vs. General Electric Capital Corporation; February 1994 and May 1995.

State of Colorado District Court, City and County of Denver, Case No. CV 13042; Bear Creek Water and Sanitation District, et al. vs. The City and County of Denver; July 1992 and April 1993.


ICC Docket No. AB-1 (Sub-No. 230); Chicago and North Western Transportation Company - Abandonment - Between Norfolk and Chadron, NE; January 1992.


Railroad Accounting Principles Board; Staff Issue Paper on Reporting Costs and Outputs; June 1985.

Railroad Accounting Principles Board; Staff Issue Paper on Movement Parameters; May 1986.

Virginia Department of Highways and Transportation, Rail and Public Transportation Division; Light Density Line Analysis Seaboard System Railroad, Suffolk to College Park, and South Suffolk to Nurney; September 1985.

QUALIFICATIONS OF PHILIP H. BURRIS

ICC Docket No. AB6 (Sub-No. 175F), Burlington Northern Railroad Company Abandonment in Fergus, Judith Basin and Chouteau Counties, Montana; February 1984.

Ex Parte 431; Adoption of the Uniform Rail Costing System for Determining Variable Costs for Purposes of Surcharges and Jurisdictional Threshold Calculations; September 1983.

Co-authored Influence of Transportation Factors in the Site Selection of a United States Mazda Automobile Assembly Plant; September 1983.

Ex Parte 347 (Sub-No. 1); Coal Rate Guidelines - Nationwide; July 1983.

ICC Docket No. 38823; R. A. Williams, Inc. vs. Illinois Central Gulf Railroad Company; April 1983.

Montana Department of Commerce; Montana Rail Cost Data Base; December 1982.


Ex Parte 411; Complaints Filed Under Section 229 of the Staggers Rail Act of 1980; October 1981.

Railroad Commission of Texas, RCT Docket No. 024130ZZR; Switching and Minimum Carload
LEGEND

NS
NS (Conrail)
CSXT
CSXT (Conrail)
EJE
Proposed Connection
### Summary of Cost to the Public

**Current Traffic and Applicants’ Post-Acquisition Projected Traffic**

(000)

<table>
<thead>
<tr>
<th>Item</th>
<th>Current Traffic</th>
<th>Projected Traffic</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train Delay Cost 1/</td>
<td>$3,730.2</td>
<td>$8,994.5</td>
<td>$5,264.3</td>
</tr>
<tr>
<td>Vehicle Fuel Consumption Cost 1/</td>
<td>$194.1</td>
<td>$470.2</td>
<td>$276.1</td>
</tr>
<tr>
<td>Vehicle Oil Consumption Cost 1/</td>
<td>$16.9</td>
<td>$40.7</td>
<td>$23.8</td>
</tr>
<tr>
<td>Vehicle Emissions Cost 2/</td>
<td>$418.4</td>
<td>$1,133.1</td>
<td>$714.7</td>
</tr>
<tr>
<td>Accident Cost 3/</td>
<td>$1,090.8</td>
<td>$1,599.0</td>
<td>$508.2</td>
</tr>
</tbody>
</table>

**Total Difference**

$6,787.1

1/ page 2
2/ page 5
3/ Page 7
## Comparison of Vehicle Delay Costs between Current Traffic and Applicants Post-Acquisition Projected Traffic

<table>
<thead>
<tr>
<th>Location</th>
<th>Current Traffic (2)</th>
<th>Projected Traffic (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Daily Delay Hours 1/</td>
<td>596.65</td>
<td>1420.89</td>
</tr>
<tr>
<td>2. Car</td>
<td>67.33</td>
<td>190.83</td>
</tr>
<tr>
<td>3. Truck</td>
<td>663.98</td>
<td>1611.72</td>
</tr>
<tr>
<td>4. Total per day</td>
<td>242,352.7</td>
<td>588,277.8</td>
</tr>
<tr>
<td>5. Total per Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Delay Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Car Occupancy Factor 2/</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>8. Truck Occupancy Factor</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>9. Hourly Delay Cost per Person 3/</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>10. Annual Delay Cost</td>
<td>$3,730,191</td>
<td>$8,994,527</td>
</tr>
<tr>
<td>11. Fuel Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Car Idle Consumption Rate (gallons per minute)</td>
<td>0.009</td>
<td>0.009</td>
</tr>
<tr>
<td>13. Truck</td>
<td>0.008</td>
<td>0.008</td>
</tr>
<tr>
<td>14. Fuel Cost per Gallon</td>
<td>$1.5</td>
<td>$1.5</td>
</tr>
<tr>
<td>15. Annual Fuel Cost</td>
<td>$194,094</td>
<td>$470,236</td>
</tr>
<tr>
<td>16. Fuel Cost per Day</td>
<td>$531.76</td>
<td>$1,288.32</td>
</tr>
<tr>
<td>17. Oil Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Oil Idle Consumption Rate (gallons per minute)</td>
<td>0.0003</td>
<td>0.0003</td>
</tr>
<tr>
<td>19. Car</td>
<td>0.0002</td>
<td>0.0002</td>
</tr>
<tr>
<td>20. Truck</td>
<td>$4.0</td>
<td>$4.0</td>
</tr>
<tr>
<td>21. Oil Cost per Gallon</td>
<td>$46.19</td>
<td>$111.46</td>
</tr>
<tr>
<td>22. Annual Oil Cost</td>
<td>$16,860</td>
<td>$40,684</td>
</tr>
<tr>
<td>23. Oil Cost per Day</td>
<td>$16,860</td>
<td>$40,684</td>
</tr>
<tr>
<td>24. Total</td>
<td>$3,941,144</td>
<td>$9,505,448</td>
</tr>
</tbody>
</table>

1/ PHB Workpapers  
3/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support Tool, Version 1.0
### Comparison of Emissions Costs between Current Traffic and Applicants Projected Traffic

#### Willow Creek to Pine Junction

<table>
<thead>
<tr>
<th></th>
<th>HC Emissions</th>
<th>NOX Emissions</th>
<th>CO Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Emission Rates (grams per hr of idling)</strong> 1/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
<td>98.556</td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
<td>2721.834</td>
</tr>
<tr>
<td><strong>b. Daily Delay Hours</strong> 2/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>23.08</td>
<td>23.08</td>
<td>23.08</td>
</tr>
<tr>
<td>- Truck</td>
<td>1.47</td>
<td>1.47</td>
<td>1.47</td>
</tr>
<tr>
<td><strong>c. Emissions Cost per gram</strong> 3/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$0.0033</td>
<td>$0.0066</td>
<td>$0.0044</td>
</tr>
<tr>
<td>- Truck</td>
<td>$0.41</td>
<td>$0.01</td>
<td>$0.0066</td>
</tr>
<tr>
<td><strong>d. Daily Emissions Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$0.92</td>
<td>$1.40</td>
<td>$10.03</td>
</tr>
<tr>
<td>- Truck</td>
<td>$0.41</td>
<td>$0.01</td>
<td>$0.0066</td>
</tr>
<tr>
<td><strong>e. Total Annual Emissions Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$483</td>
<td>$513</td>
<td>$10.102</td>
</tr>
</tbody>
</table>

#### Pine Junction to Calumet Park

<table>
<thead>
<tr>
<th></th>
<th>HC Emissions</th>
<th>NOX Emissions</th>
<th>CO Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Emission Rates (grams per hr of idling)</strong> 1/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
<td>98.556</td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
<td>2721.834</td>
</tr>
<tr>
<td><strong>b. Daily Delay Hours</strong> 2/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>458.42</td>
<td>458.42</td>
<td>458.42</td>
</tr>
<tr>
<td>- Truck</td>
<td>58.51</td>
<td>58.51</td>
<td>58.51</td>
</tr>
<tr>
<td><strong>c. Emissions Cost per gram</strong> 3/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$0.0033</td>
<td>$0.0066</td>
<td>$0.0044</td>
</tr>
<tr>
<td>- Truck</td>
<td>$16.24</td>
<td>$0.26</td>
<td>$702.31</td>
</tr>
<tr>
<td><strong>d. Daily Emissions Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$18.18</td>
<td>$27.78</td>
<td>$199.24</td>
</tr>
<tr>
<td>- Truck</td>
<td>$16.24</td>
<td>$0.26</td>
<td>$702.31</td>
</tr>
<tr>
<td><strong>e. Total Annual Emissions Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$12,562</td>
<td>$10,235</td>
<td>$329,068</td>
</tr>
</tbody>
</table>

**Total Annual Emissions Cost**

- Willow Creek to Pine Junction: $12,562, $10,235, $329,068
- Pine Junction to Calumet Park: $24,031, $19,580, $629,513
Comparison of Emissions Costs between Current Traffic and Applicants Projected Traffic

<table>
<thead>
<tr>
<th></th>
<th>Current Emissions</th>
<th>Projected Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>NOX</td>
</tr>
<tr>
<td></td>
<td>Emissions</td>
<td>Emissions</td>
</tr>
<tr>
<td>Calumet Park to Willow Creek (via IHB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hour of idling)</td>
<td>1/</td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11,988</td>
<td>9,162</td>
</tr>
<tr>
<td>- Truck</td>
<td>83,916</td>
<td>0.666</td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>115.15</td>
<td>115.15</td>
</tr>
<tr>
<td>- Truck</td>
<td>7.35</td>
<td>7.35</td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$4.57</td>
<td>$6.98</td>
</tr>
<tr>
<td>- Truck</td>
<td>$2.04</td>
<td>$0.03</td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$2,411</td>
<td>$2,559</td>
</tr>
<tr>
<td>Total Willow Creek to Calumet Park to Willow Creek (via IHB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$15,456</td>
<td>$13,307</td>
</tr>
<tr>
<td></td>
<td>$27,512</td>
<td>$23,379</td>
</tr>
</tbody>
</table>

Sum of all emissions

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$418,402</td>
<td>$755,468</td>
</tr>
</tbody>
</table>
### Comparison of Emissions Costs between Current Traffic and Applicants Projected Traffic

<table>
<thead>
<tr>
<th></th>
<th>Current Traffic</th>
<th>Projected Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC Emissions</td>
<td>NOX Emissions</td>
</tr>
<tr>
<td></td>
<td>Hobart to Tolleston</td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td>11 998</td>
<td>9 162</td>
</tr>
<tr>
<td>- Car</td>
<td>83 916</td>
<td>0 666</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td>286.04</td>
<td>286.04</td>
</tr>
<tr>
<td>- Car</td>
<td>44.5</td>
<td>44.5</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td>$11.34</td>
<td>$17.34</td>
</tr>
<tr>
<td>- Car</td>
<td>$12.35</td>
<td>$0.20</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td>$8.648</td>
<td>$6.399</td>
</tr>
<tr>
<td></td>
<td>Tolleston to Clarke Jct.</td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td>11 998</td>
<td>9 162</td>
</tr>
<tr>
<td>- Car</td>
<td>83 916</td>
<td>0 666</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td>86.91</td>
<td>86.91</td>
</tr>
<tr>
<td>- Car</td>
<td>23.48</td>
<td>23.48</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td>$3.45</td>
<td>$5.27</td>
</tr>
<tr>
<td>- Car</td>
<td>$6.52</td>
<td>$0.10</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td>$3.636</td>
<td>$1.960</td>
</tr>
<tr>
<td></td>
<td>Hobart to Clarke Jct.</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>$12,284</td>
<td>$8,360</td>
</tr>
<tr>
<td></td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>$377,643</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>$15,456</td>
<td>$13,307</td>
</tr>
<tr>
<td></td>
<td>$39,896</td>
<td>$31,739</td>
</tr>
<tr>
<td>Sum of all emissions</td>
<td>$418,402</td>
<td>$1,133,111</td>
</tr>
</tbody>
</table>

1/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support  
2/ PHB Workpapers  
3/ GradeDec Model - Converted to cost per gram from cost per ton
Comparison of Accident Costs between Current Traffic and Applicants Projected Traffic

<table>
<thead>
<tr>
<th>Accidents</th>
<th>Incidents</th>
<th>Cost</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Projected</td>
<td>Per Incident</td>
<td>Current</td>
<td>Projected</td>
</tr>
<tr>
<td></td>
<td>Traffic</td>
<td>Traffic /</td>
<td></td>
<td>Traffic</td>
<td>Traffic</td>
</tr>
<tr>
<td>Willow Creek to Pine Junction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.8222</td>
<td>1.4361</td>
<td>$50,000</td>
<td>$41,110</td>
<td>$71,803</td>
</tr>
<tr>
<td>Injury</td>
<td>0.2088</td>
<td>0.3647</td>
<td>$500,000</td>
<td>$104,400</td>
<td>$182,346</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.1116</td>
<td>0.1949</td>
<td>$3,000,000</td>
<td>$334,800</td>
<td>$584,764</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$480,310</td>
<td>$838,912</td>
<td></td>
</tr>
<tr>
<td>Pine Junction to Calumet Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>1.2851</td>
<td>1.5505</td>
<td>$50,000</td>
<td>$64,255</td>
<td>$77,525</td>
</tr>
<tr>
<td>Injury</td>
<td>0.2893</td>
<td>0.3490</td>
<td>$500,000</td>
<td>$144,650</td>
<td>$174,523</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0594</td>
<td>0.0717</td>
<td>$3,000,000</td>
<td>$176,200</td>
<td>$215,002</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$387,105</td>
<td>$467,051</td>
<td></td>
</tr>
<tr>
<td>Calumet Park to Willow Creek (via IHB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.5866</td>
<td>0.6966</td>
<td>$50,000</td>
<td>$29,330</td>
<td>$34,829</td>
</tr>
<tr>
<td>Injury</td>
<td>0.1434</td>
<td>0.1703</td>
<td>$500,000</td>
<td>$71,700</td>
<td>$85,144</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0408</td>
<td>0.0485</td>
<td>$3,000,000</td>
<td>$122,400</td>
<td>$145,350</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$223,430</td>
<td>$265,323</td>
<td></td>
</tr>
<tr>
<td>Total Willow Creek to Calumet Park to Willow Creek (via IHB)</td>
<td>$1,090,845</td>
<td>$1,571,286</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Comparison of Accident Costs between Current Traffic and Applicants Projected Traffic

<table>
<thead>
<tr>
<th>Accidents</th>
<th>Incidents Current Traffic</th>
<th>Projected Traffic</th>
<th>Cost Per Incident</th>
<th>Cost Current Traffic</th>
<th>Cost Projected Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobart to Tolleston</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.0412</td>
<td>$50,000</td>
<td>$0</td>
<td>$0</td>
<td>$2,060</td>
</tr>
<tr>
<td>Injury</td>
<td>0.0108</td>
<td>$500,000</td>
<td>$0</td>
<td>$0</td>
<td>$5,400</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0019</td>
<td>$3,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$5,700</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$13,160</td>
</tr>
<tr>
<td>Tolleston to Clarke Junction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.0670</td>
<td>$50,000</td>
<td>$0</td>
<td>$0</td>
<td>$3,350</td>
</tr>
<tr>
<td>Injury</td>
<td>0.0153</td>
<td>$500,000</td>
<td>$0</td>
<td>$0</td>
<td>$7,650</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0012</td>
<td>$3,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$3,600</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$14,600</td>
</tr>
<tr>
<td><strong>Total Hobart - Clarke Jct.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$27,760</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,090,845</td>
</tr>
</tbody>
</table>

1/ Incidents for projected traffic equals current traffic increased by the change in the number of trains for each line segment
Comparison of Costs for Applicants' Proposal and FCC's Alternative Willow Creek to Calumet Park (only) (000)

<table>
<thead>
<tr>
<th>Item</th>
<th>Applicants' Proposal</th>
<th>FCC's Alternative</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train Delay Cost</td>
<td>$6,568.4</td>
<td>$5,153.5</td>
<td>$1,414.9</td>
</tr>
<tr>
<td>Vehicle Fuel Consumption Cost</td>
<td>$342.1</td>
<td>$267.2</td>
<td>$74.9</td>
</tr>
<tr>
<td>Vehicle Oil Consumption Cost</td>
<td>$29.7</td>
<td>$23.3</td>
<td>$6.4</td>
</tr>
<tr>
<td>Vehicle Emmissions Cost</td>
<td>$755.5</td>
<td>$526.3</td>
<td>$229.2</td>
</tr>
<tr>
<td>Accident Cost</td>
<td>$1,571.3</td>
<td>$1,366.4</td>
<td>$204.9</td>
</tr>
<tr>
<td>Rail Operating Cost</td>
<td>$16,104.1</td>
<td>$15,981.5</td>
<td>$122.6</td>
</tr>
<tr>
<td>Rail Capital Investment</td>
<td>$1,166.1 2/</td>
<td>$265.7 3/</td>
<td>$850.4</td>
</tr>
<tr>
<td>Net Savings (Cost)</td>
<td></td>
<td></td>
<td>$2,903.3</td>
</tr>
</tbody>
</table>

1/ Exhibit PHB-7

2/ Assumes upgrade of line from 25mph to 40mph, plus installation of a Centralized Traffic Control System. The required investment is estimated to equal $6,565,000 with a pre tax return on investment equal to 17 percent.

3/ Assumes capital investment to rehabilitate IHB abandoned line and construct connection to CSX (CR) equals $1,562,762 with a pre tax return on investment equal to 17 percent.
### Comparison of Vehicle Delay Costs between Applicants Projected Traffic and FCC's Traffic
Willow Creek to Calumet Park to Willow Creek (via IHB/Conrail)

<table>
<thead>
<tr>
<th>Location</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Daily Delay Hours 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Car</td>
<td>1047.94</td>
<td>831.73</td>
</tr>
<tr>
<td>3. Truck</td>
<td>122.85</td>
<td>81.15</td>
</tr>
<tr>
<td>4. Total per day</td>
<td>1170.79</td>
<td>912.88</td>
</tr>
<tr>
<td>5. Total per Year</td>
<td>427,338.4</td>
<td>333,202.3</td>
</tr>
<tr>
<td>6. Delay Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Car Occupancy Factor 2/</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>8. Truck Occupancy Factor</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>9. Hourly Delay Cost per Person 3/</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>10. Annual Delay Cost</td>
<td>$6,568,372</td>
<td>$5,153,518</td>
</tr>
<tr>
<td>11. Fuel Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Fuel Idle Consumption Rate (gallons per minute)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Car</td>
<td>0.009</td>
<td>0.009</td>
</tr>
<tr>
<td>14. Truck</td>
<td>0.008</td>
<td>0.008</td>
</tr>
<tr>
<td>15. Fuel Cost per Gallon</td>
<td>$1.5</td>
<td>$1.5</td>
</tr>
<tr>
<td>16. Fuel Cost per Day</td>
<td>$937.28</td>
<td>$732.13</td>
</tr>
<tr>
<td>17. Annual Fuel Cost</td>
<td>$342,108</td>
<td>$267,228</td>
</tr>
<tr>
<td>18. Oil Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Oil Idle Consumption Rate (gallons per minute)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Car</td>
<td>0.0003</td>
<td>0.0003</td>
</tr>
<tr>
<td>21. Truck</td>
<td>0.0002</td>
<td>0.0002</td>
</tr>
<tr>
<td>22. Oil Cost per Gallon</td>
<td>$4.0</td>
<td>$4.0</td>
</tr>
<tr>
<td>23. Oil Cost per Day</td>
<td>$81.35</td>
<td>$63.78</td>
</tr>
<tr>
<td>24. Annual Oil Cost</td>
<td>$29,692</td>
<td>$23,280</td>
</tr>
</tbody>
</table>

**Total**

$6,940,173 | $5,444,026

---

1/ PHB Workpapers
3/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support Tool, Version 1.0
### Comparison of Emissions Costs between Applicants Projected Traffic and FCC's Traffic

<table>
<thead>
<tr>
<th></th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC Emissions</td>
<td>NOX Emissions</td>
</tr>
<tr>
<td>Willow Creek to Pine Junction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>51.63</td>
<td>51.63</td>
</tr>
<tr>
<td>- Truck</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td>$2.05</td>
<td>$3.13</td>
</tr>
<tr>
<td>- Car</td>
<td>$0.92</td>
<td>$0.01</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td>$1,082</td>
<td>$1,147</td>
</tr>
</tbody>
</table>

| Pine Junction to Calumet Park |                   |               |              |
| a. Emission Rates (grams per hr of idling) 1/ |                   |               |              |
| - Car                | 11.988            | 9.162         | 98.556       |
| - Truck              | 83.916            | 0.666         | 2721.834     |
| b. Daily Delay Hours 2/ |                   |               |              |
| - Car                | 876.98            | 876.98        | 876.98       |
| - Truck              | 111.93            | 111.93        | 111.93       |
| c. Emissions Cost per gram 3/ | $0.0033          | $0.0066       | $0.0044      |
| d. Daily Emissions Cost | $34.77           | $53.15        | $381.16      |
| - Car                | $17.44            | $26.65        | $191.15      |
| - Truck              | $15.58            | $0.25         | $673.74      |
| e. Total Annual Emissions Cost | $24,031          | $19,580       | $629,513     |
Comparison of Emissions Costs between Applicants Projected Traffic and FCC’s Traffic

<table>
<thead>
<tr>
<th></th>
<th>Projected Traffic</th>
<th>FCC’s Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC Emissions</td>
<td>NOX Emissions</td>
</tr>
<tr>
<td>Calumet Park to Willow Creek (via IHB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
</tr>
<tr>
<td>b. Daily Delays, Hours 2/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>119.33</td>
<td>119.33</td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$4.73</td>
<td>$7.23</td>
</tr>
<tr>
<td>- Truck</td>
<td>$2.11</td>
<td>$0.03</td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td>$2,499</td>
<td>$2,652</td>
</tr>
</tbody>
</table>

Total Willow Creek to Calumet Park to Willow Creek (via IHB),

- $27,612 $23,379 $704,477
- $20,258 $18,530 $487,481

Sum of all emissions: $755,468 $526,269

1/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support
2/ PHB Workpapers
3/ GradeDec Model - Converted to cost per gram from cost per ton
Comparison of Accident Costs between Applicants Projected Traffic and FCC's Traffic

<table>
<thead>
<tr>
<th>Accidents</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
<th>Cost Per Incident</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willow Creek to Pine Junction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>1.4361</td>
<td>0.8185</td>
<td>$50,000</td>
<td>$71,803</td>
<td>$40,924</td>
</tr>
<tr>
<td>Injury</td>
<td>0.3647</td>
<td>0.2079</td>
<td>$500,000</td>
<td>$182,346</td>
<td>$103,928</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.1519</td>
<td>0.1111</td>
<td>$3,000,000</td>
<td>$584,764</td>
<td>$333,285</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$838,912</td>
</tr>
<tr>
<td>Pine Junction to Calumet Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>1.5505</td>
<td>0.7776</td>
<td>$50,000</td>
<td>$77,525</td>
<td>$38,879</td>
</tr>
<tr>
<td>Injury</td>
<td>0.3490</td>
<td>0.1750</td>
<td>$500,000</td>
<td>$174,523</td>
<td>$87,524</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0717</td>
<td>0.0359</td>
<td>$3,000,000</td>
<td>$215,002</td>
<td>$107,824</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$467,051</td>
</tr>
<tr>
<td>Calumet Park to Willow Creek (via IHB)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.6966</td>
<td>1.7170</td>
<td>$50,000</td>
<td>$34,829</td>
<td>$85,851</td>
</tr>
<tr>
<td>Injury</td>
<td>0.1703</td>
<td>0.4197</td>
<td>$500,000</td>
<td>$85,147</td>
<td>$209,872</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0485</td>
<td>0.1194</td>
<td>$3,000,000</td>
<td>$145,350</td>
<td>$358,275</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$265,323</td>
</tr>
<tr>
<td>Total Willow Creek to Calumet Park to Willow Creek (via IHB)</td>
<td>$1,571,263</td>
<td>$1,366,361</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CALCULATION OF RETURN ON INVESTMENT COSTS

### Willow Creek to Calumet

<table>
<thead>
<tr>
<th>Segment</th>
<th>Source</th>
<th>Applicants' Projected Post-Acquisition</th>
<th>FCC's Alternative Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Willow Creek to Calumet</td>
<td>GLH/RDH-2</td>
<td>$6,565,000</td>
<td>--</td>
</tr>
<tr>
<td>(2) IHB/CR - Michigan Central</td>
<td>L.1 + L. 2</td>
<td>$6,565,000</td>
<td>$1,562,762</td>
</tr>
<tr>
<td>(3) Total</td>
<td>L.3 * .17</td>
<td>$1,116,050</td>
<td>$265,670</td>
</tr>
<tr>
<td>(4) Return on Investment - 17%</td>
<td>L.3 * .17</td>
<td>$1,116,050</td>
<td>$265,670</td>
</tr>
</tbody>
</table>
Calculation of Railroad Operating Cost

Applicants' Projected Post-Acquisition Traffic and Operating Cost

This Exhibit contains Highly Confidential URCS cost material. The text of this exhibit is contained in my Highly Confidential Workpapers at Bates Numbers 1009 - 1010.
### Comparison of Costs for Applicants' Proposal and FCC's Alternative

#### Hobart to Pine Jct (000)

<table>
<thead>
<tr>
<th>Item</th>
<th>Applicants' Proposal</th>
<th>FCC's Alternative</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train Delay Cost</td>
<td>$2,426.2</td>
<td>$469.8</td>
<td>$1,956.4</td>
</tr>
<tr>
<td>Vehicle Fuel Consumption Cost</td>
<td>$128.1</td>
<td>$24.4</td>
<td>$103.7</td>
</tr>
<tr>
<td>Vehicle Oil Consumption Cost</td>
<td>$11.0</td>
<td>$2.1</td>
<td>$8.9</td>
</tr>
<tr>
<td>Vehicle Emissions Cost</td>
<td>$377.6</td>
<td>$49.8</td>
<td>$327.8</td>
</tr>
<tr>
<td>Accident Cost</td>
<td>$27.8</td>
<td>$241.6</td>
<td>($213.8)</td>
</tr>
<tr>
<td>Rail Operating Cost 1/</td>
<td>$1,202.8</td>
<td>$1,378.5</td>
<td>($175.7)</td>
</tr>
<tr>
<td>Rail Capital Investment</td>
<td>$1,192.9 2/</td>
<td>$94.5 3/</td>
<td>$1,098.4</td>
</tr>
<tr>
<td>Net Savings (Cost)</td>
<td></td>
<td></td>
<td>$3,105.7</td>
</tr>
</tbody>
</table>

1/ Exhibit PHB-7

2/ Assumes capital investment to rehabilitate PRR abandoned line and construct connections at Tolleston, Dunes and Wabash equals $7,017,167 with a pre tax return on investment equal to 17 percent.

3/ Assumes capital investment to construct connections at Van Loon and Pine Jct equal $555,866 with a pre tax return on investment equal to 17 percent.
## Comparison of Vehicle Delay Costs between Applicants Projected Traffic and FCC's Traffic

Hobart to Pine Junction

<table>
<thead>
<tr>
<th>Location</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Daily Delay Hours 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car</td>
<td>372.95</td>
<td>75.57</td>
</tr>
<tr>
<td>Truck</td>
<td>67.98</td>
<td>7.81</td>
</tr>
<tr>
<td>Total per day</td>
<td>440.93</td>
<td>83.38</td>
</tr>
<tr>
<td>Total per Year</td>
<td><strong>160,939.5</strong></td>
<td><strong>30,432.4</strong></td>
</tr>
<tr>
<td>Delay Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car Occupancy Factor 2/</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Truck Occupancy Factor</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Hourly Delay Cost per Person 3/</td>
<td>$10</td>
<td>$10</td>
</tr>
<tr>
<td>Annual Delay Cost</td>
<td><strong>$2,426,155</strong></td>
<td><strong>$469,823</strong></td>
</tr>
<tr>
<td>Fuel Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car Idle Consumption Rate (gallons per minute)</td>
<td>0.009</td>
<td>0.009</td>
</tr>
<tr>
<td>Truck</td>
<td>0.008</td>
<td>0.008</td>
</tr>
<tr>
<td>Fuel Cost per Gallon</td>
<td>$1.5</td>
<td>$1.5</td>
</tr>
<tr>
<td>Fuel Cost per Day</td>
<td>$351.04</td>
<td>$66.83</td>
</tr>
<tr>
<td>Annual Fuel Cost</td>
<td><strong>$128,128</strong></td>
<td><strong>$24,394</strong></td>
</tr>
<tr>
<td>Oil Cost 3/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car Idle Consumption Rate (gallons per minute)</td>
<td>0.0003</td>
<td>0.0003</td>
</tr>
<tr>
<td>Truck</td>
<td>0.0002</td>
<td>0.0002</td>
</tr>
<tr>
<td>Oil Cost per Gallon</td>
<td>$4.0</td>
<td>$4.0</td>
</tr>
<tr>
<td>Oil Cost per Day</td>
<td>$30.12</td>
<td>$5.82</td>
</tr>
<tr>
<td>Annual Oil Cost</td>
<td><strong>$10,992</strong></td>
<td><strong>$2,123</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,565,275</strong></td>
<td><strong>$496,339</strong></td>
</tr>
</tbody>
</table>

1/ PHB Workpapers
3/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support Tool, Version 1.0
**Comparison of Emissions Costs between Applicants Projected Traffic and FCC's Traffic**

<table>
<thead>
<tr>
<th></th>
<th>Projected Traffic</th>
<th></th>
<th>FCC's Traffic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC Emis</td>
<td>NOX Emis</td>
<td>CO Emis</td>
<td>HC Emis</td>
</tr>
<tr>
<td>Hobart to Tolleston</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
<td>98.556</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
<td>2721.834</td>
<td></td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>286.04</td>
<td>286.04</td>
<td>286.04</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>44.5</td>
<td>44.5</td>
<td>44.5</td>
<td></td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$0.0033</td>
<td>$0.0066</td>
<td>$0.0044</td>
<td></td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$11.34</td>
<td>$17.34</td>
<td>$124.32</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>$12.35</td>
<td>$0.20</td>
<td>$534.15</td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$8,648</td>
<td>$6,399</td>
<td>$240.341</td>
<td></td>
</tr>
<tr>
<td>Tolleston to Clarke Jct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
<td>98.556</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
<td>2721.834</td>
<td></td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>86.91</td>
<td>86.91</td>
<td>86.91</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>23.48</td>
<td>23.48</td>
<td>23.48</td>
<td></td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$0.0033</td>
<td>$0.0066</td>
<td>$0.0044</td>
<td></td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>$3.45</td>
<td>$5.27</td>
<td>$37.77</td>
<td></td>
</tr>
<tr>
<td>- Truck</td>
<td>$6.52</td>
<td>$0.10</td>
<td>$261.84</td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$3,636</td>
<td>$1,960</td>
<td>$116,658</td>
<td></td>
</tr>
<tr>
<td>Hobart to Clarke Jct.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$12,284</td>
<td>$8,360</td>
<td>$356,999</td>
<td>$0</td>
</tr>
<tr>
<td>Sum of all emissions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$377,643</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comparison of Emissions Costs Between Applicants Projected Traffic and FCC's Traffic

<table>
<thead>
<tr>
<th></th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC Emissions</td>
<td>NOX Emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hobart - Van Loon - Pine Jct. (via NS/EJE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Emission Rates (grams per hr of idling) 1/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Car</td>
<td>11.988</td>
<td>9.162</td>
</tr>
<tr>
<td>- Truck</td>
<td>83.916</td>
<td>0.666</td>
</tr>
<tr>
<td>b. Daily Delay Hours 2/</td>
<td>75.57</td>
<td>75.57</td>
</tr>
<tr>
<td>- Car</td>
<td>7.81</td>
<td>7.81</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Emissions Cost per gram 3/</td>
<td>$0.0033</td>
<td>$0.0066</td>
</tr>
<tr>
<td>d. Daily Emissions Cost</td>
<td>$3.00</td>
<td>$4.58</td>
</tr>
<tr>
<td>- Car</td>
<td>$2.17</td>
<td>$0.03</td>
</tr>
<tr>
<td>- Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Total Annual Emissions Cost</td>
<td>$1,885</td>
<td>$1,684</td>
</tr>
</tbody>
</table>

Total Hobart - Van Loon - Pine Jct. | $0 | $0 | $0 | $1,885 | $1,684 | $46,190 |

Grand Total | $12,284 | $8,360 | $356,999 | $1,885 | $1,684 | $46,190 |

Sum of all emissions | $377,643 | $49,759 |

1/ GradeDec Model - Highway-Rail Grade Crossing Investment Decision Support
2/ PHB Workpapers
3/ GradeDec Model - Converted to cost per gram from cost per ton
### Comparison of Accident Costs between Applicants Projected Traffic and FCC's Traffic

<table>
<thead>
<tr>
<th>Accidents</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
<th>Cost Per Incident</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobart to Tolleston</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.0412</td>
<td>0.00108</td>
<td>$50,000</td>
<td>$2,060</td>
<td>$0</td>
</tr>
<tr>
<td>Injury</td>
<td>0.0108</td>
<td>0.0153</td>
<td>$500,000</td>
<td>$5,400</td>
<td>$0</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0019</td>
<td>0.0012</td>
<td>$3,000,000</td>
<td>$5,700</td>
<td>$0</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$13,160</td>
<td>$0</td>
</tr>
</tbody>
</table>

| Tolleston to Clarke Junction |                   |               |                   |                   |               |
| Property Damage           | 0.0670            | 0.0012        | $50,000           | $3,350            | $0            |
| Injury                    | 0.0153            | 0.0012        | $500,000          | $7,650            | $0            |
| Fatality                  | 0.0012            | 0.0012        | $3,000,000        | $3,600            | $0            |
| Subtotal                  |                   |               |                   | $14,600           | $0            |

**Total Hobart - Clarke Jct.**

$27,760

$0
Comparison of Accident Costs between Applicants Projected Traffic and FCC's Traffic

<table>
<thead>
<tr>
<th>Accidents</th>
<th>Projected Traffic 1/</th>
<th>FCC's Traffic</th>
<th>Cost Per Incident</th>
<th>Projected Traffic</th>
<th>FCC's Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobart - Van Loon - Pine Jct. (via NS/EJE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Damage</td>
<td>0.0000</td>
<td>0.5966</td>
<td>$50,000</td>
<td>$0</td>
<td>$29,828</td>
</tr>
<tr>
<td>Injury</td>
<td>0.0000</td>
<td>0.1506</td>
<td>$500,000</td>
<td>$0</td>
<td>$75,292</td>
</tr>
<tr>
<td>Fatality</td>
<td>0.0000</td>
<td>0.0455</td>
<td>$3,000,000</td>
<td>$0</td>
<td>$136,472</td>
</tr>
<tr>
<td>Total</td>
<td>$0</td>
<td></td>
<td>$241,592</td>
<td>$0</td>
<td>$241,592</td>
</tr>
</tbody>
</table>

1/ Incidents for projected traffic equals current traffic increased by the change in the number of trains for each line segment.
### CALCULATION OF RETURN ON INVESTMENT COSTS

**Hobart to Clarke Jct.**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Source</th>
<th>Applicants' Projected Post-Acquisition</th>
<th>FCC's Alternative Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hobart to Clarke Jct</td>
<td>GLH/RDH-3</td>
<td>$6,817,167</td>
<td>--</td>
</tr>
<tr>
<td>2. Van Loon Connection</td>
<td>GLH/RDH-6</td>
<td>$277,933</td>
<td>$277,933</td>
</tr>
<tr>
<td>3. Lakefron Connection</td>
<td>GLH/RDH-5</td>
<td>$277,933</td>
<td>$277,933</td>
</tr>
<tr>
<td>4. Wabash Connection</td>
<td>GLH/RDH-3</td>
<td>$200,000</td>
<td></td>
</tr>
<tr>
<td>5. Total</td>
<td>sum L.1-L.4</td>
<td>$7,017,167</td>
<td>$555,866</td>
</tr>
<tr>
<td>6. Return on Investment - 17%</td>
<td>L.5 * .17</td>
<td>$1,192,918</td>
<td>$94,497</td>
</tr>
</tbody>
</table>
VERIFICATION

COMMONWEALTH OF VIRGINIA

CITY OF ALEXANDRIA

PHILIP H. BURRIS, being duly sworn, deposes and says that he has read the foregoing statement, knows the contents thereof and that the same are true as stated.

________________________
Philip H. Burris

Sworn to and subscribed before me this 20 day of October, 1997.

Witness my hand and official seal.

________________________
James M. Seiler

12/31/98
BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.,
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
--CONTROL AND OPERATING LEASES/AGREEMENTS--
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

Verified Statement
of
Gary M. Andrew
Senior Consultant
L. E. Peabody & Associates, Inc.

On Behalf of
Four-City Consortium

Due Date: October 21, 1997
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>A. Qualifications</td>
<td>1</td>
</tr>
<tr>
<td>B. Engagement</td>
<td>1</td>
</tr>
<tr>
<td>II. SUMMARY OF FINDINGS</td>
<td>3</td>
</tr>
<tr>
<td>III. SAMPLE DESIGN</td>
<td>4</td>
</tr>
<tr>
<td>A. Objectives</td>
<td>4</td>
</tr>
<tr>
<td>B. Characteristics To Be Observed And/Or Estimated</td>
<td>5</td>
</tr>
<tr>
<td>C. Sample Size and Schedule</td>
<td>7</td>
</tr>
<tr>
<td>D. Data Collection Forms and Instructions</td>
<td>9</td>
</tr>
<tr>
<td>IV. DATA COLLECTION AND ANALYSIS</td>
<td>10</td>
</tr>
<tr>
<td>A. Data Collection</td>
<td>10</td>
</tr>
<tr>
<td>B. Analysis of Data</td>
<td>10</td>
</tr>
<tr>
<td>V. MODEL SELECTION AND CALIBRATION</td>
<td>12</td>
</tr>
<tr>
<td>A. Model Selection</td>
<td>12</td>
</tr>
<tr>
<td>B. Model Calibration</td>
<td>13</td>
</tr>
<tr>
<td>C. &quot;Around The Gate&quot; Phenomenon</td>
<td>13</td>
</tr>
<tr>
<td>VI. ESTIMATION OF TRAFFIC DELAY HOURS</td>
<td>15</td>
</tr>
</tbody>
</table>
# LIST OF EXHIBITS

<table>
<thead>
<tr>
<th>EXHIBIT NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) GMA-1</td>
<td>Qualifications of Witness</td>
</tr>
<tr>
<td></td>
<td>GMA-2 Assignment of Observers</td>
</tr>
<tr>
<td></td>
<td>GMA-3 Train Sheet</td>
</tr>
<tr>
<td></td>
<td>GMA-4 Instructions to Observers</td>
</tr>
<tr>
<td></td>
<td>GMA-5 Summary Results of Train Delay Study</td>
</tr>
<tr>
<td></td>
<td>GMA-6 Traffic Delay Model</td>
</tr>
<tr>
<td></td>
<td>GMA-7 Model Calibration</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

A. QUALIFICATIONS

My name is Gary Martin Andrew. I am Senior Consultant with the economic consulting firm of L.E. Peabody and Associates, Inc. located at 1501 Duke Street, Suite 200, Alexandria, Virginia 22314. Exhibit GMA-1 contains my resume and qualifications.

B. ENGAGEMENT

I was requested by the Four City Consortium ("FCC") to design a statistically valid sampling study for determining the vehicular delay time resulting from existing rail operations over designated lines in the Four Cities region that will be affected by the proposed CSX/NS acquisition of Conrail ("Applicants' Proposal") and for predicting the vehicular delay time that would result from the Applicants' proposed post acquisition routing of rail traffic over such lines. The purpose of the sample was to provide data sufficient to verify the validity of data received from other sources and to calibrate the mathematical model used to estimate the traffic delays for current conditions. It was also my responsibility to apply the mathematical model to estimate traffic delays that would occur given the traffic volumes and operating plan set forth in the Applicants' Proposal and an Alternative Routing Plan proposed by the FCC. The Alternative Routing Plan was developed to move the same aggregate traffic as the Applicants' Proposal in a manner that would minimize adverse incremental impacts on the Four Cities.

I have performed or personally supervised the tasks necessary to complete this assignment in a professional manner consistent with accepted statistical methods and my more than thirty-five (35) years of experience in teaching, research, and application of statistical analysis in a variety of transportation matters, including queuing theory.
The results of the study are summarized, and the details of each component of the analysis are discussed below, under the following headings:

II. Summary of Findings

III. Sample Design

IV. Data Collection and Analysis

V. Model Selection and Calibration

VI. Estimation of Traffic Delay Hours
II. SUMMARY OF FINDINGS

The vehicle delay study consisted of three parts: 1) an on-site sampling study of rail and vehicular traffic at twelve (12) at-grade crossings with currently active CSX or CSX and Conrail lines; 2) Selection of a method ("model") to use for estimating the vehicle delay hours at any intersection and the calibration of the resulting model using the sample results; and, 3) application of the model to calculate total vehicle hours delayed by the current conditions in the Four City area, by the Applicants’ Proposal and by the Alternative Routing Plan.

I designed the traffic sample, and the data was collected by observers familiar with the Four City area during the week beginning Sunday evening, September 28, 1997, and ending Sunday afternoon, October 5, 1997. The observers collected data that enabled me to estimate the characteristics of train and vehicular traffic shown in the columns of Exhibit GMA-5.

The model that I chose to estimate the vehicular delay hours per day at an at-grade crossing under conditions differing from the sampled crossings used the following train and vehicular characteristics: average daily vehicular traffic; number of rail cars and locomotives per train; train speed limit; average train speed; number of highway lanes at the crossing; and an unknown vehicular traffic flow rate. The unknown flow rate was determined by comparing the total vehicular delay hours computed using the model at the 12 sampled crossings with the total vehicular delay hours estimated from the observations at these same 12 sampled crossings. The unknown flow factor was estimated to be 1.39 and this enabled me to use the model to estimate
the vehicular delay at any at-grade crossing given the above list of characteristics of the crossing.

I then applied the model to the list of involved at-grade crossings using the required characteristics of each crossing provided to me by Mr. Philip Burris. The resulting total vehicular delay hours for the at-grade crossings involved in the movement of current traffic are shown in column (2) of Table 1 below. The total vehicle delay hours for the at-grade crossings of rail lines involved in the Applicants' Proposal are shown in column (3) of Table 2. Finally, the total vehicle delay hours for at-grade crossings involved in the Alternative Routing Plan are shown in column (4) of Table 2. I provided these results to Mr. Burris for his use in evaluating the economic impacts of the three scenarios.
Table 1
Vehicle Delay Hours\(^{1}\) (Per day)

<table>
<thead>
<tr>
<th>Route/Segment(^{2})</th>
<th>Current (2)</th>
<th>Applicants' Proposal (3)</th>
<th>Alternative Routing Plan (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Willow Creek to Calumet Park</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Willow Creek to Pine Junction</td>
<td>24.5</td>
<td>54.9</td>
<td>31.3</td>
</tr>
<tr>
<td>b. Pine Junction to Calumet Park</td>
<td>516.9</td>
<td>988.9</td>
<td>495.9</td>
</tr>
<tr>
<td>c. Calumet Park to Willow Creek (via IHB)</td>
<td>122.5</td>
<td>127.0</td>
<td>385.6</td>
</tr>
<tr>
<td>d. Total</td>
<td>663.9</td>
<td>1170.8</td>
<td>912.8</td>
</tr>
<tr>
<td><strong>2. Hobart to Clarke Jct.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Hobart to Tolleston</td>
<td>N/A</td>
<td>332.6</td>
<td>N/A</td>
</tr>
<tr>
<td>b. Tolleston to Clarke Jct.</td>
<td>N/A</td>
<td>110.4</td>
<td>N/A</td>
</tr>
<tr>
<td>c. Total</td>
<td>N/A</td>
<td>443.0</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>3. Hobart - Van Loon - Pine Jct. (via NS/EJE)</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>83.4</td>
</tr>
<tr>
<td><strong>4. Grand Total</strong></td>
<td><strong>663.9</strong></td>
<td><strong>1613.8</strong></td>
<td><strong>996.2</strong></td>
</tr>
</tbody>
</table>

\(^{1}\) The train speed limits and average daily vehicular traffic used to compute this Table were obtained from the Federal Rail Administration.

\(^{2}\) The at-grade crossings involved in each of these scenarios were identified by Mr. Philip Burris.
III. SAMPLE DESIGN

The sequence of steps in the design of the sampling study began with the development of the set of objectives for the study and determining how the results of the study would be used. The next steps were the decisions on times, places, and sample size (number of observations) required and the schedule for the observers that would maximize the observation time. The final design phase was the preparation of the data collection forms and written instructions to observers.

A. OBJECTIVES

The overall objective of the traffic study was to provide the data sufficient to calibrate the mathematical model to be used to estimate the various impacts that will be caused by changes in rail traffic volumes and routings under the operating plans as set forth in the Applicants' Proposal. The primary impacts to be measured are the costs due to: 1) increased accidents due to increased rail traffic and resulting property damage, personal injury and death; 2) lost personal productive time; 3) wasted fuel; and, 4) emissions added to the atmosphere. The quantity required in all of these impact estimates is vehicle delay time. Estimation and modelling of vehicle delay time require data on each of the following:

- Vehicular traffic volumes;
- Number of trains;
- Length of trains;
- Train Speeds;
• Gate down times;
• Queue lengths;
• Queue clearing times; and,
• Lanes of traffic.

The objectives were to obtain information on each of these characteristics, in a one-week sampling period with a sufficient number of crossing observations. An additional requirement that I placed on the design was to prepare a sample that would produce estimates by time of day and day of week. Such observations would enable estimation of the time dependence of the variables being observed. The sample was designed to provide reliable estimates of aggregate averages of the characteristics discussed above. Finally, the observations were sequenced in a manner such that failure of one observer to understand or execute the instructions would not seriously damage the results.

B. CHARACTERISTICS TO BE OBSERVED AND/OR ESTIMATED

Vehicular traffic volume is the average number of vehicles (autos, trucks, and buses) that traverse an at-grade crossing in a day. This is referred to as Average Daily Traffic ("ADT") for a given segment of a roadway (highway or street). This value is available for most roadways in the area. The sample study estimated this statistic based upon counts of autos, trucks, and buses that traversed an observed at grade crossing during each observation period.

Number of trains is the number of trains per day that traversed the intersection under study. A train may consist of anything from a single power unit (locomotive) to 200 or more cars being
pulled by three (3) or more power units. The sample study estimated this statistic based upon counts of trains that traversed an observed at-grade crossing during an observation period.

Length of a train is the straight line distance from the forward knuckle of the lead locomotive to the trailing (rear) knuckle of the trailing car (or locomotive) expressed in feet. The sample study estimated this statistic by counting the number of locomotives and the number of railroad cars that were on a train that traversed an observed at grade crossing. The estimated train length is then computed as:

\[
\text{Train Length} = (\text{cars} \times 60\text{ feet/car}) + (\text{locomotives} \times 90\text{ feet/locomotives})
\]

Train speeds are computed\textsuperscript{1} from observed data on cars, locomotives, width of intersection, and Train Blocked Time. These are implicit in the model in Exhibit GMA-6.

Gate Down Time is the length of time the crossing gate arm is down or, in the case of flashers only, the length of time between when the flashers start and when the flashers stop. In the sample this time is recorded by the observer.

Queue length is the number of vehicles that are delayed by a train. These were counted by the observer at each train event.

\textsuperscript{1} Radar computed speeds were available for six (6) Conrail through trains on the "Lake front corridor" in Whiting observed on September 10, 1997. These speeds ranged from 32 to 38 mph; averaged 34.33 mph; and were in the range of speeds computed on similar trains in this area using the sample.
Queue Clearing Time is the amount of time required before the traffic flow returned to "normal", where "normal" is defined as vehicle flow rate approximating the flow rate prior to the train's arrival. In the sample, the queue clearing times were measured by the observers.

Lanes of Traffic are the number of lanes of vehicular traffic in both directions, that can simultaneously traverse the railroad crossing when no trains are present and the gates are up.

C. SAMPLE SIZE AND SCHEDULE

The sample unit was the at-grade intersection of the railroad mainline with a street carrying vehicular traffic. The universe of interest contains all of the at-grade street crossings on the rail lines that are of principal concern to the Four Cities and used in current operations and/or will be used in either the Applicants' Proposal or The FCC Alternative Routing Plan. The intersections were selected such that: 1) the current routes of the involved operating railroads were included; 2) the streets with the larger traffic flows had a larger chance of being used; 3) consecutive streets were not selected; and, 4) within these parameters, streets that the city officials expressed concern about were generally chosen. Column (1) of Exhibit GMA-5 contains the twelve street crossings that were selected for observation.

The observations of the twelve selected intersections were taken over seven consecutive days. The seven day week was broken into the following six time blocks with observers as noted:
Block 1 6:00 - 9:00 hrs  Monday through Friday  Observers: 3
Block 2 9:00 - 12:00 hrs  Monday through Friday  Observers: 3
Block 3 12:00 - 15:00 hrs  Monday through Friday  Observers: 3
Block 4 15:00 - 18:00 hrs  Monday through Friday  Observers: 3
Block 5 18:00 - 6:00 hrs  Monday through Sunday  Observers: 1
Block 6 6:00 - 18:00 hrs  Saturday and Sunday  Observers: 2

Blocks 1 and 4 were broken into two observation periods, each period containing one and one-half hours. All other blocks were broken into one hour observation periods.

The assignments of observers to intersections for a given time period were made to comply as nearly as possible with the following guidelines:

- Every intersection should be observed at least two periods per week day during 6:00 hrs to 18:00 hrs;
- Each time period should be observed an equal number of times;
- No given observers should observe a disproportionate amount of time at one location; and.
- The next observation assignment should be near the current assignment.

Exhibit GMA-2 contains the assignments of the locations and times for each observer.

---

2/ This reduced the time lost due to travelling to the next observation during rush hours.
D. DATA COLLECTION

FORMS AND INSTRUCTIONS

Exhibit GMA-3 contains the data collection form ("Train Sheet") that was designed to be used by each observer for every observation period. A new page of this form was used for each train that was observed during the period. Exhibit GMA-4 contains the set of instructions that was given to each observer.
IV. DATA COLLECTION AND ANALYSIS

A. DATA COLLECTION

The management of the data collection and provision of personnel for observers was done by Cole Associates, Inc., a civil engineering company in Hammond, Indiana. Mr. Gregg L. Heinzman, a professional engineer with Cole Associates, was very familiar with the geographic area under study, managed the observers, provided the observers with detailed instructions and advice, and provided on-site quality control. Mr. Heinzman and I were in frequent telephone contact before and during the observation week to insure the quality of the data collected.

Mr. Heinzman assembled the train sheets and checked them for errors. If he had any questions regarding a train sheet, he contacted the involved observer and clarified the record. As a result of Mr. Heinzman’s efforts and the use of professional personnel as observers, all train charts were usable and no observation periods were lost. He then forwarded the completed train sheets to our offices for data entry.

B. ANALYSIS OF DATA

Exhibit GMA-5 summarizes the results of 162.5 hours of observations from 18:00 hrs Sunday evening, September 28, 1997, through 18:00 hrs Sunday evening, October 5, 1997. Columbia Street was the only intersection that appeared to deviate significantly from other data sources that were available. Upon investigation it was determined that Columbia Street was

---

^ Expansion factors used to estimate total activity from the sample observation were the ratio of the total hours in a time period in the week to the observed hours for the time period. All formula, sample data and intermediate results are shown in the worksheet BLOCDATA.XLS in my workpapers.
undergoing construction during much of the observation week. This created no problem for the calibration of the model and there were other sources of Average Daily Traffic for the Columbia Street crossing under normal conditions. Therefore, this anomaly did not impact the study or the use of the results. The only unexpected finding was the large number of vehicles that crossed the railroad after the gates were down by going around the gates. This will be discussed below.
V. MODEL SELECTION AND CALIBRATION

The evaluation of alternative railroad traffic volumes and operating plans requires a model for estimating vehicular delay time that can accommodate changes in train length, train speeds and the number of trains per day in addition to the average vehicles per day (arrival rate) and the number of lanes. Once the model was selected it had to be adjusted (calibrated) to achieve confidence that the model correctly estimates what we actually observed in the sample week.

A. MODEL SELECTION

After examining various alternatives, the total delay equation for restricted traffic flow was chosen. This model was developed to evaluate the total hours of vehicle delay that would result from an event which caused a restricted traffic flow for a fixed length of time such as road construction, accidents or a train blocking an at-grade crossing. The model is shown in detail in Exhibit GMA-6.

The assumptions in the model are that both the arrival of traffic and the queue clearing rates (time for cars to clear the tracks after the gates go up) are uniform and independent throughout the time period under consideration. In actual practice, the sample data shows that these conditions are not met because of variation in traffic volume in the day such as rush hour, and from day to day such as Friday versus Sunday. However, this fact does not adversely affect the

---

4 These included simulation models and models that accommodated different rail and vehicular traffic flow rates during the major time segments of the day and week.

5 Adolf D. May, Traffic Flow Fundamentals, Prentice Hall 1990, page 340ff (Specifically Table 12.1 at 348).
performance of the model because the sample observations also provided data that were used to calibrate the model to compensate for the non-uniform arrival rate.

B. MODEL CALIBRATION

The model was calibrated and the flow rate computed using the following procedure. First, the sampled crossings were divided into groups that were homogeneous with respect to the railroad operating characteristics at the crossing. These characteristics were: speed limit; average speed; and number of railroads. Exhibit_GMA-7 shows the four groups that resulted.

The second step was to compute the parameters needed by the model for each of these groups. The required parameters are: the average number of cars per train; the average number of locomotives per train; and the average speed of trains in the group. These parameters, along with the speed limit and average daily traffic at each intersection, are used in the model to estimate the total daily vehicle delay hours for each of the sampled streets. (Note: Each of these estimates remains to be adjusted by the flow rate.) The total of the computed daily vehicle delay hours for all the sample streets is shown in line column (11) of Exhibit_GMA-7. The delay hours estimated from the observations at each intersection are totaled for all 12 intersections and are shown in column (8) of Exhibit_GMA-7. The ratio of the total daily vehicle delay hours estimated from the observations to the total daily vehicle delay hours produced by the model is a ratio estimate of the combination of the flow rate and the effect of non-uniformity of vehicle arrivals throughout the 24 hour period.
The resulting adjustment is 1.39 and is shown at the bottom of Exhibit_GMA-7. Finally, when the model is used to compute the total vehicle delay times for current routing and traffic and for future traffic with two alternative Routing Plans, each estimate must be multiplied by the flow rate (1.39).

C. "AROUND THE GATE" PHENOMENON

In the test run of the questionnaire and instructions the question was asked, "How should we report the vehicles that go around a down gate before the train arrives?" We decided to record these vehicles separately and not count them as delayed. However, these vehicles should be delayed, and the drivers take great risks of death or bodily injury to themselves and their passengers by these actions.

In many areas of the United States a barrier is placed in the center of the street between the traffic lanes ("Jersey barrier") that prevents drivers from going around a gate. If Jersey barriers were in place in the Four Cities the delay times would be longer. For example, the per day delay for the eight crossings observed, Hohman to US-12, went from 460 hours to 483 hours when the vehicles that went around the gates were included in the count of cars that were delayed. The effect of this would increase the calibration number from 1.39 to 1.47.

I chose not to include the vehicles that went around the gates in the count of vehicles delayed because the costs of this behavior should ultimately be reflected in the cost of death, injury and property damage.
VI. ESTIMATION OF TRAFFIC DELAY HOURS

The traffic delay model was applied to all of the at grade street/railroad intersections for the designated rail segments involved in any of the following scenarios:

- Current Conditions
- Applicants' Proposal
- FCC's Alternate Routing Plan

The results of this application are summarized in Table 1 above and used to evaluate economic impacts by Mr. Philip Burris. The detailed calculations are contained in Mr. Burris' workpapers. I managed and personally checked the portion of these worksheets that estimated the hours of traffic delay.
PROFESSIONAL EXPERIENCE:

L. E. Peabody & Associates, Inc. (since 1967) -- Dr. Andrew has more than thirty-five (35) years of professional experience associated with transportation. Dr. Andrew has worked with L. E. Peabody & Associates, Inc., as a consultant on a variety of transportation related projects since 1967. In 1988, he joined the staff of L. E. Peabody & Associates, Inc., as a Senior Consultant. Dr. Andrew's studies have resulted in testimony as an expert witness before the Interstate Commerce Commission and other Federal Commissions.

In Docket No. R90-1, Postal Rate And Fee Changes, 1990, Dr. Andrew critiqued and restated the direct testimony of the United States Postal Service as it related to the development of the proposed rate structure on behalf of third class business mailers.

Previous Related Experience -- Beginning in 1956, Dr. Andrew was involved in the interstate highway program as a construction field office manager. In 1961, he did research that resulted in the first successful computer simulation of a railroad. As a consultant in statistical and operations analyses he has served numerous railroads and airlines. His work has included cost analysis, productivity improvements and strategic planning. He has prepared testimony as an expert witness in the matters of mergers, acquisitions, rates and abandonments in transportation.

From 1962 to 1964, Dr. Andrew taught in the Management Science Department at Case Institute of Technology and, from 1964 to 1971, in the Graduate College of Business Administration at the University of Minnesota. He also held a joint appointment in the Department of Mathematical Statistics; presented many in-house training programs for various companies and organizations; and, conducted research in operations research and computer science. Dr. Andrew was one of the organizers of the Management Information Systems Research Center at the University of Minnesota.

Dr. Andrew was Director of Planning and Analysis from 1971 to 1974 and Vice Chancellor for Administration at the University of Colorado at Boulder from 1974 to 1978. During this time he served on committees to the Governor of Colorado, conducted studies for the legislatures of both Colorado and Minnesota and continued his work in transportation with the Department of Transportation of Boulder, Colorado and several merger and acquisition traffic diversion studies for railroads. In 1978, he started Infomap, Inc., a statistical mapping service bureau and software company which he sold to Rand McNally & Company in 1983. From 1983 to 1986, he worked for Rand McNally on new product developments in transportation.
EDUCATION:

1961  DePauw University          A.B. Mathematics
1961  Case Institute of Technology  B.S. Management Science
1966  Case Institute of Technology  Ph.D. Operations Research

CONSULTING:

Partial Client List:  Adolph Coors Company
                      AT&T
                      Campbell Methun Advertising
                      Canadian National Railroad
                      Colorado Legislative Joint Budget Committee
                      Control Data Corporation
                      Data Processing Managers Association
                      Grand Trunk Western Railroad
                      Hammond Map Company
                      H.R. Toll Company
                      Investors Diversified Services
                      L.E. Peabody & Associates, Inc.
                      Louisville and Nashville Railroad
                      Minnesota Northfield and Southern Railroad
                      Minnesota State Legislature
                      Nash-Finch Foods
                      National Center for Atmospheric Research
                      North Central Airlines
                      Northwestern National Life Insurance
                      Numerous colleges and universities
                      Paper Calmenson Steel Company
                      Rand McNally & Company
                      Soo Line Railroad
                      Thompson Ramo Wooldridge
                      United Airlines

Developed and presented in house training programs for several businesses and professional groups: 1964-1971.

Mergers and Acquisitions: Milwaukee/Chicago North Western I.C.C.F.D. 24182
                           Louisville and Nashville Monon I.C.C.F.D. 25309
                           Illinois Central/Gulf Mobile and Ohio I.C.C.F.D. 255103
                           Chicago North Western/Rock Island I.C.C.F.D. 22688
                           Grand Trunk/Detroit Toledo and Ironton
                           C&O/Seaboard Coast Line

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
CONSULTING (Continued)

Rates:
- Wheat - North Dakota and Minnesota (Soo Line)
- Barley - North Dakota and Minnesota (Soo Line)
- Woodpulp - Southeastern U.S. Shippers
- Passenger - AMTRAK
- Transcontinental Divisions Case (Soo Line)

Operations Analysis:
- Car Ferry Operations - Soo Line
- Scheduling Studies - Louisville and Nashville

Abandonment Studies:
- Car Ferry - Soo Line
- Car Ferry - Grand Trunk
- Greenville Sub - Grand Trunk

SCHOLARSHIPS AND HONORS

- Nicolas Andry Award for outstanding contribution to Orthopedic Surgery.
- Thompson Ramo Wooldridge Scholarship
- Texaco Fellowship.
- Carlton Prize in Economics at Case Institute of Technology.
- High Honors, Case Institute of Technology.
- Tau Beta Pi.
- Sigma Xi.

PROFESSIONAL SOCIETIES

American Statistical Association; Operations Research Society of America; the Institute of Management Science (past President and Program Chairman of Upper Midwest Section)

PUBLICATIONS (Partial List)

Statistical Laboratory, Case Institute of Technology, November 1961
(with Leone, et. al.).


"A Note on the Use of Statistics in Rate Determination," Journal of Risk Insurance 1968. (Received award as one of four best articles published in this Journal in 1968.

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
"Use of Decision Theory in Treatment Selection," (with Dr. Wilton Bunch), Clinical Orthopedics and Related Research, October 1971. (This paper received the Nicolas Andry Award for outstanding research related to orthopedics.)

"Matching Faculty to Courses," College and University, Winter 1971.


"A Proposed Change in Pediatric Hospital Beds in Suburban Cook County-DuPage County," Loyola University Medical Center, 1979.

FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Key to the Schedule of Observations:

<table>
<thead>
<tr>
<th>Key (1)</th>
<th>Street Name (2)</th>
<th>Railroad(s) (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Hohman</td>
<td>/CSX</td>
</tr>
<tr>
<td>B</td>
<td>Calumet</td>
<td>/CSX</td>
</tr>
<tr>
<td>C</td>
<td>Columbia</td>
<td>/CSX</td>
</tr>
<tr>
<td>D</td>
<td>Indianapolis</td>
<td>/CSX</td>
</tr>
<tr>
<td>E</td>
<td>Railroad Ave</td>
<td>/CSX</td>
</tr>
<tr>
<td>F</td>
<td>Kennedy/CSX</td>
<td>/CSX</td>
</tr>
<tr>
<td>G</td>
<td>Euclid</td>
<td>/CSX</td>
</tr>
<tr>
<td>H</td>
<td>US 12</td>
<td>/CSX</td>
</tr>
<tr>
<td>I</td>
<td>Clark</td>
<td>/CSX &amp; /Conrail</td>
</tr>
<tr>
<td>J</td>
<td>Lake</td>
<td>/CSX</td>
</tr>
<tr>
<td>K</td>
<td>County Line</td>
<td>/CSX</td>
</tr>
<tr>
<td>L</td>
<td>Whiting</td>
<td>/CSX &amp; /Conrail</td>
</tr>
</tbody>
</table>

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
## OBSERVATION SCHEDULE

<table>
<thead>
<tr>
<th>TEAM</th>
<th>M_ALPHA</th>
<th>M_BETA</th>
<th>M_GAMMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 7:30</td>
<td>L</td>
<td>K</td>
<td>D</td>
</tr>
<tr>
<td>7:30 - 9</td>
<td>A</td>
<td>J</td>
<td>E</td>
</tr>
<tr>
<td>9 - 10</td>
<td>B</td>
<td>I</td>
<td>F</td>
</tr>
<tr>
<td>10-11</td>
<td>C</td>
<td>H</td>
<td>G</td>
</tr>
<tr>
<td>11-12</td>
<td>D</td>
<td>T[</td>
<td>H</td>
</tr>
<tr>
<td>12-13</td>
<td>T[</td>
<td>L</td>
<td>I</td>
</tr>
<tr>
<td>13-14</td>
<td>E</td>
<td>L</td>
<td>T[</td>
</tr>
<tr>
<td>14-15</td>
<td>F</td>
<td>A</td>
<td>J</td>
</tr>
<tr>
<td>15 - 16:30</td>
<td>G</td>
<td>B</td>
<td>K</td>
</tr>
<tr>
<td>16:30 - 18</td>
<td>H</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

T[ = TRAVEL  
X = OFFDUTY
## OBSERVATION SCHEDULE

<table>
<thead>
<tr>
<th>DAY</th>
<th>TUESDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEAM</td>
<td>T_ALPHA</td>
</tr>
<tr>
<td>TIME</td>
<td></td>
</tr>
<tr>
<td>6 - 7:30</td>
<td>A</td>
</tr>
<tr>
<td>7:30 - 9</td>
<td>B</td>
</tr>
<tr>
<td>9 - 10</td>
<td>C</td>
</tr>
<tr>
<td>10-11</td>
<td>D</td>
</tr>
<tr>
<td>11-12</td>
<td>T[</td>
</tr>
<tr>
<td>12-13</td>
<td>E</td>
</tr>
<tr>
<td>13-14</td>
<td>F</td>
</tr>
<tr>
<td>14-15</td>
<td>G</td>
</tr>
<tr>
<td>15 - 16:30</td>
<td>H</td>
</tr>
<tr>
<td>16:30 - 18</td>
<td>I</td>
</tr>
</tbody>
</table>

T[ = TRAVEL
X = OFFDUTY
## OBSERVATION SCHEDULE

<table>
<thead>
<tr>
<th>TEAM</th>
<th>W_ALPHA</th>
<th>W_BETA</th>
<th>W_GAMMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>X</td>
<td>B</td>
<td>X</td>
</tr>
<tr>
<td>6 - 7:30</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30 - 9</td>
<td>X</td>
<td>C</td>
<td>K</td>
</tr>
<tr>
<td>9 - 10</td>
<td>A</td>
<td>D</td>
<td>J</td>
</tr>
<tr>
<td>10-11</td>
<td>B</td>
<td>E</td>
<td>I</td>
</tr>
<tr>
<td>11-12</td>
<td>C</td>
<td>F</td>
<td>T[</td>
</tr>
<tr>
<td>12-13</td>
<td>D</td>
<td>T[</td>
<td>G</td>
</tr>
<tr>
<td>13-14</td>
<td>T[</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>14-15</td>
<td>E</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>15 - 16:30</td>
<td>F</td>
<td>A</td>
<td>I</td>
</tr>
<tr>
<td>16:30 - 18</td>
<td>G</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

T[ = TRAVEL
X = OFFDUTY
## Observation Schedule

**Day: Thursday**

<table>
<thead>
<tr>
<th>Time</th>
<th>TH_ALPHA</th>
<th>TH_BETA</th>
<th>TH_GAMMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 - 7:30</td>
<td>E</td>
<td>X</td>
<td>I</td>
</tr>
<tr>
<td>7:30 - 9</td>
<td>F</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>9 - 10</td>
<td>G</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>10-11</td>
<td>T</td>
<td>A</td>
<td>G</td>
</tr>
<tr>
<td>11-12</td>
<td>I</td>
<td>B</td>
<td>E</td>
</tr>
<tr>
<td>12-13</td>
<td>J</td>
<td>C</td>
<td>F</td>
</tr>
<tr>
<td>13-14</td>
<td>K</td>
<td>C</td>
<td>G</td>
</tr>
<tr>
<td>14-15</td>
<td>K</td>
<td>D</td>
<td>T</td>
</tr>
<tr>
<td>15 - 16:30</td>
<td>K</td>
<td>E</td>
<td>L</td>
</tr>
<tr>
<td>16:30 - 18</td>
<td>J</td>
<td>F</td>
<td>L</td>
</tr>
</tbody>
</table>

T[ = Travel  
X = Off-duty
# Observation Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>F_Alpha</th>
<th>F_Beta</th>
<th>F_Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 - 7:30</td>
<td>F</td>
<td>J</td>
<td>G</td>
</tr>
<tr>
<td>7:30 - 9</td>
<td>E</td>
<td>T</td>
<td>G</td>
</tr>
<tr>
<td>9 - 10</td>
<td>D</td>
<td>K</td>
<td>T</td>
</tr>
<tr>
<td>10-11</td>
<td>C</td>
<td>J</td>
<td>L</td>
</tr>
<tr>
<td>11-12</td>
<td>A</td>
<td>J</td>
<td>T</td>
</tr>
<tr>
<td>12-13</td>
<td>A</td>
<td>J</td>
<td>T</td>
</tr>
<tr>
<td>13-14</td>
<td>H</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>14-15</td>
<td>F</td>
<td>I</td>
<td>B</td>
</tr>
<tr>
<td>15 - 16:30</td>
<td>F</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>16:30 - 18</td>
<td>F</td>
<td>E</td>
<td>C</td>
</tr>
</tbody>
</table>

T[ = Travel
X = Off-duty
## OBSERVATION SCHEDULE

### SATURDAY DAY

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00</td>
<td>F</td>
</tr>
<tr>
<td>7:00</td>
<td>G</td>
</tr>
<tr>
<td>8:00</td>
<td>H</td>
</tr>
<tr>
<td>09:00</td>
<td>I</td>
</tr>
<tr>
<td>10:00</td>
<td>K</td>
</tr>
<tr>
<td>11:00</td>
<td>L</td>
</tr>
<tr>
<td>12:00</td>
<td>T</td>
</tr>
<tr>
<td>13:00</td>
<td>A</td>
</tr>
<tr>
<td>14:00</td>
<td>B</td>
</tr>
<tr>
<td>16:00</td>
<td>C</td>
</tr>
<tr>
<td>17:00</td>
<td>D</td>
</tr>
<tr>
<td>18:00</td>
<td>E</td>
</tr>
</tbody>
</table>
OBSERVATION SCHEDULE

SUNDAY DAY

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00</td>
<td>L</td>
</tr>
<tr>
<td>7:00</td>
<td>A</td>
</tr>
<tr>
<td>8:00</td>
<td>B</td>
</tr>
<tr>
<td>09:00</td>
<td>C</td>
</tr>
<tr>
<td>10:00</td>
<td>D</td>
</tr>
<tr>
<td>11:00</td>
<td>E</td>
</tr>
<tr>
<td>12:00</td>
<td>F</td>
</tr>
<tr>
<td>13:00</td>
<td>G</td>
</tr>
<tr>
<td>14:00</td>
<td>H</td>
</tr>
<tr>
<td>16:00</td>
<td>I</td>
</tr>
<tr>
<td>17:00</td>
<td>J</td>
</tr>
<tr>
<td>18:00</td>
<td>K</td>
</tr>
</tbody>
</table>
## OBSERVATION SCHEDULE

### SUNDAY NIGHT

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00</td>
<td>L</td>
</tr>
<tr>
<td>19:00</td>
<td>A</td>
</tr>
<tr>
<td>20:00</td>
<td>B</td>
</tr>
<tr>
<td>21:00</td>
<td>C</td>
</tr>
<tr>
<td>22:00</td>
<td>D</td>
</tr>
<tr>
<td>23:00</td>
<td>E</td>
</tr>
<tr>
<td>24:00/00:00</td>
<td>F</td>
</tr>
<tr>
<td>1:00</td>
<td>G</td>
</tr>
<tr>
<td>2:00</td>
<td>H</td>
</tr>
<tr>
<td>03:00</td>
<td>I</td>
</tr>
<tr>
<td>4:00</td>
<td>J</td>
</tr>
<tr>
<td>05:00</td>
<td>K</td>
</tr>
</tbody>
</table>
# OBSERVATION SCHEDULE

## MONDAY NIGHT

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00</td>
<td>H</td>
</tr>
<tr>
<td>19:00</td>
<td>I</td>
</tr>
<tr>
<td>20:00</td>
<td>J</td>
</tr>
<tr>
<td>21:00</td>
<td>K</td>
</tr>
<tr>
<td>22:00</td>
<td>T</td>
</tr>
<tr>
<td>23:00</td>
<td>A</td>
</tr>
<tr>
<td>24:00/00:00</td>
<td>B</td>
</tr>
<tr>
<td>1:00</td>
<td>C</td>
</tr>
<tr>
<td>2:00</td>
<td>D</td>
</tr>
<tr>
<td>03:00</td>
<td>E</td>
</tr>
<tr>
<td>4:00</td>
<td>F</td>
</tr>
<tr>
<td>05:00</td>
<td>G</td>
</tr>
</tbody>
</table>
# OBSERVATION SCHEDULE

## THURSDAY NIGHT

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00</td>
<td>C</td>
</tr>
<tr>
<td>19:00</td>
<td>D</td>
</tr>
<tr>
<td>20:00</td>
<td>E</td>
</tr>
<tr>
<td>21:00</td>
<td>F</td>
</tr>
<tr>
<td>22:00</td>
<td>G</td>
</tr>
<tr>
<td>23:00</td>
<td>H</td>
</tr>
<tr>
<td>24:00/00:00</td>
<td>I</td>
</tr>
<tr>
<td>1:00</td>
<td>J</td>
</tr>
<tr>
<td>2:00</td>
<td>K</td>
</tr>
<tr>
<td>03:00</td>
<td>T[</td>
</tr>
<tr>
<td>4:00</td>
<td>A</td>
</tr>
<tr>
<td>05:00</td>
<td>B</td>
</tr>
</tbody>
</table>
## OBSERVATION SCHEDULE

### FRIDAY NIGHT

<table>
<thead>
<tr>
<th>TIME</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:00</td>
<td>K</td>
</tr>
<tr>
<td>19:00</td>
<td>J</td>
</tr>
<tr>
<td>20:00</td>
<td>I</td>
</tr>
<tr>
<td>21:00</td>
<td>H</td>
</tr>
<tr>
<td>22:00</td>
<td>I</td>
</tr>
<tr>
<td>23:00</td>
<td>K</td>
</tr>
<tr>
<td>24:00/00:00</td>
<td>L</td>
</tr>
<tr>
<td>1:00</td>
<td>L</td>
</tr>
<tr>
<td>2:00</td>
<td>A</td>
</tr>
<tr>
<td>03:00</td>
<td>B</td>
</tr>
<tr>
<td>4:00</td>
<td>C</td>
</tr>
<tr>
<td>05:00</td>
<td>D</td>
</tr>
</tbody>
</table>
FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Train: __________________________ Location Start Time: ____ : ____
Location: __________ Location End Time: ____ : ____
Date: ___ / ___ / ___ Reset Vehicle Counter = 0

Train Delay Observation Form

Train Delay Event Begin Time: ____ : ____ Vehicle Counter ____

If train stops, record: 1

Train stop time: ____ : ____
Train start time: ____ : ____

Number of locomotives: 2 __________
Number of railcars: 2 __________

Train Delay Event End Time: ____ : ____

Number of vehicles in queue
-- DO NOT reset counter --

Time queue clears crossing ____ : ____

Ending 3 Vehicle Count ____
Reset Vehicle Counter = 0

1In any given event if the train stops more than once, record train stop time and train start time each time the train stops and starts
2If more than one train closes a crossing at the same time, to the extent possible, record the number of locomotives and railcars in both trains
3At end of observation period or when next train arrives

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Observation Data to be Obtained at Each Delay Event

- Record vehicular traffic on the street per "Sequence Instructions"
- Record the time the road crossing is first blocked

  -- Assuming the crossing has gates, this time is when the gates are closed, regardless if vehicles go around the closed gates

  -- Assuming the crossing has flashing lights and no gates, the time is when the lights begin flashing, or when a railroad employee or police officer stops traffic, whichever is earlier

  -- Assuming the crossing has only cross buck signs and no flashing lights or gates, the time is when the train enters the crossing, or when a railroad employee or police officer stops traffic, whichever is earlier

- As the train moves through the crossing count and record the number of locomotives and the number of railcars in the train

- Record the time the crossing is opened

  -- Assuming the crossing has gates, this time is when the gates are raised

  -- Assuming the crossing has flashing lights, and no gates the time is when the lights stop flashing

  -- Assuming the crossing has no gates or flashing lights, the time is when the train clears the crossing

- After the gates are opened, count the number of vehicles that are in the queue and cross the tracks. Count the vehicles crossing the tracks in both directions

- Record the time the last vehicle in the queue clears the crossing. If this is not possible, record the time when the traffic flow approximates the flow prior to the train delay
FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Guidelines for Recording Observations

- Record all times in military time, e.g. 3:25 p.m. is recorded as 15:25.

- If you are in the process of collecting data and the time for observation at that crossing lapses, stay at the crossing and complete the observation before continuing to the next assigned crossing. If you then arrive at the next observation location later than scheduled, note the “Location start time” on the Observation form.

- If you arrive at a observation location early, begin the observation when you arrive and note the “Location start time”. If you arrive late at an observation location late note the “Location start time”.

- In the event more than one track, or railroad, operates at a given crossing, and more than one train closes the crossing at one time, record the begin and end time as the total time the crossing is closed. In this instance please record locomotive and car counts for both trains, if possible.

- At crossings F (Chicago Avenue and Kennedy Avenue in East Chicago), and L (117th and Front Street in Whiting) position yourself in order to be able to record events at both crossings.

- At Whiting a possible observation point to record events at both Front Street and 117th Street is from the bleachers at the Whiting High School just southwest of the crossings. If both crossings cannot be observed simultaneously, then the team should split its observation time equally between the two crossings.

- At crossing I (Clark Road in Gary) position yourself between the CSX and Conrail mainlines in order to be able to record events on both railroads.

- When setting up at a crossing to observe events, if possible, face the direction needed to travel to the next observation location and with the railroad behind you in order that you will not be impeded enroute to the next observation location.
FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Sequence Instructions

1. Drive to location.
2. Get in position with unobstructed view of the crossing that will not be later obstructed by vehicular traffic waiting for a train.
3. Fill in the top portion of the form (above the line "Train Delay Observation Form") except the line "Location End Time: _____:_____" which will completed at the end of the observation period.
4. **RESET YOUR VEHICLE COUNTER.**
5. Count all vehicles that cross the tracks until the next train arrives. If your observation period ends; then
   - Record your vehicle counter.
   - Reset your vehicle counter.
   - Fill out the page count and "Location End Times" at the top of each page.
   - Go to next location.
6. When a train arrives:
   - Record the vehicle count when vehicles stop crossing the tracks.
   - **RESET THE VEHICLE COUNTER.**
   - Record the "Train Delay Event Begin Time".
   - Count and record the locomotives and railroad cars on the train.
   - If the train comes to a complete stop while in the intersection; then, record "Train stop time" and "Train start time".
   - Record the "Train Delay Event End Time".
   - **RESET COUNTER.**
   - Begin recording vehicles as they cross the track.

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
Sequence Instructions

- Record the number of vehicles in the queue.*

- Record the time queue* clears crossing.

* For purposes of this study the end of the queue occurs when traffic movement approximates the flow rate that was occurring prior to the train's arrival.

7. Do NOT reset counter.

8. Continue counting vehicles until the next train arrives [Go to step 6 above] or until the observation period ends.

9. If the observation period ends during a train delay, extend the period until the train clears.

10. If there is a train delay in process when you arrive at a location, begin a "Train Delay Observation Form". In this case, make sure the "Location Start Time" and the "Train Delay Event Begin Time" contain EXACTLY the same time.
<table>
<thead>
<tr>
<th>Location</th>
<th>Vehicles</th>
<th>Train Delay Incidents</th>
<th>Train Blocked Hours</th>
<th>Elapsed Delay Time</th>
<th>Total Locos</th>
<th>Average Locos</th>
<th>Average Railcars</th>
<th>Vehicle Delay Hours</th>
<th>Cars Around Gates</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hohman</td>
<td>70,356</td>
<td>282</td>
<td>23.60</td>
<td>27.81</td>
<td>683</td>
<td>2.42</td>
<td>63.72</td>
<td>395</td>
<td>360</td>
</tr>
<tr>
<td>B. Calumet</td>
<td>146,591</td>
<td>185</td>
<td>18.42</td>
<td>24.05</td>
<td>418</td>
<td>2.26</td>
<td>72.84</td>
<td>1,365</td>
<td>481</td>
</tr>
<tr>
<td>C. Columbia</td>
<td>27,272</td>
<td>285</td>
<td>23.19</td>
<td>25.78</td>
<td>517</td>
<td>1.82</td>
<td>54.62</td>
<td>170</td>
<td>110</td>
</tr>
<tr>
<td>D. Indianapolis</td>
<td>114,814</td>
<td>130</td>
<td>12.61</td>
<td>15.36</td>
<td>260</td>
<td>2.00</td>
<td>76.56</td>
<td>528</td>
<td>2,972</td>
</tr>
<tr>
<td>E. Railroad</td>
<td>37,194</td>
<td>261</td>
<td>16.42</td>
<td>18.62</td>
<td>550</td>
<td>2.11</td>
<td>63.96</td>
<td>140</td>
<td>321</td>
</tr>
<tr>
<td>F. Kennedy</td>
<td>44,851</td>
<td>268</td>
<td>20.00</td>
<td>21.98</td>
<td>720</td>
<td>2.68</td>
<td>80.19</td>
<td>212</td>
<td>1,044</td>
</tr>
<tr>
<td>G. Euclid</td>
<td>62,308</td>
<td>209</td>
<td>12.69</td>
<td>14.42</td>
<td>463</td>
<td>2.22</td>
<td>67.73</td>
<td>132</td>
<td>131</td>
</tr>
<tr>
<td>H. U.S. 12</td>
<td>79,873</td>
<td>221</td>
<td>13.88</td>
<td>16.95</td>
<td>542</td>
<td>2.46</td>
<td>71.99</td>
<td>279</td>
<td>242</td>
</tr>
<tr>
<td>I. Clark</td>
<td>6,181</td>
<td>603</td>
<td>33.62</td>
<td>36.00</td>
<td>1,405</td>
<td>2.33</td>
<td>76.23</td>
<td>59</td>
<td>51</td>
</tr>
<tr>
<td>J. Lake</td>
<td>71,045</td>
<td>172</td>
<td>6.41</td>
<td>8.94</td>
<td>335</td>
<td>1.95</td>
<td>57.57</td>
<td>68</td>
<td>66</td>
</tr>
<tr>
<td>K. County Line</td>
<td>47,594</td>
<td>77</td>
<td>2.18</td>
<td>2.94</td>
<td>166</td>
<td>2.16</td>
<td>60.02</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>L. Whiting</td>
<td>12,065</td>
<td>1152</td>
<td>67.07</td>
<td>68.78</td>
<td>2,661</td>
<td>2.31</td>
<td>68.18</td>
<td>58</td>
<td>195</td>
</tr>
</tbody>
</table>

1/ The data shown for vehicles, trains, delayed vehicles, delay hours and cars around gates are expanded from statistically valid sample observations to represent the entire seven day study period.

2/ Includes vehicles going around gates which remained closed after train had passed through crossing.

L. E. PEABODY & ASSOCIATES, INC.
ECONOMIC CONSULTANTS
TRAFFIC DELAY MODEL

The model used computes the total expected delay time of all cars delayed per train and multiplies this value by the number of trains per day. The expected total delay time per train can be computed using the following formulas from queuing theory and highway traffic engineering:

1. Total Vehicle Delay/Train = (Gate Down Time)² * (Vehicle Arrival Rate) * (Flow Factor) / 2

where:

2. Vehicle Arrival Rate = The Average Daily Traffic / 24

3. Flow Factor = (Road Capacity) / (Road Capacity - Vehicle Arrival Rate)
   [Note: This factor is affected more by time of day, day of week variations than from one intersection to another.]

4. Gate Down Time = (Train Length - I - Safety Setback - I - Crossing Width) / (5280 * Train Speed)

5. Train Length = (60 * Cars on Train) + (90 * Locomotives)

6. Safety Set Back = (20 * Train Speed Limit * 5280) / 3600
   = 29.333 * Train Speed Limit
   [Note: The Safety Set Back is the distance the train is away from the crossing when the gate goes down such that the gates are down for 20 seconds prior to the train entering the crossing.]

---

Finally,

7. Total Vehicle Delay per Day
   \[ = \text{(Trains/Day)} \times \text{(Total Vehicle Delay/Train)} \]
   \[ = \text{[(Trains/Day)} \times \text{(Gate Down Time)} /2\text{]} \times \text{[Vehicle Arrival Rate*Flow Factor]} \]

| Train Statistics | Vehicle Statistics |

From the above description of the model, it can be seen that the total delay time per day [equation 7] is a function of strictly railroad statistics multiplied by a function of strictly highway statistics. This fact is used in the calibration of the model.
### WILLow Creek To Calumet Park And Whiting
### SUMMARY RESULTS OF TRAIN DELAY STUDY 1/

<table>
<thead>
<tr>
<th>Location</th>
<th>Speed Limit</th>
<th>Railroads</th>
<th>Trains/Day</th>
<th>Average Loco</th>
<th>Average Railcars</th>
<th>Delayed Vehicles</th>
<th>Vehicle Delay Hours</th>
<th>No. of Lanes</th>
<th>Average Daily Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hohman</td>
<td>25 CSX</td>
<td>40.3</td>
<td>2.42</td>
<td>69.72</td>
<td>1,056</td>
<td>56.4</td>
<td>3</td>
<td>10,051</td>
<td>40.07</td>
</tr>
<tr>
<td>B. Calumet</td>
<td>25 CSX</td>
<td>26.5</td>
<td>2.26</td>
<td>72.84</td>
<td>2,439</td>
<td>195.0</td>
<td>4</td>
<td>20,942</td>
<td>83.94</td>
</tr>
<tr>
<td>C. Columbia</td>
<td>25 CSX</td>
<td>40.7</td>
<td>1.82</td>
<td>54.62</td>
<td>467</td>
<td>24.2</td>
<td>4</td>
<td>3,896</td>
<td>15.62</td>
</tr>
<tr>
<td>D. Indianapolis</td>
<td>25 CSX</td>
<td>18.6</td>
<td>2.00</td>
<td>75.56</td>
<td>825</td>
<td>75.5</td>
<td>4</td>
<td>16,402</td>
<td>65.74</td>
</tr>
<tr>
<td>E. Railroad</td>
<td>25 CSX</td>
<td>37.3</td>
<td>2.11</td>
<td>63.95</td>
<td>428</td>
<td>19.9</td>
<td>4</td>
<td>5,313</td>
<td>21.30</td>
</tr>
<tr>
<td>F. Kennedy</td>
<td>25 CSX</td>
<td>38.3</td>
<td>2.68</td>
<td>80.19</td>
<td>657</td>
<td>30.3</td>
<td>4</td>
<td>6,407</td>
<td>25.68</td>
</tr>
<tr>
<td>G. Euclid</td>
<td>25 CSX</td>
<td>29.9</td>
<td>2.22</td>
<td>67.73</td>
<td>423</td>
<td>18.6</td>
<td>4</td>
<td>8,901</td>
<td>35.68</td>
</tr>
<tr>
<td>H. U.S. 12 Group I</td>
<td>25 CSX</td>
<td>31.5</td>
<td>2.46</td>
<td>71.99</td>
<td>882</td>
<td>39.8</td>
<td>4</td>
<td>11,410</td>
<td>45.74</td>
</tr>
<tr>
<td>A. thru H.</td>
<td>32.9</td>
<td>2.25</td>
<td>68.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Group II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Clark</td>
<td>25 CSX/CR</td>
<td>86.2</td>
<td>2.33</td>
<td>76.23</td>
<td>206</td>
<td>8.4</td>
<td>2</td>
<td>883</td>
<td>3.82</td>
</tr>
<tr>
<td>J. Lake</td>
<td>60 CSX</td>
<td></td>
<td>1.95</td>
<td>57.57</td>
<td>265</td>
<td>9.8</td>
<td>4</td>
<td>10,149</td>
<td>4.51</td>
</tr>
<tr>
<td>K. County Line</td>
<td>60 CSX</td>
<td>17.8</td>
<td>2.01</td>
<td>56.33</td>
<td>116</td>
<td>2.8</td>
<td>2</td>
<td>6,799</td>
<td>2.99</td>
</tr>
<tr>
<td>J thru K.</td>
<td>164.6</td>
<td></td>
<td>2.31</td>
<td>66.18</td>
<td>250</td>
<td>8.3</td>
<td>2</td>
<td>1,724</td>
<td>5.27</td>
</tr>
</tbody>
</table>

**Calculated Train Speed:** 12.767

**Observed / Model = Flow Rate = 1.36**

1/ The data shown for vehicles, trains, delayed vehicles, and delay hours are expanded from statistically valid sample observations to represent an average day.

---

**L. E. Peabody & Associates, Inc.**
**Economic Consultants**
VERIFICATION

COMMONWEALTH OF VIRGINIA

CITY OF ALEXANDRIA

GARY M. ANDREW, being duly sworn, deposes and says that he has read the foregoing statement, knows the contents thereof and that the same are true as stated.

Sworn to and subscribed
before me this 30 day

Witness my hand and official seal.
BEFORE THE
SURFACE TRANSPORTATION BOARD

CSX CORPORATION AND CSX
TRANSPORTATION, INC., NORFOLK
SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY
COMPANY -- CONTROL AND
OPERATING LEASES/AGREEMENTS--
CONRAIL, INC. AND CONSOLIDATED
RAIL CORPORATION

Finance Docket No. 33388

JOINT VERIFIED STATEMENT OF
GREGG L. HEINZMAN AND RONALD H. DUNN

I. INTRODUCTION

My name is Gregg L. Heinzman. I am an engineer with Cole Associates Inc., a consulting engineering firm located at 7011 Indianapolis Boulevard, Hammond, Indiana 46324. I hold a bachelor's degree in Civil Engineering from Purdue University and a master's degree in Business Administration from Indiana University. I am a licensed Professional Engineer in the State of Indiana. I am a licensed Professional Engineer in the State of Indiana, a licensed Land Surveyor in the State of Indiana, and a licensed Structural Engineer in the State of Illinois. I have been employed with Cole Associates for nineteen years and have worked in design and supervisory positions on a variety of civil, structural, and survey projects for industrial, municipal, and commercial clients. A statement of my qualifications is attached as Exhibit GLH-1.
Cole Associates Inc. ("Cole") is a multi-disciplined consulting firm with a staff of more than 170 located in five offices in Indiana and Michigan. Cole has performed civil engineering services for more than 80 years and has served the industrial area of Northwest Indiana for more than 35 years. Cole's transportation division has performed many transportation and traffic studies, including studies that have monitored and counted both vehicular and rail traffic.

My name is Ronald H. Dunn. I am President of R.H. Dunn & Associates, Inc., a firm that specializes in railway construction engineering services. The firm's offices are located at 149 Hunting Cove, Williamsburg, Virginia 23185. I am a Registered Professional Engineer and a graduate of John Hopkins University, where I earned a Bachelor of Science degree in Engineering. I have been elected to the grade of FELLOW by the American Society of Civil Engineers, the National Academy of Forensic Engineers and also by the Institute of Transportation Engineers. I am a LIFE member of the American Railway Engineering Association and a Board Certified DIPLOMATE-FORENSIC ENGINEER.

I have more than 40 years of professional experience in railway engineering gained through active employment with a major railroad, with three of the largest engineering firms in the nation, and for the previous thirteen years, with my own firm. I have been personally involved in engineering projects of 18 railroads and 17 rail rapid transit systems in more than 40
states, the District of Columbia, and 6 Canadian provinces. My qualifications are attached as Exhibit RHD-1.

The Cities of East Chicago, Hammond, Gary and Whiting, Indiana (the "Four City Consortium" or "FCC") and its economic consulting firm, L.E. Peabody & Associates, Inc., have requested Mr. Heinzman to perform certain studies involving the gathering of vehicular and train movement data at certain designated rail/highway grade crossings in the FCC region. Both of us have been requested by the FCC and L.E. Peabody & Associates to perform a study of the work required (and associated costs) to rehabilitate certain out-of-service railroad trackage and to construct certain connections between rail lines in this region. The purpose of our testimony is to describe these studies and their results.

II. DATA COLLECTION FOR L.E. PEABODY & ASSOCIATES

By Mr. Heinzman

Between September 28 and October 5, 1997, Cole performed services consisting of gathering vehicular and train movement and delay data as specified by L.E. Peabody & Associates. The design of the data collection system was prepared by Dr. Gary M. Andrew and is described in his verified statement. The data gathering took place at twelve railroad crossings within the Cities of Gary, Hammond, East Chicago, and Whiting, Indiana and involved the CSX, Conrail, and Indiana Harbor Belt railroad lines. Exhibit GLH-2 contains the data collection form ("Train
Sheet") used by each observer for every observation period. A
new page of this form was used for each train observed at each
observation site. Instructions prepared by Dr. Andrew were given
to each observer. I personally managed the observers, provided
them with detailed instructions, and provided on-site quality
control. I was in frequent telephone contact with Dr. Andrew
before and during the observation week to insure the quality of
the data collected. I collected and assembled the train sheets,
checked them for errors of omission or commission, and forwarded
them to L. E. Peabody & Associates for data entry and analysis.

Our observers were extremely concerned at the pattern
they observed of numerous vehicles ignoring activated crossing
gates, running around them to get across the rail lines before a
train arrived. The observers were fearful that they might
witness a serious accident as a result of this frequent practice.
In fact, although not captured by the data collection form,
several pedestrians were also observed disregarding gates and
walking across grade crossings.

III. RAIL CONSTRUCTION PROJECTS

By Mr. Heinzman and Mr. Dunn

A. General

We were requested by the FCC and L.E. Peabody & Associ-
ates to examine existing rail conditions at three distinct loca-
tions to determine the engineering and operational feasibility of
implementing specific alternatives to the Applicants' proposed
rail operations in the FCC area. We have also been requested to estimate the cost of construction of the necessary rail line rehabilitation and connections required to implement the FCC’s Alternative Routing Plan, which is fully described in the verified statement of Philip H. Burris of the Peabody firm.

We examined three specific locations which are identified below.

1. The Indiana Harbor Belt Railroad ("IHB") line which extends from Calumet Park in an easterly direction, through Hammond, Indiana past IHB’s Gibson Yard and continuing east via Tolleston to the grade separated crossing at Virginia Street in Gary.

2. The former Pennsylvania Railroad ("PRR") line between Hobart and Clarke Junction, via Tolleston and Pine Junction, where the CSX line from Willow Creek splits into a line running northwest along the Lake Michigan Waterfront and a line running west through East Chicago and Hammond, Indiana. The east/west line runs parallel to Chicago Avenue in both East Chicago and Hammond. Pine Junction is just east of the point where the PRR line crosses the CSX (BOCT) Pine Junction to Calumet Park line.

3. Van Loon Junction, located at the intersection of the Norfolk Southern Corporation ("NS") line running from Hobart to Hammond and the Elgin, Joliet and
Eastern Railroad ("EJ&E") line running north/south between Griffith and Ivanhoe Junction in Gary.

B. **IHB line from Calumet Park to Virginia Street**

The IHB line from Calumet Park to Virginia Street in Gary is approximately 11 miles in length. The majority of the crossings from Calumet Park to Virginia Street are grade separated. The line crosses 16 streets and only three of these crossings are at grade, with the remaining 13 crossings being grade separated.

From Calumet Park, the IHB line runs in a southeasterly direction through Hammond past the Gibson Yard and continues east through Gary to a point between the Holy Rosary School Park and Chase Elementary School where it serves several local industries on Chase Street, including Excell Logistics, Chicago Steel, and Tin Plate Partners International. The portion of this line east of Chase Street has been out of service for several years. At one time this line extended further east, then north, crossing the Chicago SouthShore & South Bend Railroad ("CSS&SB"), the CSX Willow Creek to Pine Junction line, and the Conrail Lakefront line. The line then continued west to Burns Harbor, Indiana and to National Steel Company located adjacent to the Port of Indiana.

The IHB line is out of service from Chase Street east to the point where it crosses the CSS&SB. We understand the line has been abandoned east of the CSS&SB and is now owned by the
United States Park Service. We have confirmed IHB’s continued ownership of the line segment from the point where it is out of service to Virginia Street by examining the Lake County, Indiana property tax records.

At a location named Ivanhoe, the IHB Calumet Park to Virginia Street line connects with Conrail’s Porter Branch line, which is part of the former Michigan Central main line between Chicago and Detroit. From Calumet Park to Ivanhoe the line is in good condition and is generally comprised of 127 pound rail with approximately 3,300 ties per mile. This IHB line is currently used to move Conrail trains between Calumet Park and Ivanhoe, where the trains then move across an existing connection to the Conrail Porter Branch. According to the Federal Railroad Administration ("FRA"), the maximum authorized train speed on this line is 40 miles per hour.

The IHB line from Ivanhoe to the out-of-service portion of the line from Chase Street to Massachusetts Street is also in good condition and with 127 pound rail and approximately 3300 ties per mile. The out-of-service portion of the line continues to have rail in place; however, the existing rail, ties, rail fastening materials and ballast are inadequate to handle any significant volumes of rail traffic.

\[1\] Based on Document numbers CSX 44 CO 000 101 thru 126 provided by Applicants in response to FCC’s second set of interrogatories and document production requests, CSX also plans to use this the IHB line from Calumet to Ivanhoe where the existing connection to the Conrail Porter Branch will be used.
As described in Mr. Burris’ verified statement, the FCC proposes that CSX reduce the traffic it projects to move on the Willow Creek to Pine Junction and Pine Junction to Barr Yard lines by using these lines in conjunction with the IHB Calumet Park to Virginia Street line and the Conrail Porter Branch back to Willow Creek as paired main tracks each with traffic generally moving in a single and opposite direction. Exhibit PHB-2, attached to the accompanying verified statement of Philip H. Burris, includes a graphical depiction of the CSX Willow Creek to Calumet Park line via Pine Junction and the IHB/Conrail Porter Branch from Calumet Park to Willow Creek. Exhibit GLH/RHD-1 shows the location of the out-of-service track between Chase and Virginia Streets, and the location of the proposed connection between the IHB and Conrail lines.

The CSX line between Willow Creek and Calumet Park via Pine Junction, has 27 at-grade crossings, with 20 of these crossings located between Pine Junction and Calumet Park. By contrast, the IHB/Conrail Porter Branch from Calumet Park to Willow Creek has 13 at-grade crossings. In addition, the IHB/Conrail line has 13 grade separated crossings. The FCC alternative will significantly reduce the volume of traffic on the Willow Creek to Pine Junction and Pine Junction to Barr Yard lines, thereby mitigating some of the most significant negative

---

2 The CSX Pine Junction to Barr Yard line connects with the IHB Calumet Park to Virginia Street line at Calumet Park.
impacts on the Four Cities as a result of the Applicants' proposed operating plan.

Rather than using the existing connection between the IHB line and the Conrail Porter Branch at Ivanhoe, the FCC suggests placing the IHB line back into service to a point approximately adjacent to Virginia Street in Gary and constructing a connection with the Porter Branch at that point. Doing so will permit continued use of the grade separated IHB line, thereby avoiding 9 at-grade crossings between Ivanhoe and Virginia Street.

The FCC alternative will increase the rail traffic on the IHB/Porter Branch from 11.4 trains per day post acquisition, as proposed by the Applicants, to 28.1 trains per day. The ITC alternative assumes the additional 16.7 trains proposed to be moved via this line will move in an easterly direction.

We have examined the Conrail Porter Branch from Virginia Street to Willow Creek. This line has 127 pound rail with approximately 3300 ties per mile. According to the FRA, the authorized speed limit on this section of track is 40 miles per hour. We understand that this line is equipped with Centralized Traffic Control.

Based on our examination of the IHB/Conrail line from Calumet Park to Willow Creek, we have concluded that this line is in adequate condition and has sufficient capacity to handle 28 trains per day with an average gross weight of 5,400 tons. This is especially true as the vast majority of the trains will be
moving in a single direction. Even in the absence of directional traffic flow, however, the line is adequate to sustain this level of traffic.

We have also examined the out-of-service portion of the IHB line and the grade separation bridges. Based on this examination, we have estimated the cost of replacing the necessary track and constructing the required connection between the grade elevated IHB line and the at-grade Conrail line, as proposed under the FCC alternative. Accomplishing this requires replacing approximately 2.1 miles of out-of-service IHB track and construction of a connection between the elevated IHB roadbed and the at-grade Conrail Porter Branch line in the vicinity of Virginia Street. We estimate the cost of replacing the out-of-service track and constructing the connection to equal $1,116,776 and $445,986, respectively. Our estimate of the cost of the connection between the IHB line and the Porter Branch does not include any signaling cost because no traffic will move on the Conrail line from Ivanhoe to Virginia Street. Exhibit GLH/RHD-2 provides our calculation of these construction estimates.

C. **Hobart to Clarke Junction via Tolleston**

As fully described in the verified statement of Mr. Burris, CSX proposes to place back into service the PRR rail line between Hobart and Clarke Junction via Tolleston and to connect this line to both the Conrail Porter Branch at Tolleston and to the CSX line that runs northwest from Pine Junction along the
Lake Michigan waterfront. This out-of-service line is approximately 11.75 miles in length.

We have examined this line and found that it has been out-of-service for a significant period of time. The line is covered with vegetation (some trees are actually growing between the rails), and many of the at-grade crossings have been paved over. The line cannot be used to provide service in its current condition, and at a minimum requires vegetation control, resurfacing, undercutting, substantial tie replacement, restoration of the track through grade crossings, and replacement of warning devices. We have estimated that the cost to rehabilitate this line to FRA Class 2 serviceable condition will equal $7,017,167. This cost includes the construction of a connection with the Conrail Porter Branch at Tolleston, the cost of the connection NS proposes to construct between its former Wabash line and the out-of-service PRR line, and the cost of a connection with EJ&E at Dune. NS proposes to construct the connection with the Wabash spur to facilitate operations in serving Gary Sugar's facility located on the Wabash spur. Exhibit GLH/RHD-3 displays our estimate of the cost of the rehabilitation of the Hobart to Clarke Junction line and the construction of the described turnouts.

The portion of this line from Hobart to Tolleston is currently owned by NS, and the portion of the line from Tolleston to Clarke Junction is owned by Conrail. Post-acquisition, both of these line segments are proposed to be owned and operated by CSX.
The FCC opposes the reactivation of the out-of-service PRR line, and proposes an alternative which will permit NS to achieve its objective of serving industry on the Wabash spur and to connect with the Conrail Lakefront line moving in an easterly direction. This alternative requires the use of the existing turnouts at Pine Junction on the CSX lines and the construction of a connection between the CSX line at Pine Junction and the Conrail Lakefront line. Exhibit GLH/RHD-4 is a graphical depiction of the proposed construction of this connection. This connection, including signaling, is estimated to cost $277,933. The calculations underlying this estimate are found in Exhibit GLH/RHD-5.

D. Van Loon Junction

Based on CSX’s responses to the FCC’s September 29, 1997 questions in lieu of deposition and CSX’s responses to the FCC’s Second Set of Interrogatories and Request for Production of Documents, it appears that CSX desires to reactivate the PRR line to move coal and coke to the steel mills located on the Lake Michigan waterfront. CSX’s responses to the FCC’s questions indicate this coal and coke will be moved to the U.S. Steel Mill in Gary via the Hobart to Tolleston line, then over the EJ&E by CSX crews.

As indicated previously, the FCC opposes the reactivation of the out-of-service PRR line between Hobart and Clarke Junction. To accommodate the five trains per day, that CSX
projects to move over these lines, the FCC proposes that these CSX trains be routed from Hobart to Van Loon over the NS (former Nickel Plate ("NKP"). line via a trackage rights agreement between the Applicants. From Van Loon, the FCC proposes that the CSX trains move over the EJ&E via trackage rights to the same lakefront steel mills. This alternative requires the construction of a connection between the NS/NKP line and the EJ&E line at Van Loon.

We have inspected the tracks at Van Loon and have determined that it is feasible to build the required connection to accommodate the movement of five trains per day from the NS line to the EJ&E line. We have preliminarily estimated the cost of this connection to equal $277,933. Exhibit GLH/RHD-6 displays our calculations of this construction cost. Exhibit GLH/RHD-7 is a graphical depiction of the connection between the NKP and EJ&E lines at Van Loon.

A potential alternative to the NS/EJE routing via Van Loon also exists. This alternative would use the NS/NKP line further westward to Osborn Junction. At Osborn, the trains would use an existing connection with a north-south IHB line, and would operate over the IHB to connections with the CSX Lakefront line and the EJ&E at the Lakefront yard lines in the Indiana Harbor area. This alternative is more circuitous than the Van Loon/EJ&E route, and it is less desirable from the FCC viewpoint because the IHB line has more grade crossings than the EJ&E line.
EDUCATION
M.S. Business Administration
Indiana University, 1988

B.S. Civil Engineering
Purdue University - West Lafayette, Indiana, 1972

REGISTRATIONS
Professional Engineer: Indiana, 1977, #17288

Structural Engineer: Illinois, 1983, #81004504

Land Surveyor: Indiana
LN29700020

MEMBERSHIPS
Association of Iron and Steel Engineers

EXPERIENCE
Mr. Heinzman's experience includes over 24 years of project management and engineering design services for municipal projects, private commercial developments and heavy industry, particularly the steel and petrochemical industries. Mr. Heinzman also has experience in structural inspection, civil engineering and surveying. Mr. Heinzman's project experience includes the following:

Civil/Structural Projects
- Trump/Barden Riverboat Gaming Development, Civil/Site Design Including Sewer and Water Service - Gary, Indiana
- Showboat Gaming Development, Civil and Structural Design - East Chicago, Indiana
- Steel and Concrete Design, Municipal Airport Terminal - Gary, Indiana
- Streets Reconstruction, City of Hammond - Hammond, Indiana
- Indiana University Northwest - Gary, Indiana
- Structural Inspection of 21 Buildings - Fort Benjamin Harrison, Indiana - U.S. Army Corps of Engineers

Survey Projects
- Lehigh Portland Cement Co., Gary
- U.S. Steel Property Surveys
- Midwest Steel Property Surveys
- Little Calumet River Basin Development Commission, Land Acquisition and Easement Surveys

Industrial Projects
- U.S. Steel - Gary Works
  - Roadway Modifications for CTEK Slab Carriers
  - Railroad Track Inventory
  - Construction Supervision - "E" Vessel Reline, #1 BOP

- Numerous Projects for the following industries:
  - Bethlehem Steel
  - Inland Steel
  - Midwest Steel
  - LTV Steel
  - Swenson Process Equipment Inc.
FOUR CITY CONSORTIUM
TRAIN DELAY STUDY

Team: _______________ Location Start Time: ____ : ____
Location: ____________ Location End Time: ____ : ____
Date: ___ / ___ / ____ Reset Vehicle Counter = 0

Train Delay Observation Form

Train Delay Event Begin Time: ____ : ____ Vehicle Counter ____

IF Train stops, record: ¹

Train stop time: ____ : ____ Reset Vehicle Counter = 0
Train start time: ____ : ____

Number of locomotives: ²
Number of railcars: ²

Train Delay Event End Time: ____ : ____

Number of vehicles in queue
-- DO NOT reset counter --

Time queue clears crossing: ____ : ____

Ending ² Vehicle Count ____
Reset Vehicle Counter = 0

¹In any given event if the train stops more than once, record train stop time and train start time each time the train stops and starts
²If more than one train closes a crossing at the same time, to the extent possible, record the number of locomotives and railcars in both trains
³At end of observation period or when next train arrives
### FCC’s Alternative Routing Plan
Summary of Investment Costs for Abandoned IHB Line To Virginia Street

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHB Line</td>
<td></td>
</tr>
<tr>
<td>8 Ties</td>
<td>172,632</td>
</tr>
<tr>
<td>9 Rail &amp; OTM</td>
<td>449,262</td>
</tr>
<tr>
<td>11 Ballast</td>
<td>99,304</td>
</tr>
<tr>
<td>12 Track Labor</td>
<td>182,700</td>
</tr>
<tr>
<td><strong>Total Track</strong></td>
<td><strong>$903,898</strong></td>
</tr>
<tr>
<td>3 Grading</td>
<td>53,886</td>
</tr>
<tr>
<td><strong>Connection with Conrail Porter Branch</strong></td>
<td><strong>405,442</strong></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$1,363,225</strong></td>
</tr>
<tr>
<td>Engineering</td>
<td>57,467</td>
</tr>
<tr>
<td>Contingency</td>
<td>142,069</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,562,762</strong></td>
</tr>
</tbody>
</table>
# REHABILITATION OF ABANDONED IHB LINE

## ROAD PROPERTY INVESTMENT

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>6,823</td>
<td>25.30</td>
<td>172,632</td>
</tr>
<tr>
<td>Rail - New 132 Lb.</td>
<td>Ton</td>
<td>488</td>
<td>660.00</td>
<td>321,996</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>17</td>
<td>150.00</td>
<td>2,520</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>27</td>
<td>80.00</td>
<td>21,577</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>13,647</td>
<td>1.00</td>
<td>13,647</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>13,647</td>
<td>6.00</td>
<td>81,881</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>27,294</td>
<td>0.28</td>
<td>7,642</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>8,870</td>
<td>8.00</td>
<td>70,963</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>4,723</td>
<td>6.00</td>
<td>28,341</td>
</tr>
<tr>
<td>TL &amp; S WTRR - Labor</td>
<td>Track Mile</td>
<td>2.10</td>
<td>77,000.00</td>
<td>161,700</td>
</tr>
<tr>
<td>Track Removal</td>
<td>Track Mile</td>
<td>2.10</td>
<td>10,000.00</td>
<td>21,000</td>
</tr>
<tr>
<td>Grading</td>
<td>Cubic Yd.</td>
<td>21,000</td>
<td>2.50</td>
<td>52,500</td>
</tr>
<tr>
<td>Earthwork Excavation - Soil</td>
<td>Mile</td>
<td>2.10</td>
<td>160.00</td>
<td>336</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Mile</td>
<td>2.10</td>
<td>500.00</td>
<td>1,050</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Mile</td>
<td>2.10</td>
<td>500.00</td>
<td>1,050</td>
</tr>
</tbody>
</table>

## Total Raw Road Property

- **Total Raw Road Property**: 957,784
- Engineering: 6% 57,467
- Contingencies: 10% 101,525

## Grand Total

- **Grand Total**: 1,116,776
## CONSTRUCTION OF CONNECTION
### Between IHB and Conrail Porter Branch at Virginia Street

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Acres</td>
<td>2.2</td>
<td>$500.00</td>
<td>$1,100</td>
</tr>
<tr>
<td>Earthwork Excavitation</td>
<td>Cubic Yd.</td>
<td>15,000</td>
<td>$10.97 1/</td>
<td>$164,550</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>1,744</td>
<td>$8.00</td>
<td>$13,952</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>929</td>
<td>$6.00</td>
<td>$5,572</td>
</tr>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>1,342</td>
<td>$25.30</td>
<td>$33,941</td>
</tr>
<tr>
<td>Rail - New 132 Lb.</td>
<td>Ton</td>
<td>96</td>
<td>$660.00</td>
<td>$63,307</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>112</td>
<td>$90.00</td>
<td>$10,062</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>2,683</td>
<td>$1.00</td>
<td>$2,683</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>2,683</td>
<td>$6.00</td>
<td>$16,098</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>5,366</td>
<td>$0.28</td>
<td>$1,503</td>
</tr>
<tr>
<td>Turnouts: 132#, #15 Complete</td>
<td>Each</td>
<td>2</td>
<td>$31,000.00</td>
<td>$62,000</td>
</tr>
<tr>
<td>Labor &amp; Equipment</td>
<td>Miles</td>
<td>0.41</td>
<td>$70,000.00</td>
<td>$28,902</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Miles</td>
<td>0.41</td>
<td>$160.00</td>
<td>$66</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Miles</td>
<td>0.41</td>
<td>$500.00</td>
<td>$206</td>
</tr>
<tr>
<td>Curve Lubricator installed</td>
<td>Each</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$405,442</td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td>10%</td>
<td>$40,544</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>$445,986</td>
</tr>
</tbody>
</table>

1/ From 1997 RS Means - Site Work & Landscape Cost Data
Includes borrow, track mounted front end loader, 5 mile haul and spreading and compacting
## Applicants' Operating Plan

### Summary of Investment Costs for Abandoned Pennsylvania Railroad From Hobart to Clarke Jct.

**PRR Line**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Ties</td>
<td>965,915</td>
</tr>
<tr>
<td>9 Rail &amp; OTM</td>
<td>2,513,726</td>
</tr>
<tr>
<td>11 Ballast</td>
<td>555,630</td>
</tr>
<tr>
<td>12 Track Labor</td>
<td>1,022,250</td>
</tr>
<tr>
<td><strong>Total Track</strong></td>
<td><strong>$5,057,522</strong></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Grading</td>
<td>301,505</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection with Conrail Porter Branch</td>
<td>258,428</td>
</tr>
<tr>
<td>Connection with EJE at Dunes</td>
<td>258,428</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$5,875,883</strong></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>321,542</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency</td>
<td>619,742</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NS connection between Wabash line and PRR line</td>
<td>200,000 1/</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7,017,167</strong></td>
</tr>
</tbody>
</table>

---

1/ Finance Docket No. 33388 - Railroad Control Application, Volume 3B of 8, page 283
### ABANDONED PENNSYLVANIA RR LINE - Hobart to Clarke Jct.
#### ROAD PROPERTY INVESTMENT

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>38,178</td>
<td>25.30</td>
<td>965,915</td>
</tr>
<tr>
<td>Rail - New 132 Lb</td>
<td>Ton</td>
<td>2,730</td>
<td>660.00</td>
<td>1,801,642</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>94</td>
<td>150.00</td>
<td>14,100</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>1,509</td>
<td>80.00</td>
<td>120,726</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>76,357</td>
<td>1.00</td>
<td>76,357</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>76,357</td>
<td>6.00</td>
<td>458,142</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>152,714</td>
<td>0.28</td>
<td>42,760</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>49,632</td>
<td>8.00</td>
<td>397,056</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>26,429</td>
<td>6.00</td>
<td>158,574</td>
</tr>
<tr>
<td>TL &amp; S WTRR - Labor</td>
<td>Track Mile</td>
<td>11.75</td>
<td>77,000.00</td>
<td>904,750</td>
</tr>
<tr>
<td>Track Removal</td>
<td>Track Mile</td>
<td>11.75</td>
<td>10,000.00</td>
<td>117,500</td>
</tr>
<tr>
<td>Earthwork Excavation - Soil</td>
<td>Cubic Yd.</td>
<td>117,500</td>
<td>2.50</td>
<td>293,750</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Mile</td>
<td>11.75</td>
<td>160.00</td>
<td>1,880</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Mile</td>
<td>11.75</td>
<td>500.00</td>
<td>5,875</td>
</tr>
</tbody>
</table>

Total Raw Road Property: 5,359,027

Engineering: 6% 321,542

Contingencies: 10% 568,057

Grand Total: 6,248,625
CONSTRUCTION OF CONNECTION.
Between PRR and Conrail Porter Branch

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Acres</td>
<td>2.2</td>
<td>$500.00</td>
<td>$1,100</td>
</tr>
<tr>
<td>Earthwork Excavation</td>
<td>Cubic Yd.</td>
<td>1,698</td>
<td>$10.97 1/</td>
<td>$18,627</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>763</td>
<td>$8.00</td>
<td>$6,106</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>406</td>
<td>$6.00</td>
<td>$2,438</td>
</tr>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>587</td>
<td>$25.30</td>
<td>$14,853</td>
</tr>
<tr>
<td>Rail - New 132 Lb.</td>
<td>Ton</td>
<td>42</td>
<td>$660.00</td>
<td>$27,704</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>4</td>
<td>$150.00</td>
<td>$600</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>23</td>
<td>$80.00</td>
<td>$1,856</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>1,174</td>
<td>$1.00</td>
<td>$1,174</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>1,174</td>
<td>$6.00</td>
<td>$7,045</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>2,348</td>
<td>$0.28</td>
<td>$658</td>
</tr>
<tr>
<td>Turnouts: 132#, #15 Complete</td>
<td>Each</td>
<td>2</td>
<td>$31,000.00</td>
<td>$62,000</td>
</tr>
<tr>
<td>Signals</td>
<td>Each</td>
<td>2</td>
<td>$50,000.00</td>
<td>$100,000</td>
</tr>
<tr>
<td>Labor &amp; Equipment</td>
<td>Miles</td>
<td>0.18</td>
<td>$70,000.00</td>
<td>$12,648</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Miles</td>
<td>0.18</td>
<td>$160.00</td>
<td>$29</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Miles</td>
<td>0.18</td>
<td>$500.00</td>
<td>$90</td>
</tr>
<tr>
<td>Curve Lubricator installed</td>
<td>Each</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$258,428</td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td></td>
<td>$25,843</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>$284,271</td>
</tr>
</tbody>
</table>

1/ From 1997 RS Means - Site Work & Landscape Cost Data
Includes borrow, track mounted front end loader, 5 mile haul and spreading and compacting
CONSTRUCTION OF CONNECTION
Between PRR and EJE at Dunes

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Acres</td>
<td>2.2</td>
<td>$500.00</td>
<td>$1,100</td>
</tr>
<tr>
<td>Earthwork Excavation</td>
<td>Cubic Yd.</td>
<td>1,698</td>
<td>$10.97</td>
<td>$18,627</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>763</td>
<td>$8.00</td>
<td>$6,106</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>406</td>
<td>$6.00</td>
<td>$2,438</td>
</tr>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>587</td>
<td>$25.30</td>
<td>$14,853</td>
</tr>
<tr>
<td>Rail - New 132 Lb.</td>
<td>Ton</td>
<td>42</td>
<td>$660.00</td>
<td>$27,704</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>4</td>
<td>$150.00</td>
<td>$600</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>23</td>
<td>$80.00</td>
<td>$1,856</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>1,174</td>
<td>$1.00</td>
<td>$1,174</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>1,174</td>
<td>$6.00</td>
<td>$7,045</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>2,348</td>
<td>$0.28</td>
<td>$658</td>
</tr>
<tr>
<td>Turnouts: 132#, #15 Complete</td>
<td>Each</td>
<td>2</td>
<td>$31,000.00</td>
<td>$62,000</td>
</tr>
<tr>
<td>Signals</td>
<td>Each</td>
<td>2</td>
<td>$50,000.00</td>
<td>$100,000</td>
</tr>
<tr>
<td>Labor &amp; Equipment</td>
<td>Miles</td>
<td>0.18</td>
<td>$70,000.00</td>
<td>$12,648</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Miles</td>
<td>0.18</td>
<td>$160.00</td>
<td>$29</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Miles</td>
<td>0.18</td>
<td>$500.00</td>
<td>$90</td>
</tr>
<tr>
<td>Curve Lubricator installed</td>
<td>Each</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$258,428</td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td>10%</td>
<td>$25,843</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>$284,271</td>
</tr>
</tbody>
</table>

1/ From 1997 RS Means - Site Work & Landscape Cost Data
Includes borrow, track mounted front end loader, 5 mile haul and spreading and compacting
### FCC's Alternative Routing Plan
#### CONSTRUCTION OF CONNECTION between CSX and CR Lakefront Line

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Acres</td>
<td>2.2</td>
<td>$500.00</td>
<td>$1,100</td>
</tr>
<tr>
<td>Earthwork Excavitation</td>
<td>Cubic Yd.</td>
<td>1,698</td>
<td>$10.97 / 1</td>
<td>$18,627</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>763</td>
<td>$8.00</td>
<td>$6,106</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>406</td>
<td>$6.00</td>
<td>$2,438</td>
</tr>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>587</td>
<td>$25.30</td>
<td>$14,853</td>
</tr>
<tr>
<td>Rail - New 115 Lb.</td>
<td>Ton</td>
<td>37</td>
<td>$600.00</td>
<td>$21,942</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>4</td>
<td>$150.00</td>
<td>$600</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>23</td>
<td>$80.00</td>
<td>$1,856</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>1,174</td>
<td>$1.00</td>
<td>$1,174</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>1,174</td>
<td>$6.00</td>
<td>$7,045</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>2,348</td>
<td>$0.28</td>
<td>$658</td>
</tr>
<tr>
<td>Turnouts: 115#, #15 Complete</td>
<td>Each</td>
<td>2</td>
<td>$31,000.00</td>
<td>$62,000</td>
</tr>
<tr>
<td>Signals</td>
<td>Each</td>
<td>2</td>
<td>$50,000.00</td>
<td>$100,000</td>
</tr>
<tr>
<td>Labor &amp; Equipment</td>
<td>Miles</td>
<td>0.18</td>
<td>$70,000.00</td>
<td>$12,648</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Miles</td>
<td>0.18</td>
<td>$160.00</td>
<td>$29</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Miles</td>
<td>0.18</td>
<td>$500.00</td>
<td>$90</td>
</tr>
<tr>
<td>Curve Lubricator installed</td>
<td>Each</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$252,666</td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td>10%</td>
<td>$25,267</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>$277,933</td>
</tr>
</tbody>
</table>

1/ From 1997 RS Means - Site Work & Landscape Cost Data
   Includes borrow, track mounted front end loader, 5 mile haul and spreading and compacting
### FCC's Alternative Routing Plan

**CONSTRUCTION OF CONNECTION between EJE and NS at Van Loon**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Costing Unit</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Acres</td>
<td>2.2</td>
<td>$500.00</td>
<td>$1,100</td>
</tr>
<tr>
<td>Earthwork Excavation</td>
<td>Cubic Yd.</td>
<td>1,698</td>
<td>$10.97 1/</td>
<td>$16,627</td>
</tr>
<tr>
<td>Ballast</td>
<td>Cubic Yd.</td>
<td>763</td>
<td>$8.00</td>
<td>$6,106</td>
</tr>
<tr>
<td>Subballast</td>
<td>Cubic Yd.</td>
<td>406</td>
<td>$6.00</td>
<td>$2,438</td>
</tr>
<tr>
<td>Ties - Grade 5</td>
<td>Each</td>
<td>587</td>
<td>$25.30</td>
<td>$14,853</td>
</tr>
<tr>
<td>Rail - New 115 Lb.</td>
<td>Ton</td>
<td>37</td>
<td>$600.00</td>
<td>$21,942</td>
</tr>
<tr>
<td>Rail Welds - Field</td>
<td>Each</td>
<td>4</td>
<td>$150.00</td>
<td>$600</td>
</tr>
<tr>
<td>Rail Welds - Shop</td>
<td>Each</td>
<td>23</td>
<td>$80.00</td>
<td>$1,856</td>
</tr>
<tr>
<td>Rail Anchors</td>
<td>Each</td>
<td>1,174</td>
<td>$1.00</td>
<td>$1,174</td>
</tr>
<tr>
<td>Tie Plates - New</td>
<td>Each</td>
<td>1,174</td>
<td>$6.00</td>
<td>$7,045</td>
</tr>
<tr>
<td>Track Spikes</td>
<td>Each</td>
<td>2,348</td>
<td>$0.28</td>
<td>$658</td>
</tr>
<tr>
<td>Turnouts: 115#, #15 Complete</td>
<td>Each</td>
<td>2</td>
<td>$31,000.00</td>
<td>$62,000</td>
</tr>
<tr>
<td>Signals</td>
<td>Each</td>
<td>2</td>
<td>$50,000.00</td>
<td>$100,000</td>
</tr>
<tr>
<td>Labor &amp; Equipment</td>
<td>Miles</td>
<td>0.18</td>
<td>$70,000.00</td>
<td>$12,648</td>
</tr>
<tr>
<td>Brush Cutting</td>
<td>Miles</td>
<td>0.18</td>
<td>$160.00</td>
<td>$29</td>
</tr>
<tr>
<td>Herbicide Application</td>
<td>Miles</td>
<td>0.18</td>
<td>$500.00</td>
<td>$90</td>
</tr>
<tr>
<td>Curve Lubricator installed</td>
<td>Each</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$252,666</strong></td>
</tr>
<tr>
<td><strong>Contingencies</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$277,933</strong></td>
</tr>
</tbody>
</table>

1/ From 1997 RS Means - Site Work & Landscape Cost Data
Includes borrow, track mounted front end loader, 5 mile haul and spreading and compacting.
FORENSIC ENGINEERING QUALIFICATIONS

Mr. Dunn is a Licensed Professional Engineer with more than 40 years of experience in the design, construction, maintenance, and operation of railroads and rail rapid transit systems; including ten years with the Baltimore & Ohio Railroad and personal involvement in major engineering projects of 18 railroads and 17 rail rapid transit properties throughout North America (In more than 40 states, D.C. and 6 provinces). He is knowledgeable of European and Asian railway standards and practices through professional involvement there. His railway and rail transit consulting services include: forensic railway engineering, track failure/derailment investigations, railroad and crossing accident investigations, construction audits/overviews, construction claims investigations, track construction/maintenance inspections, laboratory tests monitoring, track material procurement inspection, and technical input/expert witness testimony for plaintiffs or defendants in litigation and arbitration cases, including construction claims, wrongful death, personal injury and FELA claims.

In addition to forensic testimony based upon his professional engineering background, Mr. Dunn, relying upon his extensive experience, training and knowledge of railroad industry practices, including operations, rules, statutes, training, and maintenance, has also testified to: main line and yard operations, switching and kicking of cars (including placarded cars), radio communications, couplers and coupling/uncoupling of cars, event recorders, handholds and sill steps, railroad operating and safety rules, employee training, derailment and accident investigations, clearances, function and operation of switches and derailers, maintenance tools/equipment, maintenance standards/practices, walkways/walking conditions, vegetation, lighting, blue flags, air hoses and hand brakes, yard layout, track and train inspections, turntables, and human factors.

He earned a B.S. Engineering, at Johns Hopkins University and is: a Board Certified DIPLOMATE-FORENSIC ENGINEER; a FELLOW in ASCE, NAFE and ITE; a LIFE MEMBER of AREA; a MEMBER of APTA, CSCE, CSI, NARSCI, NSPE, SAME, TRB and VSPE; an active member of 6 technical committees in those organizations, and of a select panel of THE NATIONAL ACADEMY OF SCIENCES-NRC/TRB; and an ARBITRATOR in the American Arbitration Association.

Ronald H. Dunn, P.E., F.ASCE

President

EDUCATION:
Johns Hopkins University, B.S. Engineering

MANAGEMENT TRAINING:
- Dimensional Management Training Program
- Design Professionals Liability Course
- Virginia Construction Law
- The Engineer As An Expert Witness
- Claims Arbitration Training
- The Role of Expert Witnesses.

PROFESSIONAL SOCIETY MEMBERSHIPS AND AFFILIATIONS:
- American Arbitration Association - Arbitrator, Construction Industry
- American Public Transit Association
- American Railway Engineering Association - Life Member
- American Society of Civil Engineers - Fellow
- Canadian Society For Civil Engineering
- Construction Specifications Institute
- Institute of Transportation Engineers - Fellow
- National Academy of Sciences - NRC/TRB/FTA/TDC
- National Association of Railroad Safety Consultants and Investigators
- National Institute for Engineering Ethics
- National Society of Professional Engineers
- Roadmasters and Maintenance-of-Way Association of America
- Society of American Military Engineers
- Transportation Research Board, National Research Council
- U.S. Department of Transportation, 1968-1971
- Virginia Society of Professional Engineers

PROFESSIONAL EXPERIENCE:
Mr. Dunn is a Licensed Professional Engineer with more than 40 years of diversified experience in railroad and rail transit engineering. He has been personally involved in engineering of major yard, shop and trackwork projects of 18 railroads and 17 rail rapid transit properties throughout North America.
December, 1983 - Present:

- Current and recent assignments include design criteria preparation and review for yards and trackwork, construction overview, construction inspection, track inspection, inspection training, maintenance manual preparation, maintenance planning, derailment investigation, cost estimating, claim investigation, material procurement inspection, laboratory tests monitoring, staff and organization planning, supplemental technical staff, proposal assistance, and expert forensic engineering testimony. Clients for which these services have been provided include: Massachusetts Bay Transportation Authority (MBTA); Metro Canada Limited (MCL); Urban Transportation Development Corp. (UTDC); UTDC (USA), Inc.; Teledyne Engineering Services, Inc.; City of Calgary, Alberta; Port Authority (Transit) of Allegheny County (PAT); British Columbia Transit (BCT); Ontario Ministry of Transportation and Communications; City and County of Honolulu, HI; County of Maui, HI; Union Pacific Railroad; U.S. Department of Interior; Santa Clara County (CA) Transportation Agency; Metro Dade Transit Agency (Miami); City of Chicago; Consolidated Rail Corp.; U.S. Naval Facilities Engineering Command (Pacific Division); U.S. Department of Justice/EPA; and many major law firms throughout the United States.

May, 1978 - April, 1984:
Parsons Brinckerhoff Quade & Douglas, Inc., McLean, VA and Pittsburgh, PA, Vice President, Technical Director-Railway Engineering, Professional Associate.

- As Technical Director, responsible for quality of technical production and for staffing and training of personnel resources of firm's railway engineering projects; managed projects and actively involved in business development, management and administration of firm's Railway Division.

- Developed and conducted a formal training program on the principles of track design, fabrication, construction, and inspection. Program included 26 hours of classroom and field instruction for staff of 25 engineers responsible for monitoring and inspecting work of all trackwork material suppliers and installation contractors on a major transit project.

- Area Manager responsible for overall management and operation of firm's McLean, VA office in addition to management of the Railway Division.

- Principal-in-Charge and Project Director for preliminary and final design of trackwork and material procurement documents for advanced light rail transit (ALRT) system of Metro Canada Limited in Vancouver, B.C., a fully automated, 14-mile linear induction rail transit system.

- Principal-in-Charge and Project Director for preliminary and final design of trackwork for Detroit Central Automated Transit System (CATS), a fully automated, linear induction rail transit system for the Southeastern Michigan Transportation Authority (SEMTA).

- Principal-in-Charge of final design of a 60 mile coal haul railroad for unit train operation in Utah for a major coal company. This major branch line will comprise part of the D&RGW Railroad system.

- Principal-in-Charge and Project Director for forensic investigation of track failure, preparation of bid documents for material procurement and reconstruction of direct fixation track and resident engineering services during reconstruction under revenue traffic for City of Calgary, Alberta, light rail transit (LRT) system. Engineering consultant for extension to LRT system for City of Calgary.
o Technical Consultant on "Project Yellow", a vital $460 million joint venture engineering and construction project of the Union Pacific Railroad and the Chicago and North Western Railroad.

o Project Director for development of trackwork design criteria and directive drawings for governing final design of Guadalupe Corridor light rail transit project, San Jose, CA.

o Principal-in-Charge and Project Director for final design of trackwork, (including yards trackage), material procurement documents and floating slabs, and for provision of material procurement inspection services for light rail rapid transit system of Niagara Frontier Transportation Authority (NFTA), Buffalo, NY.

o Chief Trackwork Engineer for the Frankford Elevated Structure Rehabilitation Project for the City of Philadelphia/Southeastern Pennsylvania Transportation Authority (SEPTA). This rehabilitation project was planned for being accomplished under revenue traffic.

o Principal-in-Charge for trackwork material procurement and final design documents required on the Newark City Subway Rehabilitation Project for New Jersey Transit (NJT), a major track rehabilitation project performed under revenue traffic.

o Trackwork Project Manager for Commuter Rail Improvement Program of MBTA in Boston. Project involved track inspection of all track, formulation of recommendations and engineering for rehabilitating seven commuter rail lines. Program work included track undercutting, drainage improvements, grade crossing improvements, cross tie renewal, turnout renewal, surfacing and lining, and laying of continuous welded rail under commuter traffic conditions, and coordination with operating department of MBTA.

o Responsible for preparation of trackwork design criteria and technical specifications for material procurement for LRT track rehabilitation of PAT, Pittsburgh, PA.

February, 1976 - May, 1978:
Morrison-Knudsen Co., Inc., Boise, ID, Director-Railroad Engineering.

o In this position, Mr. Dunn had overall responsibility for creation and management of a railroad engineering organization performing conceptual and detail design of railroad maintenance shops; preliminary and detail design of railroad branch lines to serve new coal mines; and studies comparing economics of alternative modes of coal transportation.

February, 1973 - February, 1976:
PBTE, Atlanta, GA, Manager of Engineering Support.

o In this position, Mr. Dunn, for the Parsons Brinckerhoff joint venture engaged as the General Engineering Consultant of the Metropolitan Atlanta Rapid Transit Authority (MARTA) Project, developed and managed a large multidisciplined department comprised of Railroad, Rail Facilities, Survey, Acoustics, and Utility Sections. He was responsible for the technical review and coordination of all design work with the 29 railroads, agencies and utilities affected by the Project. Was also responsible for conceptual, preliminary and final design of rail transit yards, shops and trackwork; writing the design review procedures and the surveying and mapping specifications; contract administration and technical management of surveying and photogrammetric mapping; and was the technical manager of the noise and vibration consultant's Work.
June, 1966 - February, 1973:
De Leuw, Cather & Co., Washington, DC, Chief Engineer-Yards, Shops & Trackwork.

His major responsibilities on Washington, DC Metro Project included: development of design criteria and directive drawings; final design, cost estimates of major repair yard, all trackwork (including state-of-the-art direct fixation rail fastener specifications), 3 service and inspection yards; engineering of noise and vibration control features, including floating slabs for special trackwork; direction of staff engaged in comprehensive study of track design, construction and maintenance practices of North American and European rail transit systems; and an in-depth analytical investigation of track design principles, including an economic study of track structure components. Was Project Engineer for final design of Major Repair Shop, procurement of shop equipment and for conceptual design of Service & Inspection Shops.

November, 1958 - June, 1966:
Baltimore and Ohio Railroad (Chessie System) Baltimore, MD.

Mr. Dunn's various assignments included:

- Resident engineer for construction of a power plant and facilities to expand railroad's coal-handling capacity. Responsibilities included route location and preparation of plans and cost estimates for alignment changes, relocation of main tracks, and construction of new branch lines, sidings and yards. Was also involved in all facets of track maintenance, on-site studies into causes of major train derailments, train movements of continuous welded rail (CWR), laying of CWR in-track, and engineering design and surveying of the railroad's TOFCEE facility in Baltimore.

PUBLICATIONS AND PAPERS:

HONORS:
Verification

State of Indiana  
County of Lake  

Gregg L. Heinzman, being duly sworn, deposes and says that he has read the foregoing Verified Statement, knows the contents thereof, and that the same are true as stated except as to those statements made on information and belief, and as to those, that he believes them to be true.

[Signature]

Subscribed and sworn to before me
this 7th day of October, 1997.

[Signature]
Notary Public for Lake County, Indiana.

My commission expires 5-24-01.
Verification

State of Virginia  
County of James City

Ronald H. Dunn, P.E., being duly sworn, deposes and says that he has read the foregoing Verified Statement, knows the contents thereof, and that the same are true as stated except as to those statements made on information and belief, and as to those, that he believes them to be true.

Subscribed and sworn to before me this 14th day of October, 1997.

Carol W. Adams  
Notary Public for James City County, Virginia

My commission expires 12-31-2000.
October 9, 1997

VIA HAND DELIVERY

Mr. Vernon A. Williams, Secretary
Surface Transportation Board
1925 K Street, N.W., Seventh Floor
Washington, DC 20423-0001

Re: CSX Corp./Norfolk Southern Corp. -- Control and Operating Leases/Agreement -- Conrail: Finance Docket No. 33388

Dear Secretary Williams:

Enclosed are the original and 25 copies of a “Motion In Limine” (ACE, et al.-17) for filing in the above-referenced proceeding. Also enclosed is a 3.5" diskette containing the documentation in WordPerfect format.

Please date stamp and return the enclosed three additional copies via our messenger.

Very truly yours,

Michael F. McBride
Bruce W. Neely
Linda K. Breggin
Brenda Durham
Joseph H. Fagan

Attorneys for American Electric Power, Atlantic City Electric Company, Delmarva Power & Light Company, and Indianapolis Power & Light Company

cc: All Parties of Record
BEFORE THE  
SURFACE TRANSPORTATION BOARD  

________________________________________  
Finance Docket No. 33388  

CSX CORPORATION AND CSX TRANSPORTATION, INC.,  
NORFOLK SOUTHERN CORPORATION AND  
NORFOLK SOUTHERN RAILWAY COMPANY  
---CONTROL AND OPERATING LEASE/AGREEMENTS---  
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION  

MOTION IN LIMINE  

Atlantic City Electric Company, American Electric  
Power, Delmarva Power & Light Company, and Indianapolis Power &  
Light Company, ("Movants"), by and through undersigned counsel,  
respectfully file this Motion in Limine, and request that the  
Surface Transportation Board ("Board") issue an order limiting  
Applicants' presentation of their rebuttal evidence pertaining to  
the Comments and evidence that Movants intend to file in this  
proceeding. Movants request an order imposing the same  
limitations on Applicants' rebuttal evidence that were imposed on  
Movants during the discovery process. Such an order will ensure  
that, in the circumstances now limiting the information available
to Movants, all parties' interests are protected as fairly as possible. Obviously, it would be unfair if Applicants are allowed to rebut Movants' evidence on the proposed Application with information or documents that Applicants themselves successfully resisted furnishing to Movants during discovery, or themselves claimed are not relevant, or which the Board said were not relevant, or which the Board said were not relevant. See Applicants' Response to Appeal of Atlantic City Electric Company et al. (ACE, et al.-6), filed July 25, 1997; see also Decision No. 17 at 2, 3 ("the material that ACE seeks would in [no] way aid our resolution of those issues"); Decision No. 42.

Prior to the adoption of modern discovery rules, litigation was conducted under a "philosophy that a judicial proceeding was a battle of wits rather than a search for the truth." Wright, Miller & Marcus, 8 Federal Practice and Procedure, at 40. Thereafter, discovery rules were adopted to avoid litigation by surprise. The Supreme Court has summarized the current discovery process this way:

The various instruments of discovery now serve (1) as a device, along with the pre-trial hearing under Rule 16, to narrow and clarify the basic issues between the parties, and (2) as a device for ascertaining the facts, or information as to the existence or whereabouts of facts, relative to those issues. Thus
civil trials in the federal courts no longer need be carried on in the dark. The way is now clear, consistent with recognized privileges, for the parties to obtain the fullest possible knowledge of the issues and facts before trial. [emphasis added.]

The Board's general approach in its various proceedings has also been to follow the discovery rules in the Federal courts, with some limitations.

A motion in Limine is appropriate to bar specific evidence or arguments that may be unnecessarily cumulative, create unfair prejudice, or confuse the issues based upon the grounds available under the Federal Rules of Civil Procedure and the Federal Rules of Evidence. In recent years, the motion in limine has "become widely recognized as a salutary device to avoid . . . unfairly prejudicial evidence . . . ." Further, many courts encourage the use of the motion "to exclude evidence based upon Rule 403 objections." Federal Rule 403 allows for

1 See, Fed. R. Civ. P. 16(4)(c).
2 See, Fed. R. Evid. 103, 403.
4 Weinstein's Federal Evidence, § 403.02[1](b). Federal Rule of Evidence 403 states:

[although relevant, evidence may be excluded if its (continued...)}
the exclusion of evidence which may create "unfair prejudice,"
meaning 'an undue tendency to suggest decision on an improper
basis . . . ."^5

In Wagschal v. Sea Ins. Co., the Court stated that
"[p]ursuant to Rule 403, Fed. R. Evid., otherwise admissible
evidence may be excluded if its probative value is substantially
outweighed by the danger of unfair prejudice."^6 Similarly, the
Court in Hendrix v. Raybestos-Manhattan, Inc., explained that
"Rule 403 requires the judge to 'balance the probative value of
and the need for the evidence against the harm likely to result
from its admission.'"^7 Judge Leventhal adopted such an approach
in Decision No. 11, which the board followed in affirming
Decision No. 11 in Decision No. 17.

^4(...continued)
probative value is substantially outweighed by the danger of
unfair prejudice, confusion of the issues, . . . or by
considerations of undue delay, waste of time, or needless
presentation of cumulative evidence.

^5Fed. R. Evid. 403 Advisory Committee Notes.


^7776 F.2d 1492, 1501 (11th Cir. 1985) (quoting Fed. R. Evid.
403 Advisory Committee Notes).
The Board's Rules of Practice, consistent with the Federal Rules of Evidence, protect the rights of the parties before it.

Any evidence which is sufficiently reliable and probative to support a decision under the general statutes of the United States, or under the rules of evidence governing proceedings in matters not involving trial by jury in the courts of the United States, will be admissible in hearings before the Commission. The rules of evidence will be applied in any proceeding to the end that necessary and proper evidence will be conveniently, inexpensively, and speedily produced, while preserving the substantial rights of the parties.°

In this proceeding, the substantial rights of Movants are at risk if Applicants are allowed to present evidence in rebuttal that was denied to Movants during the discovery process. This motion in limine asks only that the parties be placed in equal position to one another.

On July 3, 1997, Movants served "Atlantic City Electric Company, et al.'s First Set of Interrogatories an. First Set of Requests for Production of Documents" (ACE, et al. -2, -3, and -4) upon Conrail, CSX, and Norfolk Southern, respectively. Movants' requests for production of documents sought information to test whether the Applicants' actual rate-setting practices conform to

the Board's standard presumption in railroad merger and acquisition proceedings. The first two requests sought Applicants' bids for certain movements of coal by unit trains or trainloads since 1978 and documents relating thereto. The third request for production sought Applicants' 100% traffic tapes from 1978 through the second quarter of 1997.

Applicants objected to Movants' July 3, 1997 document requests for production, claiming the requests were overbroad, unduly burdensome, and not relevant or likely to lead to the discovery of admissible evidence. In Decision No. 11, issued and served on July 18, 1997, Judge Leventhal determined that at least some of the documents requested by Movants were relevant or reasonably calculated to lead to the production of evidence.

On September 4, 1997, after concluding that the evidence produced by Applicants in response to Movants' earlier discovery efforts was limited to present a complete presentation to the Board of the sort that Movants' experts believed was necessary (see Appeal of ACE, et al., filed July 22, 1997, Exhibit C), many of these Movants also served on Applicants, "Atlantic City Electric Company, et al.'s Second Set of Interrogatories and Request for Production of Documents to Applicants" (ACE, et al., 11) and requested that Applicants provide and state all revenue-masking factors applicable to the "1% Waybill Samples" filed with the ICC/STB from 1978 through the most recently-filed time period. Applicants objected to those requests, but Judge Leventhal sided in part with Movants. Applicants appealed, as did Movants, and in Decision No. 42, the Board denied Movants all such information.
relevant to the subject matter of this proceeding, but limited
the required production in light of the burden on Applicants.
Decision No. 11 limited production of documents to (a) a certain
number of years for each Applicant; (b) Conrail-served
destinations only; and (c) information related only to Movants’
plants. In Decision No. 17, served August 1, 1997, the Board
affirmed the limits on discovery imposed by Judge Leventhal’s
ruling, finding that the other information and documents sought
by Movants would “in no way” assist the Board in its decision in
this proceeding, despite Movants’ vigorous arguments that the
documents were necessary to meet the standard set forth by the
Interstate Commerce Commission (“ICC”) and affirmed by the United
States Court of Appeals for the District of Columbia Circuit for
determining whether the Applicant railroads set their rates to
maximize net revenues. Western Resources, Inc. v. Surface
Transportation Bd., 109 F.3d 782, 787 (D.C. Cir. 1997) (quoting
Burlington Northern/Santa Fe, Finance Docket No. 32549, served
August 23, 1995, slip op. at 70). Subsequently, Judge Leventhal
allowed Indianapolis Power & Light Company, New York State
Electric & Gas Company, and Niagara Mohawk Power Corporation to
obtain similar information under the same restrictions applicable to Movants.

Movants' intend to file comments and evidence in response to the Application. However, because of Decision Nos. 11 and 17, Movants' consultants must analyze how Applicants set their rates utilizing only the information and documents that Movants were permitted to obtain by these Decisions or that is otherwise publicly available (i.e., that which is on "Waybill Samples").

Finally, in Decision No. 42, the Board determined that it would not provide Movants with the masking factors for the revenues on the Waybill Samples, holding that the masking factors "are not relevant to any legitimate issue raised by [M]ovants here." Decision No. 42 at 7. The Board went so far as to find Movants' effort to show that they are at risk of rate increases "highly questionable." Id. at 8. While Movants vigorously disagree with the Board's rulings on relevance, those rulings must be applied even-handedly to all parties.

In light of the limitations imposed by Decision No. 11 and confirmed by Decision Nos. 17 and 42, Movants request that Applicants' rebuttal evidence be limited in the same manner.
Movants' request that Applicants specifically not be allowed to introduce into evidence, in their rebuttal in support of the Application, *any* documentary evidence or information that Movants were precluded from examining as a result of the limitations imposed by Decision Nos. 11, 17, and 42.

The data that Movants were permitted to obtain in discovery should be the only data that Applicants can use in their presentation of rebuttal evidence when responding to Movants' Comments, because as to any other information and documents, Movants will have been deprived of that latter information and documentation and will not have been afforded an opportunity to question and analyze that latter evidence. Applicants have argued that the information and documents requested by Movants are not relevant to the issues presented in this proceeding. Therefore, such a limitation will not harm Applicants' ability to present their rebuttal. In contrast, Movants will suffer unfair prejudice if Applicants are allowed to present evidence that Movants were denied. In their rebuttal, Applicants should not be permitted to present or rely on in any way the documentary evidence and information that Movants were denied during the discovery process. Such an order would place
the same limitation on Applicants that was imposed on Movants and is consistent with preserving the interest of justice and assures fairness in this proceeding.

If Movants were denied access to information that will be relied upon by Applicants in their rebuttal case or make up part of their rebuttal evidence, Movants will have been denied procedural due process because the Procedural Schedule adopted in Decision No. 6 would deny Movants the opportunity to take evidence on Applicants' heretofore undisclosed documents and information and would also prevent Movants from submitting evidence in surrebuttal to that previously undisclosed information.

Moreover, an order by the Board limiting the documents that Applicants may present in their rebuttal that pertain to Movants' comments and evidence is appropriate at this time, because it will give all parties ample notice that the Board intends to consider one universe of information and documents on coal rate issues, acquisition premium, and jurisdictional threshold matters, so that Movants and Applicants may prepare their pleadings accordingly. One purpose of the motion in limine
is to "procure a definitive ruling on the admissibility of evidence at the outset of trial."\textsuperscript{10}

An order from the Board is also appropriate at this time because it would avoid the far less effective and burdensome alternative of requiring Movants to move to strike the disputed evidence. A motion to strike is not an effective solution because the disputed evidence may permeate Applicants' rebuttal and therefore be impossible to ignore or extricate. As stated by CSX counsel elsewhere in this proceeding, one can't "unring the bell." Applicants' Appeal filed September 8, 1997 (CSX/NS-70) at 9.

\textbf{WHEREFORE, in consideration of the foregoing, the Movants respectfully request that the Board issue an order precluding Applicants, in rebuttal to comments and evidence due October 21, from offering or relying on any information or}

\textsuperscript{10}Wright & Graham, Federal Practice and Procedure: Evidence § 5037. See also, Reidelberger v. Highland Body Shop, 416 N.E.2d 268, 271 (Ill. 1981) (motion allows a party to obtain an order before trial excluding evidence).
documents requested in discovery by Movants but which Applicants
did not produce during the discovery process.

Respectfully submitted,

[Signature]
Michael F. McBride
Bruce W. Neely
Linda K. Breggin
Brenda Durham
Joseph H. Fagan
LeBoeuf, Lamb, Greene
& MacRae, L.L.P.
1875 Connecticut Avenue, N.W.
Suite 1200
Washington, D.C. 20009-5728
(202) 986-8000 (Telephone)
(202) 986-8102 (Facsimile)

Attorneys for Atlantic City
Electric Company, American
Electric Power, Delmarva Power &
Light Company, and Indianapolis
Power & Light Company

Dated: October 9, 1997
BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.,
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
-- CONTROL AND OPERATING LEASES/AGREEMENTS --
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

CERTIFICATE OF SERVICE

I hereby certify that I have served this 9th day of
October, 1997, a copy of the foregoing "Motion in Limine" (ACE, et al.,-17) by first-class mail, postage prepaid, upon all parties
of record and by facsimile upon each of the following persons:

Patricia Bruce, Esq.              Steptoe & Johnson
Zuckert, Scoult                  1330 Connecticut Avenue, N.W.
 & Rasenberger, L.L.P.           Washington, DC 20036
Brawner Building                 VIA FACSIMILE
888 17th Street, N.W.            Gerald P. Norton, Esq.
Washington, DC 20006-3939        Harkins Cunningham
VIA FACSIMILE                     1300 19th Street, N.W.
Drew A. Harker, Esq.             Suite 600
Chris Datz, Esq.                  Washington, DC 20036
Susan Cassidy, Esq.              VIA FACSIMILE
Arnold & Porter                  Michael F. McBride
555 12th Street, N.W.            ____________________________
Washington, DC 20004-1202         Michael F. McBride
VIA FACSIMILE
BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
—CONTROL AND OPERATING LEASES/AGREEMENTS—
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

MOTION OF ORANGE AND
ROCKLAND UTILITIES INC. FOR
LEAVE TO LATE FILE ITS
NOTICE OF INTENT TO
PARTICIPATE

Orange and Rockland Utilities, Inc. ("Orange and Rockland") hereby requests leave of the Board to file its Notice of Intent to Participate in this proceeding out of time. Good cause exists for granting this motion, which will not prejudice the Applicants, other parties or the Board. Orange and Rockland does not seek to extend any forthcoming deadline in the procedural schedule, but plans to file its comments on the Application on October 21, 1997.

Orange and Rockland is an investor-owned electric and gas utility in southeastern New York which serves over 266,000 electric customers in New York, New Jersey and Pennsylvania. As relevant to this proceeding, Orange and Rockland receives approximately 700,000
tons of coal annually at its Lovett Plant, all of which is currently delivered in unit train service by Conrail. A small amount of this coal moves to the Lovett Plant in single line service via Conrail, but most of the coal moves in joint line service via Norfolk Southern and Conrail.

If the Application of NS, CSX and Conrail is approved, CSX will replace Conrail as the sole railroad delivering coal to Orange and Rockland, NS will originate all coal shipments in the near future, and it appears that at least one of the current interchange points for rail service to the Lovett Plant will be eliminated or changed.

Despite its status as a significant customer, Orange and Rockland has received little information about the Applicants' plans for future service. Within the last few days, Orange and Rockland has been given erroneous or inconsistent information about future routings. Orange and Rockland has never intended to oppose the breakup of Conrail, but has recently concluded that it needs to make its concerns known to the Board.

Orange and Rockland has learned in the last few weeks of service problems following the UP/SP merger. Coal storage capacity at the Lovett Plant is limited, and if service problems similar to those recently experienced by Union Pacific were to occur in the aftermath of the Conrail breakup and were to affect service to Orange and Rockland, outages at the Lovett Plant could occur. The adverse impact on Orange and Rockland would be severe.
Acceptance of Orange and Rockland's Notice of Intent to Participate for filing out of time will not delay proceedings, because Orange and Rockland will file its comments by the existing October 21, 1997 deadline, and has no present plans to seek discovery of the Applicants.\footnote{Orange and Rockland does plan to review relevant documents in the Applicants' document depository.}

WHEREFORE, Orange and Rockland's motion for leave to late file its notice of intent to participate should be granted.

Respectfully submitted,

JOHN M. CUTLER, JR.
DANIEL J. SWEENEY
MCCARTHY, SWEENEY &
HARKAWAY, P.C.
Suite 1105
1750 Pennsylvania Avenue, N.W.
Washington, DC 20006
(202) 393-5710

Attorneys for Orange and
Rockland Utilities, Inc.

Dated: October 8, 1997
CERTIFICATE OF SERVICE

I hereby certify that I have this 8th day of October, 1997, caused the foregoing document to be served by first-class mail on counsel for the applicants and on the FERC Administrative Law Judge assigned to handle discovery matters, as indicated below. Copies have also been served by first-class mail on all parties of record on the official service list.

Richard A. Allen
James A. Calderwood
Zuckert, Scoult & Rasenberger, LLP
888 17th Street, N.W., #600
Washington, D.C.  20006

James L. Howe, III
George A. Aspatore
Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510

Dennis G. Lyons
Richard L. Rosen
Arnold & Porter
555 12th Street, N.W.
Washington, D.C.  20004

P. Michael Giftos
Paul R. Hitchcock
CSX Transportation, Inc.
500 Water Street
Jacksonville, FL  32202

Paul A. Cunningham
Robert M. Jenkins, III
Harkins Cunningham
1300 19th Street, N.W., #600
Washington, D.C.  20036

Constance L. Abrams
Consolidated Rail Corporation
Two Commerce Square
2001 Market Street
Philadelphia, PA  19103

John M. Nannes
Scot B. Hutchins
Skadden, Arps, Slate Meagher & Flom, LLP
1440 New York Avenue, N.W.
Washington, D.C.  20005

Samuel M. Sipe, Jr.
Timothy M. Walsh
Steptoe & Johnson, LLP
1330 Connecticut Avenue, N.W.
Washington, D.C.  20036

Mark G. Aron
Peter J. Shudtz
CSX Corporation
One James Center
902 East Cary Street
Richmond, VA  23129

The Honorable Jacob Leventhal
Administrative Law Judge
Federal Energy Regulatory Comm’n
Suite 11F
888 First Street, N.E.
Washington, D.C.  20426

John M. Cutler, Jr.
Mr. Vernon A. Williams  
Office of the Secretary  
Case Control Board  
Attention STB Finance Docket 33388  
Surface Transportation Board  
1925 K Street, N.W.  
Washington, DC 20423-0001  

RE: Finance Docket No. 33388 CSX Corp. et. al., Norfolk Southern Corp. et. al., Control and operating leases/agreements  
Conrail Inc. et. al., transfer of railroad line by Norfolk Southern Railway Co. to CSX  

Dear Sir: /Madam:  
Enclosed are an original and ten copies of a Motion for Leave to  
Late-File a Notice of Intent to participate in the above referenced  
proceedings. All service requirements have been met.  

Thank you for your consideration in this matter.  

Very truly yours,  

Samuel J. Nasca  
Director/Chairperson  

SJN:bp  
Enc.  

OCT - 3 1997  
Part of Public Record
BEFORE THE 
SURFACE TRANSPORTATION BOARD

CSX CORPORATION AND CSX
TRANSPORTATION, INC., NORFOLK
SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY
COMPANY -- CONRAIL AND OPERATING
LEASES/AGREEMENTS -- CONRAIL, INC.
AND CONSOLIDATED RAIL CORPORATION

Finance Docket No. 33388

MOTION FOR LEAVE TO LATE-FILE
A NOTICE OF INTENT TO PARTICIPATE

Pursuant to Decision No. 21 in the above-captioned proceeding, served August 19, 1997, the New York State Legislative Board, of the United Transportation Union, by and through its Director, Samuel J. Nasca, respectfully requests authority to participate in this proceeding.

Also enclosed are an original and ten copies of a certificate of service as required by Decision 21, and a copy of all previous filings.

Pursuant to Decision No. 21, the New York State Legislative Board and Samuel J. Nasca, certifies that all Parties of Record on the service list attached to Decision No. 21 and Decision No. 27 have been served (see attached Certificate of Service).
Dated: September 30, 1997
Albany, New York

Respectfully submitted

By: [Signature]

Samuel J. Nasca
Legislative Director
United Transportation Union
35 Fuller Road Ste 205
Albany, New York 12205
Certificate of Service

I, the New York State Legislative Board by and through its Director, Samuel J. Nasca hereby certify that on September 30, 1997, I caused a copy of the foregoing Motion for Leave to Late-File a Notice of Intent to Participate ("Motion") and all previous filings to be served upon all Parties of Record by placing a copy of the Motion and all previous filings in a pre-paid envelope in a post office box of the United States Postal Service.

[Signature]

Samuel J. Nasca
Legislative Director
State of New York
United Transportation Union
VIA HAND DELIVERY

Honorable Vernon A. Williams
Secretary
Surface Transportation Board
1925 K Street, N.W., Room 700
Washington, D.C. 20423-0001


Dear Secretary Williams:

Enclosed you will find an original and 25 copies of the Motion of Vermont Railway, Inc. for Leave To File Late Notice of Intent to Participate in Proceeding (VTR-1) and the Notice of Intent of Vermont Railway, Inc. to Participate in Proceeding (VTR-2). Also enclosed is a 3.5 inch diskette containing the filings in WordPerfect 5.1.

Please contact the undersigned if you have any questions regarding this matter.

Respectfully submitted,

Edward J. Fishman

Enclosures

cc: All Parties of Record on Service List
BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC., NORFOLK SOUTHERN CORPORATION AND NORFOLK SOUTHERN RAILWAY COMPANY -- CONTROL AND OPERATING LEASES/AGREEMENTS -- CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION -- TRANSFER OF RAILROAD LINE BY NORFOLK SOUTHERN RAILWAY COMPANY TO CSX TRANSPORTATION, INC.

MOTION OF VERMONT RAILWAY, INC. FOR LEAVE TO FILE LATE NOTICE OF INTENT TO PARTICIPATE IN PROCEEDING

Paul M. Laurenza
Edward J. Fishman
Oppenheimer Wolff & Donnelly
1020 Nineteenth Street, N.W.
Suite 400
Washington, D.C. 20036
202-293-6300

Counsel for Vermont Railway, Inc.

Dated: October 1, 1997
BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.,
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
-- CONTROL AND OPERATING LEASES/AGREEMENT --
CONRAIL, INC. AND CONSOLIDATED RAIL CORPORATION

MOTION OF VERMONT RAILWAY, INC. FOR LEAVE TO FILE
LATE NOTICE OF INTENT TO PARTICIPATE IN PROCEEDING

Vermont Railway, Inc. ("VTR"), through its undersigned counsel, hereby moves for leave
to file the accompanying Notice of Intent of Vermont Railway, Inc. to Participate in Proceeding.
The bases for this motion are set forth below.

VTR is a short-line railroad that is engaged, inter alia, in the business of supplying
piggyback trailers to various Class I rail carriers, including CSX Transportation, Inc. ("CSXT"),
pursuant to trailer interchange agreements. VTR has been and continues to be engaged in
negotiations with CSX Intermodal, Inc. ("CSXI"), pertaining to the continuation of the
interchange agreement between VTR and CSXI, as agent for CSXT, one of the Applicants herein.
CSXI initially notified VTR on September 3, 1997, approximately one month after the date for
filing notices of intent to participate herein, that the interchange agreement would be terminated
as of September 30, 1997. On September 24, 1997, CSXI notified VTR that the effective
termination date had been postponed until November 30, 1997.
In view of the above, VTR respectfully requests that it be allowed to file late its notice of intent to participate in this proceeding. The pending termination, if not resolved by negotiation with CSXI, will adversely impact VTR's operations, including, but not limited to, its ability to compete effectively in the intermodal transportation market. Since Applicants have cited intermodal competition as a major benefit of the proposed transaction, VTR submits that its comments will be highly relevant to the Board's review of the Primary Application. Moreover, Applicants would not be prejudiced by VTR's late entry into this proceeding because comments and requests for conditions are not due until October 21, 1997.

For the foregoing reasons, VTR requests that its motion for leave to file a late notice of intent to participate be granted.

Respectfully submitted,

Paul M. Laurenza
Edward J. Fishman
Oppenheimer Wolff & Donnelly
1020 Nineteenth Street, N.W.
Suite 400
Washington, D.C. 20036
202-293-6300

Counsel for Vermont Railway, Inc.

Dated: October 1, 1997
CERTIFICATE OF SERVICE

I hereby certify that on this 1st day of October, 1997, a copy of the foregoing Motion of Vermont Railway, Inc. For Leave to File Late Notice of Intent to Participate in Proceeding, (VTR-2) was served by first class mail, postage prepaid, upon all Parties of Record on the Service List.

Edward J. Fishman
BEFORE THE SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33338

CSX CORPORATION and CSX TRANSPORTATION, INC.
NORFOLK SOUTHERN CORPORATION and
NORFOLK SOUTHERN RAILWAY COMPANY
-- CONTROL AND OPERATING LEASES/AGREEMENTS --
CONRAIL, INC. and CONSOLIDATED RAIL CORPORATION
TRANSFER OF LINE BY NORFOLK SOUTHERN RAILWAY COMPANY
TO CSX TRANSPORTATION, INC.

MOTION FOR LEAVE TO LATE-FILE A
A NOTICE OF INTENT TO PARTICIPATE

Now comes the City of Cleveland, Ohio, by and through
director of Law, Sharon Sobol Jordan and Chief Assistant
director of Law, Richard F. Horvath, and moves the Board for
Leave to file a Notice of Intent to Participate as a party
record in the above-captioned proceedings for the reasons more
fully set forth in the Memorandum attached hereto and
incorporated herein.

Respectfully submitted,

SHARON SOBOL JORDAN (0006731)
Director of Law

By:

RICHARD F. HORBATH (0030912)
Chief Assistant Director of
Law

City of Cleveland
Department of Law - Rm. 106
601 Lakeside Avenue
Cleveland, Ohio 44114
(216) 664-2808

DATE: September 9, 1997
CERTIFICATE OF SERVICE

I hereby certify that on September 9, 1997, a copy of the foregoing Motion for Leave to Late File a Notice of Intent to Participate and Memorandum of Support was served by first-class, U.S. Mail, postage prepaid, upon the following:

Honorable Jacob Leventhal
Administrative Law Judge
Federal Energy Regulatory Commission
888 - 1st Street, N.E.
Suite 11F
Washington, DC 20426 US

Richard A. Allen
Zuckert, Scout, Rasenberger
888 7th Street, NW
Suite 600
Washington, DC 20006-3939 US

William D. Ankner
Rhode Island Dept. of Transportation
Two Capitol Hill
Providence, RI 02903 US

T. Scott Bannister
T. Scott Bannister & Associates
1300 Des Moines Building
405 Sixth Avenue
Des Moines, IA 50309 US

Norman H. Barthlow
Detroit Edison
2000 Second Avenue
Detroit, MI 48226 US

James L. Belcher
Eastman Chemical Company
P.O. Box 431
Kingsport, TN 37662 US

David A. Abraham
Suite 631W
7315 Wisconsin Avenue
Bethesda, MD 20814 US

Nels Ackerson
The Ackerson Group
1275 Pennsylvania Avenue, NW
Suite 1100
Washington, DC 2004-2404 US

Charles E. Allenbaugh, Jr.
East Ohio Stone Company
2000 W. Besson Street
Alliance, Ohio 44601 US

Donald G. Avery
Slover & Loftus
1224 Seventeenth Street, NW
Washington, DC 20036-3003 US

J. R. Barbee
General Chairperson UTU
P.O. Box 9599
Knoxville, TN 37940 US

Harry C. Barbin
Barbin, Lauffer & O’Connell
608 Huntingdon Pike
Rockledge, PA 19111 US

Dinah Bear
Executive Office of the President
Council on Environmental Quality
Washington, DC 20503 US
Fay D. Dupuis  
City Solicitor  
City Hall  
801 Plum Street - Rm. 214  
Cincinnati, OH 45202 US

Gary A. Ebert  
City of Bay Village  
350 Dover Center Road  
Bay Village, OH 44140 US

Robert Edwards  
Eastern Transport & Logistics  
1109 Lanette Drive  
Cincinnati, OH 45230 US

Terrell Ellis  
CAEZWV  
P.O. Box 176  
Clay, WV 25043 US

Sara J. Fagnilli  
Director of Law  
1250 Detroit Avenue  
Lakewood, Ohio 44107 US

Carl Feller  
Dekalb Agra, Inc.  
P.O. Box 127  
4743 County Road 2A  
Waterloo, IN 46793-0127

Edward J. Fishman  
Oppenheimer, Wolf & Donnelly  
1020 Nineteenth Street, NW  
Suite 400  
Washington, DC 20036 US

Garland B. Garrett, Jr.  
North Carolina Dept. of Transportation  
P.O. Box 25201  
Raleigh, NC 27611 US

Michael J. Garrigan  
BP Chemicals, Inc.  
4440 Warrensville Ctr. Rd.  
Cleveland, OH 44128 US

David Dysard  
TMACOG  
P.O. Box 9508  
300 Central Union Plaza  
Toledo, OH 43697-9508 US

Richard S. Edelman  
Highsaw, Mahoney & Clark  
1050 Seventeenth Street, NW  
Suite 210  
Washington, DC 20036 US

Daniel R. Elliott, III  
Assistant General Counsel  
United Transportation Union  
14600 Detroit Avenue  
Cleveland, Ohio 44107 US

Robert L. Evan  
Oxychem  
P.O. Box 809050  
Dallas, TX 75380 US

Gerald W. Fauth, III  
G.W. Fauth & Associates, Inc.  
P.O. Box 2401  
116 South Royal Street  
Alexandria, VA 22314 US

Michael P. Ferro  
Millennium Petrochemical, Inc.  
11500 Northlake Drive  
Cincinnati, OH 45249 US

J.D. Fitzgerald  
UTU, General Chairperson  
400 E. Evergreen Boulevard  
Suite 217  
Vancouver, WA 98660-3264 US

Stephen M. Fontaine  
Massachusetts Central Railroad  
One Wilbraham Street  
Palmer, MA 01069 US

Richard A. Gavrill  
16700 Gentry Lane - No. 104  
Tinley Park, IL 60477 US
Richard E. Kerth  
Transportation Manager  
Champion International Corp.  
101 Knightsbridge Drive  
Hamilton, OH  45020-0001 US

David D. King  
Beaufort and Morehead RR Co.  
P.O. Box 25201  
Raleigh, NC  27611-5201 US

L.P. King, Jr.  
General Chairperson, UTU  
145 Campbell Avenue, SW  
Suite 207  
Roanoke, VA  24011 US

Mitchell M. Kraus  
General Counsel  
Transportation Communications  
International Union  
3 Research Place  
Rockville, MD  20850 US

L P. King, Jr.  
General Chairperson, UTU  
P.O. Box 25201  
Raleigh, NC  27611-5201 US

Hon. Dennis J. Kucinich  
United States House of  
Representatives  
Washington, DC  20515 US

Paul H. Lamboley  
Oppenheimer, Wolf & Donnelly  
1020 19th Street, N.W.  
Suite 400  
Washington, DC  20036 US

J. Patrick Latz  
Heavy Lift Cargo System  
P.O. Box 51451  
Indianapolis, IN  46251-0451US

John K. Leary, Gen. Manager  
Southeastern Pennsylvania  
Transportation Authority  
1234 Market Street - 5th Flr.  
Philadelphia, PA  19107-3780US

Sherri Lehman  
Director of Congressional Affairs  
Corn Refiners Association  
1701 Pennsylvania Avenue, NW  
Washington, DC  20006-5805 US

Thomas J. Litwiler  
Oppenheimer, Wolff & Donnelly  
180 N. Stetson Avenue  
45th Floor  
Chicago, IL  60601 US

Edward Lloyd  
Rutgers Environmental Law Clinic  
15 Washington Street  
Newark, NJ  07102 US

C. Michael Loftus  
Slover & Loftus  
1224 Seventeenth Street, NW  
Washington, DC  20036 US

Dennis G. Lyons  
Arnold & Porter  
555 12th Street, NW  
Washington, DC  20004-1202 US

Gordon P. MacDougall  
1025 Connecticut Avenue, NW  
Suite 410  
Washington, DC  20036 US

William G. Mahoney  
Highsaw, Mahoney & Clarke  
1050 Seventeenth Street, NW  
Suite 210  
Washington, DC  20036 US

Ron Marquardt  
Local Union 1810 UMWA  
RD #2  
Rayland, OH  43943 US
Monty L. Parker  
CMC Steel Group  
P.O. Box 911  
Seguin, TX 78156 US

Harold P. Quinn, Jr.  
Senior VP & General Counsel  
National Mining Association  
1130 Seventeenth Street, NW  
Washington, DC 20036 US

J.T. Reed  
General Chairperson UTU  
7785 Bay Meadows Way  
Suite 109  
Jacksonville, FL 32256 US

Arvid E. Roach, II  
Covington & Burling  
P.O. Box 7566  
1201 Pennsylvania Avenue, NW  
Washington, DC 20044-7566US

James F. Roberts  
210 E. Lombard Street  
Baltimore, MD 21202 US

John M. Robinson  
9916 Old Spring Road  
Kensington, MD 20895-3124US

J. L. Rodgers  
General Chairman UTU  
P.O. Box 298  
67 Main Street  
Centerbrook, CT 06409 US

G. Craig Schelter  
PIDC  
1500 Market Street  
Philadelphia, PA 19102 US

Frederick H. Schranck  
P.O. Box 778  
Dover, DE 19903 US

Larry R. Pruden  
Trans. Comm. Intl. Union  
3 Research Place  
Rockville, MD 20850 US

Mark H. Sidman  
Weiner, Brodsky, Sidman  
1350 New York Avenue, Ste. 800  
Washington, DC 20005 US

John Jay Rosacker  
KS Dept. of Transportation  
217 SE 4th Street - 2nd Floor  
Topeka, KS 66603 US

Charles M. Rosenberger  
CSX Transportation  
500 Water Street  
Jacksonville, FL 32202 US

Thomas R. Rydman, President  
Indian Creek Railroad Company  
3905 W. 600 North  
Anderson, IN 46011 US

R.K. Sargent  
General Chairperson UTU  
1319 Chestnut Street  
Kenova, WV 25530 US

Scott M. Saylor  
North Carolina Railroad Co.  
3200 Atlantic Avenue - St.110  
Raleigh, NC 27604 US

Edward J. Rodriguez  
P.O. Box 298  
67 Main Street  
Centerbrook, CT 06409 US

Patrick B. Simmors  
NC Dept. of Transport  
1 S. Wilmington Street  
Room 557  
Raleigh, NC 27611 US
Randolph L. Seger
McHale, Cook & Welch, PC
320 N. Meridian Street
Suite 1110
Indianapolis, IN 46204 US

Diane Seitz
Central Hudson Gas & Electric Corp.
284 South Avenue
Poughkeepsie, NY 12601 US

Denise L. Sejna
City Attorney
City of Hammond
5925 Calumet Avenue
Hammond, IN 46320 US

Anthony P. Semancik
347 Madison Avenue
New York, NY 10017-3706 US

Roger A. Serpe
Indiana Harbor Belt RR
175 West Jackson Blvd.
Suite 1460
Chicago, IL 60604 US

James E. Shepherd
Tuscola & Saginaw Bay
P.O. Box 550
Owosso, MI 48867-0550 US

Philip G. Sido
Union Camp Corporation
1600 Valley Road
Wayne, NJ 07470 US

Charles A. Spitulnik
Hopkins & Sutter
888 Sixteenth Street, N.W.
Washington, DC 20006

K. N. Thompson
General Chairperson UTU
11017-F Gravois Industrial Plaza
St. Louis, MO 63128

William C. Sippel
Oppenheimer, Wolff & Donnelly
180 N. Stetson Avenue
Two Prudential Plaza-45th Flr
Chicago, IL 60601 US

Richard G. Slattery
Amtrak
60 Massachusetts Avenue, NE
Washington, DC 20002 US

William L. Slover
Slover & Loftus
1224 Seventeenth Street, NW
Washington, DC 20036-3003 US

Garret G. Smith
Mobil Oil Corporation
3225 Gallows Road - Rm. 8A903
Fairfax, VA 22037-0001 US

Paul Samuel Smith
U.S. Dept. of Transportation
400 7th Street, SW
Room 4102 C-30
Washington, DC 20590 US

Mike Spahis
Fina Oil & Chemical Co.
P.O. Box 2159
Dallas, TX 75221 US

Kenneth E. Siegel
American Trucking Association
2200 Mill Road
Alexandria, VA 22314-4677 US

J. E. Thomas
Hercules Incorporated
1313 North Market Street
Wilmington, DE 19894

Mary Gabrielle Sprague
555 Twelfth Street, N.W.
Washington, DC 20004-1202
William Thompson  
City of Philadelphia  
Law Dept.  
1600 Arch St., 10th Floor  
Philadelphia, PA  19103

W. David Tidholm  
Hutcheson & Grundy  
1200 Smith Street #3300  
Houston, TX  77002

Merrill L. Travis  
Illinois Dept. of Transp.  
2300 South Dirksen Parkway  
Room 302  
Springfield, IL  62703-4555

James F. Sullivan  
CT Dept. of Transportation  
P.O. Box 317546  
Newington, CT  06131

Daniel J. Sweeney  
McCarthy, Sweeney &  
Harkaway, P.C.  
1750 Pennsylvania Ave., N.W.  
Ste. 1105  
Washington, DC  20006

Robert G. Szabo  
V. Ness Feldman  
1050 Tho Jefferson St., N.W.  
Washington, DC  20007

William C. Van Slyke  
152 Washington Avenue  
Albany, NY  12210 US

John A. Vuono  
Vuono & Gray  
2310 Grant Building  
Pittsburgh, PA  15219 US

Eileen S. Stommes  
Director, T & M Division  
Agricultural Marketing  
Service, USDA  
P.O. Box 96456  
Washington, DC  20090-6456

Scott N. Stone  
Patterson Boggs L.L.P.  
2550 M Street, N.W.  
7th Floor  
Washington, DC  20037-1346

D.G. Strunk, Jr.  
General Chairperson UTU  
817 Kilbourne Street  
Bellevue, OH  44811

Mayor Vincent M. Urbin  
150 Avon Belden Rd.  
Avon Lake, OH  44012

Stephen M. Uthoff  
Coniglio & Uthoff  
110 West Ocean Blvd.  
Suite C  
Long Beach, CA  90802

J. William Van Dyke  
NJ Transportation Planning  
Authority  
One Newark Center  
17th Floor  
Newark, NJ  07102

Charles H. White, Jr.  
Galland, Kharasch &  
Garfinkle, P.C.  
1054 Thirty-First Street NW  
Washington, DC  20007-4492 US

William W. Whitehurst, Jr.  
W.W. Whitehurst &  
Associates, Inc.  
12421 Happy Hollow Road  
Cockeysville, MD  21030 US
F. Ronalds Walker
Citizens Gas & Coke Utility
2020 N. Meridian Street
Indianapolis, IN 46202 US

Jack A. Walter
WCI Steel, Inc.
1040 Pine Avenue, SE
Warren, OH 44483 US

James R. Weiss
Preston, Gates, Ellis,
1735 New York Avenue, NW
Suite 500
Washington, DC 20006 US

Sergeant W. Wise
Livonia, Avon & Lakeville
P.O. Bxo 190-B
5769 Sweeteners Boulevard
Lakeville, NY 14480 JS

Frederic L. Wood
Donelan, Cleary, Wood &
Maser, P.C.
1100 New York Avenue, NW
Suite 750
Washington, DC 20005-3934 US

L. Pat Wynns
Suite 210
1050 - 17th Street, NW
Washington, DC 20036-5503 US

Sheldon A. Zabel
Schiff, Hardin & Waite
7200 Sears Tower
Chicago, IL 60606 US

Walter E. Zullig, Jr.
Special Counsel
Metro-North Commuter Railroad
Company
347 Madison Avenue
New York, NY 10017-3706 US

Henry M. Wick, Jr.
Wick, Streiff, et al.
1450 Two Chatham Center
Pittsburgh, PA 15219 US

Robert J. Will
United Transportation Union
4134 Grave Run Road
Manchester, MD 21102 US

Richard R. Wilson
1126 Eight Avenue, Ste. 403
Altoona, PA 16602 US

Timothy A. Wolfe
Wyandot Doliotte, Inc.
P.O. Box 99
1794 Co. Rd. #99
Carey, OH 43316 US

E. C. Wright
Rail Transportation
Procurement Manager
1007 Market Street
 Dupont Building 3100
Wilmington, DE 19898 US

Edward Wytkind
Executive Director
Transportation Trades Dept.
AFLCIO
400 N. Capitol Street, SW
Suite 861
Washington, DC 20001 US

Scott M. Zimmerman
Zuckert, Scoull &
Rasenberger, L.L.P.
888 Seventeenth Street, NW
Washington, DC 20006 US

David Roloff
Goldstein & rolloff
526 Superior Avenue, East
Suite 1440
Cleveland, OH 44114 US
September 9, 1997

To All Parties of Record

Re: Finance Docket No. 33388
CSX Corporation and CSX Transportation, Inc. Norfolk Southern Corporation and Norfolk Southern Railway Company -- Control and Operating Leases/Agreements -- Conrail, Inc. and Consolidated Rail Corporation Transfer of Line by Norfolk Southern Railway Company to CSX Transportation, Inc.

Dear Sir/Madam:

Due to delay in compiling the documents for mailing, the original of the enclosed Motion to Late-File a Notice of Intent to Participate and the original of Notice of Intent to Participate were mailed to the Surface Transportation Board on September 9, 1997, not on September 5, 1997 as shown on the first and second pages of the enclosed documents. The original of the documents filed with the Board contain the correct date of September 9, 1997.

Please contact me if you have any questions regarding this matter.

Respectfully submitted,

Richard F. Horvath
Chief Assistant Director of Law

RFH/sm
MEMORANDUM

On June 23, 1997, CSX Corporation and CSX Transportation, Inc. ("CSX"), Norfolk Southern Corporation and Norfolk Southern Railway Company ("NS") and Conrail, Inc. and Consolidated Rail Corporation ("Conrail") filed a joint application with the Surface Transportation Board seeking authority for CSX and NS to acquire control of Conrail and for the subsequent division of Conrail's assets by CSX and NS.

The Surface Transportation Board ("Board") in Decision No. 6, served May 30, 1997 (62 FR 29387), set the deadlines for timely filing of various documents involved in this matter.

On August 7, 1997, Jay Westbrook, President of Cleveland City Council, filed an untimely Notice of Intent to Participate as a party of record on behalf of the City of Cleveland.

In Decision No. 21, served August 19, 1997, the Board denied Mr. Westbrook's request for more time to participate in the proceeding due to the expedited procedural schedule, however indicated that it would entertain a Motion for Leave to Late-File a Notice of Intent to Participate.

The City of Cleveland hereby requests permission to late-file a Notice of Intention to Participate as a party of record for several reasons.

First, the changes proposed by the applicant railways will have a significant impact on the citizens of the City.
For example, set forth in the Surface Transportation Board, Finance Docket No. 33388, Railroad Control Application; Supplemental Environmental Report (Volume 6), August 28, 1997, p. 12, Table 1-3, the increase in the number of freight trains per day on certain routes is marked, increasing in at least one instance by over twenty-three (23) freight trains per day. In addition, numerous facilities within the City of Cleveland will be affected by numerous proposals made in the Application. The interest of the citizens of the City in having adequate representation as to how these proposals will effect air quality, noise, and public health and welfare in their communities cannot be understated.

Second, no burden will be visited upon other parties in this proceeding, in that the City has been served, through Mr. Westbrook, with copies of all relevant documents to date. Allowing the City of Cleveland to Participate as a Party of Record will not substantially burden other Parties of Record as far as copy and labor costs are concerned.

CONCLUSION

WHEREFORE, the City of Cleveland hereby requests leave to late-file a Notice of Intent to Participate.

Respectfully submitted,

SHARON SOBOL JORDAN (0006731)
Director of Law

By: RICHARD F. HORVATH (0030912)
Assistant Director of Law

City of Cleveland
Department of Law - Rm. 106
601 Lakeside Avenue
Cleveland, Ohio 44114
(216) 664-2808

DATE: September 9, 1997
September 9, 1997

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board
1925 K Street, N.W.
Washington, D.C. 20423-0001

Re: CSX Corporation And CSX Transportation, Inc., Norfolk Southern Corporation And Norfolk Southern Railway Company -- Control And Operating Leases/Agreements -- Conrail, Inc. And Consolidated Rail Corporation
Finance Docket No. 33388
Motion for Leave to Serve Parties of Record Late

Dear Secretary Williams:

We are filing with this letter the following:

1. An original and 25 copies of the Motion for Leave to Serve Parties of Record Late, with attached Certificate of Service for this Motion.

2. An original and 10 copies of a Certificate of Service pursuant to Decision No. 21 in Finance Docket No. 33388, with respect to the service of the Notice of Intent to Participate in Proceedings by participants of the Supplemental Pension Plan of Consolidated Rail Corporation, together with a copy of the letter to all the Parties of Record, with attached Notice of Intent to Participate in Proceedings by participants of the Supplemental Pension Plan of Consolidated Rail Corporation.

Please date stamp the additional copy of this letter at the time of filing and return it to us.

Very truly yours,

BARBIN, LAUFFER & O'CONNELL

cc: The Honorable Jacob Leventhal
All Parties of Record
BEFORE THE
SURFACE TRANSPORTATION BOARD

Finance Docket No. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
-- CONTROL AND OPERATING LEASES/AGREEMENTS --
CONRAIL, INC. AND CONSOLIDATED RAIL CORPORATION

MOTION OF
PAUL J. ENGELHART, WILLIAM J. FITZPATRICK,
H. C. KOHOUT, THOMAS F. MEEHAN, JR.,
LAWRENCE CIRILLO, CHARLES D. NESTER,
JACQUELINE A. MACE, DONALD E. KRAFT
AND ROBERT E. GRAHAM, FORMER EMPLOYEES OF
CONSOLIDATED RAIL CORPORATION ("RETIRES")
FOR LEAVE TO SERVE LATE PARTIES OF RECORD
NOTICE OF INTENT TO PARTICIPATE IN PROCEEDING AND TO
CORRECT MAILING ADDRESS

HARRY C. BARBIN, ESQUIRE, attorney for the Former Employees of
Consolidated Rail Corporation ("Retirees"), hereby moves the
Surface Transportation Board for permission to serve late all
Parties of Record in this proceeding their Notice of Intent to
Participate in these proceedings and to correct their mailing
address, and in support assert as follows:

1. The Former Employees ("Retirees") filed their Notice of
   Intent to Participate in Proceeding in the above-captioned matter
   with the Surface Transportation Board on August 5, 1997.
2. The Notice of Intent was served upon all Parties of Record known to the Retirees at that time by first class mail, and a Certificate of Service of the Notice was filed with the Notice of Intent to Participate.

3. Harry C. Barbin, the attorney for the Retirees, became aware on August 27, 1997 that the Service List listed an incorrect post office Zip Code of 19111 for the Retirees, when it should have been the new Zip Code 19046.

4. The Retirees, by their attorney, advised the Office of the Secretary of the Surface Transportation Board, by letter dated August 28, 1997, mailed via Federal Express, to correct the mailing address on the Service List. A copy of that letter is attached as Exhibit "A".

5. Decision No. 21 of the STB required that all Parties of Record serve upon all the other Parties of Record all of the prior filings on or before August 29, 1997.

6. The attorney for the Retirees did not receive the mailed copy of Decision No. 21 from the Secretary's Office until September 2, 1997 because of the incorrect mailing address, and he was not aware of the requirement of Decision No. 21 to serve upon the Parties of Record all prior filings with the Surface Transportation Board by August 29, 1997.

7. The Retirees request that they be permitted to serve the Notice of Intent to Participate upon all Parties of Record on the Service List, as set forth in Decision No. 21, late, which will be mailed via first class mail on the date of this Motion.
8. The late service of Notice of Intent to Participate upon all parties of record will not unduly complicate or delay this proceeding or its procedural schedule.

9. The Retirees' comments with respect to the Supplemental Pension Plan of Consolidated Rail Corporation ("SPP") will provide very important information regarding the interest of the employees and retirees in the SPP, which will be affected by the proposed transaction, for the STB's consideration.

10. For the reasons set forth herein, the Retirees request leave to serve late their Notice of Intent to Participate in these proceedings and that the STB add the following correct mailing address to the Service List for the Retirees as Parties of Record:

   Harry C. Barbin, Esquire  
   PA I.D. No. 08539  
   William M. O'Connell, III, Esquire  
   PA I.D. No. 20023  
   Barbin, Lauffer & O'Connell  
   608 Huntingdon Pike  
   Rockledge, PA 19046  
   (215) 379-3015

   Respectfully submitted,

   BARBIN, LAUFFER & O'CONNELL

   By: ________________________________
   Harry C. Barbin, Esquire  
   PA I.D. No. 08539  
   William M. O'Connell, III, Esquire  
   PA I.D. No. 20023  
   608 Huntingdon Pike  
   Rockledge, Pennsylvania 19046  
   (215) 379-3015

   Dated: September 9, 1997
VIA FEDERAL EXPRESS

Office of the Secretary
Case Control Branch
Attn: STB Finance Docket No. 33388
Surface Transportation Board
1925 K Street, N.W.
Washington, D.C. 20423-0001

RE: CSX Corporation And CSX Transportation, Inc.
Norfolk Southern Corporation And Norfolk Southern Railway Company -- Control And Operating Leases/Agreements -- Conrail Inc. And Consolidated Rail Corporation
Finance Docket No. 33388
Notice Of Intent To Participate In Proceeding

Dear Sir/Madam:

In accordance with Decision No. 21 dated August 19, 1997, we would like to request a change in our address on the service list attached to Decision No. 21. The service list reflects a wrong zip code for our address. Please note our complete correct address below:

Harry C. Barbin, Esquire
BARBIN, LAUFFER & O'CONNELL
608 Huntingdon Pike
Rockledge, PA 19046

Thanking you for your courtesy and cooperation, I remain

Very truly yours,

BARBIN, LAUFFER & O'CONNELL

Harry C. Barbin

p.s. Enclosed with this letter is a disk containing the contents of this letter

EXHIBIT "A"
CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Motion for Leave to Serve Late Parties of Record Notice of Intent to Participate in Proceeding and to Correct Mailing Address were served this 9th day of September, 1997, by first-class mail, postage pre-paid, upon all Parties of Record in this Proceeding, and upon:

The Honorable Jacob Leventhal
Federal Emergency Regulatory Commission
888 First Street, N.E.
Suite 11F
Washington, D.C. 20426

Harry C. Barbin, Esquire
September 24, 1997

BY OVERNIGHT MAIL

The Honorable Vernon A. Williams
Secretary
Surface Transportation Board
Case Control Branch
ATTN: STB Finance Docket 33388
1925 K Street, N.W.
Washington, D.C. 20423-0001

Re: Finance Docket No. 33388,
CSX Corporation and CSX Transportation, Inc.,
Norfolk Southern Corporation and Norfolk
Southern Railway Company -- Control and
Operating Lease/Agreement -- Conrail Inc.
and Consolidated Rail Corporation

Dear Secretary Williams:

Enclosed please find the original and twenty-five (25) copies of the New York Attorney General's Motion for Leave to Late-File a Notice of Intent to Participate ("Motion") in the above-captioned proceedings. The Parties of Record were served September 24, 1997, by first-class mail.

Also, I have included an extra copy of the Motion to be time-stamped and returned to me in the self-addressed envelope.

Thank you for your consideration.

Very truly yours,

George Mesires
Assistant Attorney General

Enclosures
BEFORE THE
SURFACE TRANSPORTATION BOARD

CSX CORPORATION AND CSX
TRANSPORTATION, INC., NORFOLK
SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY
COMPANY -- CONRAIL AND OPERATING
LEASES/AGREEMENTS -- CONRAIL, INC.
AND CONSOLIDATED RAIL CORPORATION

MOTION FOR LEAVE TO LATE-FILE
A NOTICE OF INTENT TO PARTICIPATE

Pursuant to Decision No. 21 in the above-captioned
proceeding, served August 19, 1997, the State of New York, by and
through its Attorney General, Dennis C. Vacco, (the "Attorney
General") respectfully requests authority to participate in this
proceeding.

Pursuant to Decision No. 21, the Attorney General certifies
that all Parties of Record on the service list attached to
Decision No. 21 and Decision No. 27 have been served (see
attached Certificate of Service).

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK
Respectfully submitted,

DENNIS C. VACCO
Attorney General of the State of New York

PAMELA JONES HARBOUR
Deputy Attorney General
Public Advocacy

STEPHEN D. HOUCK
Assistant Attorney General
In Charge, Antitrust Bureau

By:  

GEORGE R. MESIRES
Assistant Attorney General
120 Broadway, Suite 2601
New York, New York 10271
(212) 416-8821
Certificate of Service

I, George R. Mesires, hereby certify that on September 24, 1997, I caused a copy of the foregoing Motion for Leave to Late-File a Notice of Intent to Participate ("Motion") to be served upon all Parties of Record by placing a copy of the Motion in a pre-paid envelope in a post-box of the U.S. Postal Service.

George R. Mesires
September 25, 1997

Vernon A. Williams, Secretary
Office of the Secretary
Case Control Branch
ATTN: STB Finance Docket No. 33388
Surface Transportation Board
1925 K Street, N.W.
Washington, D.C. 20423-0001

Re: CSX Corporation and CSX Transportation Inc., Norfolk Southern Corporation and Norfolk Southern Railway Company – Control and Operating Leases/Agreements – Conrail Inc. and Consolidated Rail Corporation, Finance Docket No. 33388

Dear Secretary Williams:

Enclosed are an original and twenty-five (25) copies of The New York City Economic Development Corporation’s Petition for Clarification of Decision No. 33 (NYC-6), for filing in the above-referenced proceeding. An additional copy of the filing is enclosed for file stamp and return with our messenger. Please note that a copy of the pleading is also enclosed on a 3.5-inch diskette in WordPerfect 5.1 format.

Sincerely,

Charles A. Sbitulnik

Enclosures

cc: Anne Quinlan
All Parties Of Record
The New York City Economic Development Corporation ("NYCEDC"), pursuant to 49 C.F.R. §§ 1117.1, hereby petitions the Surface Transportation Board for an Order clarifying its Decision No. 33, served on September 17, 1997. NYCEDC seeks clarification of two points.

First, NYCEDC did not specifically request that its responsive application be considered a minor rather than a significant transaction, see Petition for Waiver and Clarification of Railroad Consolidation Procedures, Submitted by the New York City Economic Development Corporation (NYC-3) (filed Aug. 22, 1997) ("Petition for Waiver"). However, other parties seeking relief similar to that requested by NYCEDC did make such a request. Then, in a paragraph that discussed issues raised by NYCEDC, the Board went on to state in Decision No. 33 that:

although the responsive applications to be filed by petitioners will be considered minor, the burden of proof is
still on petitioners to submit sufficient evidence to justify a grant of their respective responsive applications.

Decision No. 33, slip op. at 4 (end of first full paragraph). Because NYCEDC's responsive application will seek relief that is similar in scope to that sought by other parties whose petitions for waiver are addressed in Decision No. 33, NYCEDC therefore requests that the Board clarify that the term "petitioners" includes NYCEDC, and that NYCEDC's responsive application will be considered a minor transaction.

Second, NYCEDC requests that the Board clarify that the requirements of 49 C.F.R. § 1180.9 do not apply to the responsive application that NYCEDC will file.

NYCEDC's Petition for Waiver included the following:

(3) Information Regarding the Applicants Under 49 C.F.R. § 1180.3(j)(6), the definition of "transferor" applies to the Applicants and Metro-North, from whom trackage rights over one or more lines of railroad will be sought in NYCEDC's responsive application. NYCEDC requests clarification of the requirements of 49 C.F.R. § 1180.9, specifically that this regulation does not require NYCEDC to submit financial information regarding the Applicants and Metro-North as "transferors." The Applicants have already provided the Board with substantial financial information about themselves, and inclusion of the same information in NYCEDC's application would burden the record with duplicative information. In addition, NYCEDC is not in a position to reasonably obtain such information about Metro-North.

See Petition for Waiver (NYC-3) at 3 (¶ 3)). NYCEDC assumes that the Board did not rule on this request for clarification in Decision No. 33 because the responsive application that NYCEDC anticipates filing is clearly not a major transaction. Indeed, if the Board clarifies Decision No. 33 as requested above, NYCEDC's responsive application will constitute a minor transaction. But even if that request is not granted,
NYCEDC requests that the Board clarify that § 1180.9 does not apply to its application which will at most be a "significant" transaction.

Because clarification of the foregoing issues will assist NYCEDC in preparation of its responsive application, NYCEDC respectfully requests that the Board clarify Decision No. 33 as requested in this Petition.

Dated: September 25, 1997

Respectfully submitted,

[Signature]

Charles A. Spitalnik
Alicia M. Serfaty
Jamie Palter Rennert
HOPKINS & SUTTER
888 Sixteenth Street, NW
Washington, D.C. 20006
(202) 835-8000

Counsel for New York City Economic Development Corporation, acting on behalf of the City of New York
CERTIFICATE OF SERVICE

I hereby certify that on September 25, 1997, a copy of the foregoing New York City Economic Development Corporation's Petition for Clarification of Decision No. 33 (NYC-6) was served by hand delivery upon the following:

The Honorable Jacob Leventhal
Administrative Law Judge
Federal Energy Regulatory Commission
388 First Street, N.E.
Suite 11F
Washington, D.C. 20426

Richard A. Allen
John V. Edwards
Zuckert, Scutt & Rasenberger, L.L.P.
888 Seventeenth Street, N.W.
Suite 600
Washington, D.C. 20006-3939

John M. Nannes
Skadden, Arps, Slate, Meagher & Flom L.L.P.
1440 New York Avenue, N.W.
Washington, D.C. 20005-2111

Dennis G. Lyons
Drew A. Harker
Arnold & Porter
555 12th Street, N.W.
Washington, D.C. 20004-1202

Samuel M. Sipe, Jr.
Steptoe & Johnson L.L.P.
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036-1795

Paul A. Cunningham
Harkins Cunningham
1300 Nineteenth Street, N.W.
Suite 600
Washington, D.C. 20036

and by first class mail, postage pre-paid upon all other Parties of Record in this proceeding.

Jamie Palter Rennert
September 25, 1997

Vernon A. Williams, Secretary  
Office of the Secretary  
Case Control Branch  
ATTN: STB Finance Docket No. 33388  
Surface Transportation Board  
1925 K Street, N.W.  
Washington, D.C. 20423-0001

Re: CSX Corporation and CSX Transportation Inc., Norfolk Southern Corporation and Norfolk Southern Railway Company – Control and Operating Leases/Agreements – Conrail Inc. and Consolidated Rail Corporation, Finance Docket No. 33388

Dear Secretary Williams:

Enclosed are an original and twenty-five (25) copies of The Philadelphia Belt Line Railroad Company’s Petition for Clarification of Decision No. 33 (PBL-7), for filing in the above-referenced proceeding. An additional copy of the filing is enclosed for file stamp and return with our messenger. Please note that a copy of the pleading is also enclosed on a 3.5-inch diskette in WordPerfect 5.1 format.

Sincerely,

Charles A. Spulnik

cc: Anne Quinlan  
All Parties of Record

Enclosures
The Philadelphia Belt Line Railroad Company ("PBL"), pursuant to 49 C.F.R. §§ 1117.1, hereby petitions the Surface Transportation Board for an Order clarifying its Decision No. 33, served on September 17, 1997. PBL seeks clarification of two points.

First, PBL did not specifically request that its responsive application be considered a minor rather than a significant transaction, see Petition for Waiver and Clarification of Railroad Consolidation Procedures, Submitted by the Philadelphia Belt Line Railroad Company (PBL-3) (filed Aug. 22, 1997) ("Petition for Waiver"). However, other parties seeking relief similar to that requested by PBL did make such a request. Then, in a paragraph that discussed issues raised by PBL, the Board went on to state in Decision No. 33 that:

although the responsive applications to be filed by petitioners will be considered minor, the burden of proof is
still on petitioners to submit sufficient evidence to justify a
grant of their respective responsive applications.

Decision No. 33, slip op. at 4 (end of first full paragraph). Because PBL's responsive
application will seek relief that is similar in scope to that to be sought by other parties
whose petitions for waiver are addressed in Decision No. 33, PBL therefore requests that
the Board clarify that the term "petitioners" includes PBL, and that PBL's responsive
application will be considered a minor transaction.

Second, PBL requests that the Board clarify that the requirements of 49
C.F.R. § 1180.9 do not apply to the responsive application that PBL will file. PBL's
Petition for Waiver included the following:

(3) Information Regarding the Applicants Under 49
C.F.R. §1180.3(j)(6), the definition of "transferor" applies to
the Applicants, from whom trackage rights over one or more
lines of railroad will be sought in PBL’s responsive
application. PBL requests clarification of the requirements
of 49 C.F.R. § 1180.9, specifically that this regulation does
not require PBL to submit financial information regarding
the Applicants as "transferors," because the Applicants have
already provided the Board with substantial financial
information, and inclusion of the same information in PBL's
application would burden the record with duplicative
information.

See Petition for Waiver (PBL-3) at 3 (¶ 3)). PBL assumes that the Board did not rule on
this request for clarification in Decision No. 33 because the responsive application that
PBL anticipates filing is clearly not a major transaction. Indeed, if the Board clarifies
Decision No. 33 as requested above, PBL’s application will constitute a minor
transaction. But even if that request is not granted, PBL requests that the Board clarify
that § 1180.9 does not apply to its application which will at most be a "significant"
transaction.
Because clarification of the foregoing issues will assist PBL in preparation of its responsive application, PBL respectfully requests that the Board clarify Decision No. 33 as requested in this Petition.

Dated: September 25, 1997

Respectfully submitted,

[Signature]

Charles A. Spulnak
Alicia M. Serfaty
Jamie Palter Rennert
HOPKINS & SUTTER
888 Sixteenth Street, NW
Washington, D.C. 20006
(202) 835-8000

Counsel for Philadelphia Belt Line Railroad Company
CERTIFICATE OF SERVICE

I hereby certify that on September 25, 1997, a copy of the foregoing Philadelphia Belt Line Railroad Company's Petition for Clarification of Decision No. 33 (PBL-7) was served by hand delivery upon the following:

The Honorable Jacob Leventhal
Administrative Law Judge
Federal Energy Regulatory Commission
888 First Street, N.E.
Suite 11F
Washington, D.C. 20426

Richard A. Allen
John V. Edwards
Zuckert, Scoult & Rasenberger, L.L.P.
888 Seventeenth Street, N.W.
Suite 600
Washington, D.C. 20006-3939

John M. Nannes
Skadden, Arps, Slate, Meagher & Flom L.L.P.
1440 New York Avenue, N.W.
Washington, D.C. 20005-2111

Dennis G. Lyons
Drew A. Harker
Arnold & Porter
555 12th Street, N.W.
Washington, D.C. 20004-1202

Samuel M. Sipe, Jr.
Steptoe & Johnson L.L.P.
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036-1795

Paul A. Cunningham
Harkins Cunningham
1300 Nineteenth Street, N.W.
Suite 600
Washington, D.C. 20036

and by first class mail, postage pre-paid upon all other Parties of Record in this Proceeding.

Jamie Palter Rennert
BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. 33388

CSX CORPORATION AND CSX TRANSPORTATION, INC.
NORFOLK SOUTHERN CORPORATION AND
NORFOLK SOUTHERN RAILWAY COMPANY
-CONTROL AND OPERATING LEASES/AGREEMENTS-
CONRAIL INC. AND CONSOLIDATED RAIL CORPORATION

MOTION OF THE PORT AUTHORITY OF NEW YORK AND
NEW JERSEY TO COMPEL APPLICANTS TO SUPPLEMENT THE
PRIMARY APPLICATION BY FILING THE NORTH JERSEY
SHARED ASSET OPERATING PLANS AND FOR OTHER RELIEF

The Port Authority of New York and New Jersey (the Port Authority) hereby moves that the Board order Applicants to supplement the primary application to include within the application their respective operating plans for the North Jersey Shared Assets Area. The Port Authority also moves that the procedural schedule be modified so as to permit the Port Authority reasonable time and opportunity to examine the plans and depose such witnesses as may be necessary fully to understand the plans and the proposed operations. To the extent that Applicants file their supplemental information in a reasonable time, grant of the requested relief will not delay the ultimate disposition of this proceeding. To the extent that Applicants do not supplement the primary application to provide an operating plan for North Jersey Shared Asset Area, and to the extent that the Port Authority and
other interested parties do not have an opportunity to review those plans and examine those witnesses who prepared the plans, the parties and the Board will be denied of a meaningful opportunity to determine the impact of the proposed transaction upon the public interest, particularly the public interest at the New York/New Jersey Metropolitan Area. In further support of its motion the Port Authority states as follows:

INTRODUCTION

The Port Authority is charged by statute to protect the commerce of the New York/New Jersey Port District. It is the responsibility of the Port Authority to protect the economic interests of the 14 million people that live and work within that District. In that regard, the Port Authority is obligated to protect the public interest of the States of New York and New Jersey.¹

There is no doubt that the pending application anticipates major changes in service and operations within what Applicants refer to as the North Jersey Shared Asset Area. This Shared Asset Area, which includes some 189 miles of track and 18 terminal operations and is noteworthy for the complex and congested nature of its rail facilities, is currently operated by only one

¹The Board's Decision No. 37 states that the Port Authority's position in this proceeding is akin to that of a commercial party. This holding reflects a serious misunderstanding of the role of the Port Authority. While the Port Authority does engage in certain commercial activities, it does so as a governmental entity and not as a private enterprise. It makes no profit and has no stockholders. Its sole objective in this proceeding is to protect the public interest and not to enhance any private business interest.
rail carrier, Conrail. The application anticipates three rail carriers, CSX, NS and the remaining Conrail, all operating within the same congested area and with essentially the same rail infrastructure as Conrail alone operates today. Thus, the operating plans that are currently being developed by the Applicants are plainly essential to an understanding of the proposed rail services within the Area and how those services will affect the public interest at New York and New Jersey.

ARGUMENT

In Decision No. 7, decided May 29, 1997, the Board recognized that the Port Authority had, in NYNJ-3 raised legitimate questions with respect to the nature and operations of the surviving Conrail in the NY/NJ Metro Area. In this Decision, served well in advance of the filing of the primary application stated at p. 12:

We agree that, because applicants envision that Conrail will cease to be an independent rail carrier, separate statements for Conrail on a freestanding basis would not be meaningful and would not contribute to the analysis of the Control Transaction. Applicants should be advised, however, that we expect that the primary application will fully describe the post-transaction Conrail, its structure, its management, and its operations, and, in particular, will address the concerns raised by the Port Authority (the nature of applicants' operations in the NY/NJ Metro Area, the competitive impact and economic effect of those operations, the investment CSX and ND anticipate making in the NY/NJ Metro Area, and the level of competition that the NY/NJ Metro Area will experience following the proposed transaction.)
The primary application did not address the concerns raised by the Port Authority, particularly with respect to the operations of the surviving Conrail, or for that matter of CSX and NS. The primary application proposes an untried, untested and largely unprecedented concept of Shared Asset Areas. One of these Shared Asset Areas in the NY/NJ Metro Area is called the North Jersey Shared Asset Area.

In the operating plans submitted by CSX and NS as required by 49 C.F.R. 1180.8 (Conrail submitted no plan even though it will conduct the bulk of the operations within the North Jersey Shared Asset Area), CSX and NS describe which carrier will serve each of the yards within the Area, and make some very general statements regarding how each will operate. These generalizations stand in marked contrast to the detailed operating plans that Applicants have submitted for their mainline operations.

Mr. John W. Orrison, CSX's chief operating witness and the sponsor of its operating plan, testified at deposition on September 12, 1997. His testimony was as follows:

Q.

A.
Similarly, Mr. John W. Snow, CSX's Chief Executive Officer, testified

He also testified

(Snow Deposition Tr. 192) Mr. Snow continued:

Similarly, Mr. D. Michael Mohan, NS's chief operating witness and the sponsor of its operating plan, testified

It could be argued that 49 C.F.R. 1180.8 does not specifically require operating plans for terminal areas. In many consolidation proceedings, terminal area operating plans would obviously be unnecessary. But, with respect to this transaction, and with respect to this North Jersey Shared Asset Area, an understanding of the proposed operations to be conducted is
essential to a determination of the public interest issues that the Board must determine. The importance of the operations to be conducted within this area is made clear by the Board's Decision No. 7 and by the personal attention given to this area by no less than CSX's Chief Executive Officer.

In addition to the size and complexity of operations within the North Jersey Shared Asset Area, the Board must also consider the unique character of the shared assets concept. In the traditional rail consolidation proceeding, two carriers are being merged into one. Great care is taken to point out that efficiencies, in the form of the elimination of duplicative operating facilities and trackage within various terminal areas will reduce costs and improve service. Here, of course, applicants, for competitive commercial reasons are all proposing to operate within a congested terminal area heretofore served only by Conrail. This area has been operated by Conrail for many years following the Final System Plan and Conrail has "rationalized" the rail facilities within this area to produce the most efficient operating conditions for one carrier not three. The potential for gridlock certainly exists. Further, as Mr. Snow recognized in his deposition,

Given the fact that neither CSX nor NS has operated at New York/New Jersey, further care must be exercised in reviewing an operating plan developed by these "new" carriers. In essence,
the North Jersey Shared Asset Area will present challenges not faced by these carriers at other locations.

**SUGGESTED REMEDY**

The Port Authority has no desire to delay the final disposition of this proceeding. (It must be remembered that in its initial pleading in this matter, the Port Authority recommended a 280 day procedural schedule.) Quite frankly, with the fate of Conrail all but sealed, it is far more likely that service at New York and New Jersey will deteriorate rather than improve during any significant delay in resolution of this proceeding. At the same time, no thoughtful determination of the public interest can be accomplished without an understanding of the impact of the proposed operations on one of the largest and most congested metropolitan areas in the country.

Thus, the Port Authority submits that the Board should compel Applicants promptly to supplement the initial application with detailed operating plans of the North Jersey Shared Asset Area. Further, Applicants should promptly schedule the depositions of those witnesses necessary fully to explain the proposed operating plans.

While the October 21, 1997, comment date should remain in place, the record should remain open for a reasonable time following submission of the plans to permit parties to comment upon the supplemental materials and the testimony of Applicants' witnesses regarding those materials. To the extent that Applicants develop and file these plans promptly, there should be no
delay in the final decision of the Board. To the extent that Applicants do not file these plans, they will have failed in their burden of demonstrating that the proposed transaction is consistent with the public interest.

Respectfully submitted,

Hugh H. Welsh, Deputy General Counsel
The Port Authority of New York and New Jersey
One World Trade Center, 67E
New York, NY 10048
(212) 435-6915

[Signature]

Paul M. Donovan
LaRoe, Winn, Moerman & Donovan
3506 Idaho Avenue, N.W.
Washington, DC 20016
(202) 362-3010

Attorneys for
The Port Authority of New York and New Jersey

Dated at Washington, DC
September 25, 1997
CERTIFICATE OF SERVICE

I, Paul M. Donovan, certify that on September 25, 1997, I caused to be served by Facsimile on Applicants' counsel and all parties on the Restricted Service list, and a nonconfidential version by first class mail, postage prepaid, upon all other parties copies of the foregoing Motion of the Port Authority of New York and New Jersey to Compel Applicants to Supplement the Primary Application by Filing the North Jersey Shared Asset Operating Plans and for Other Relief.

Paul M. Donovan