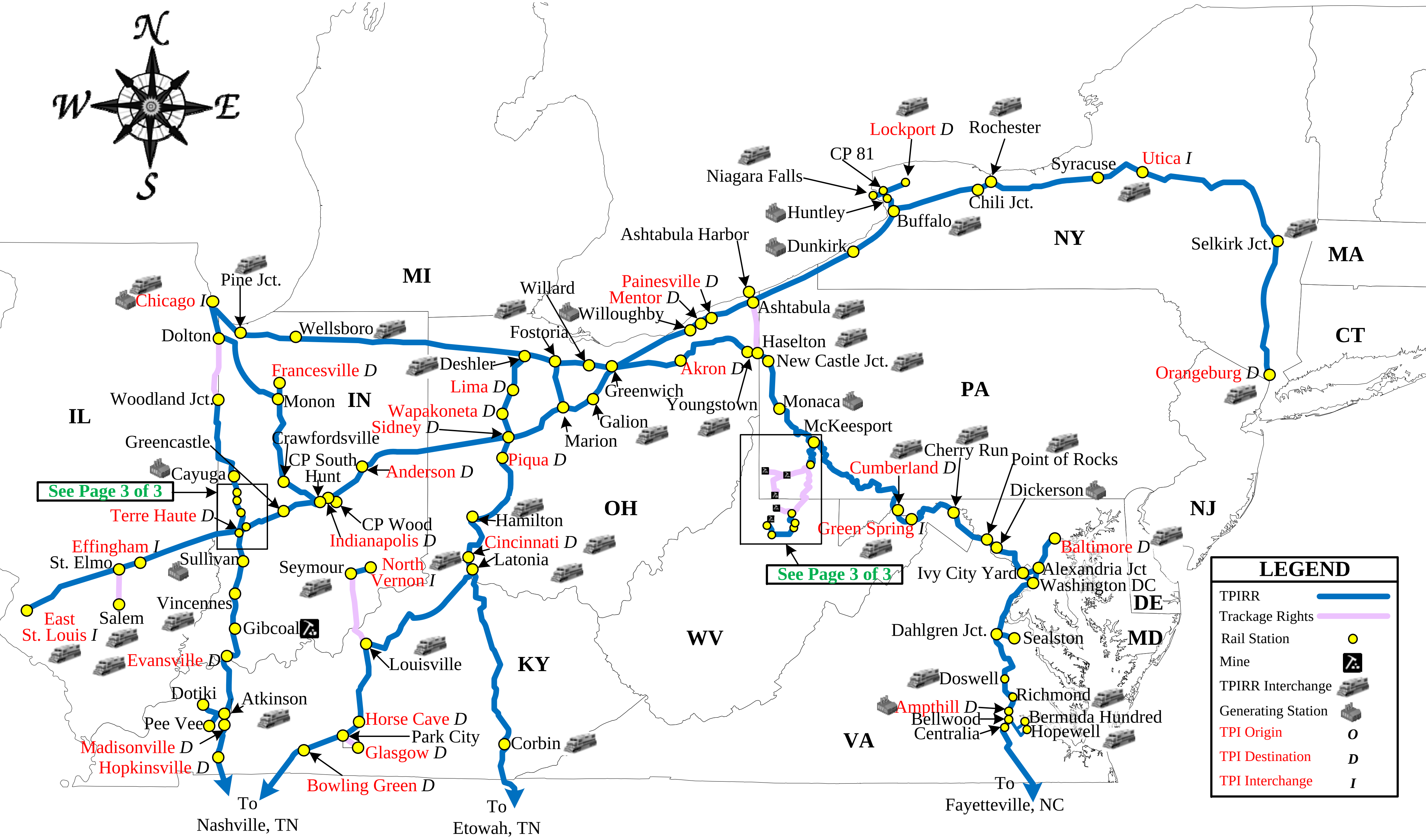
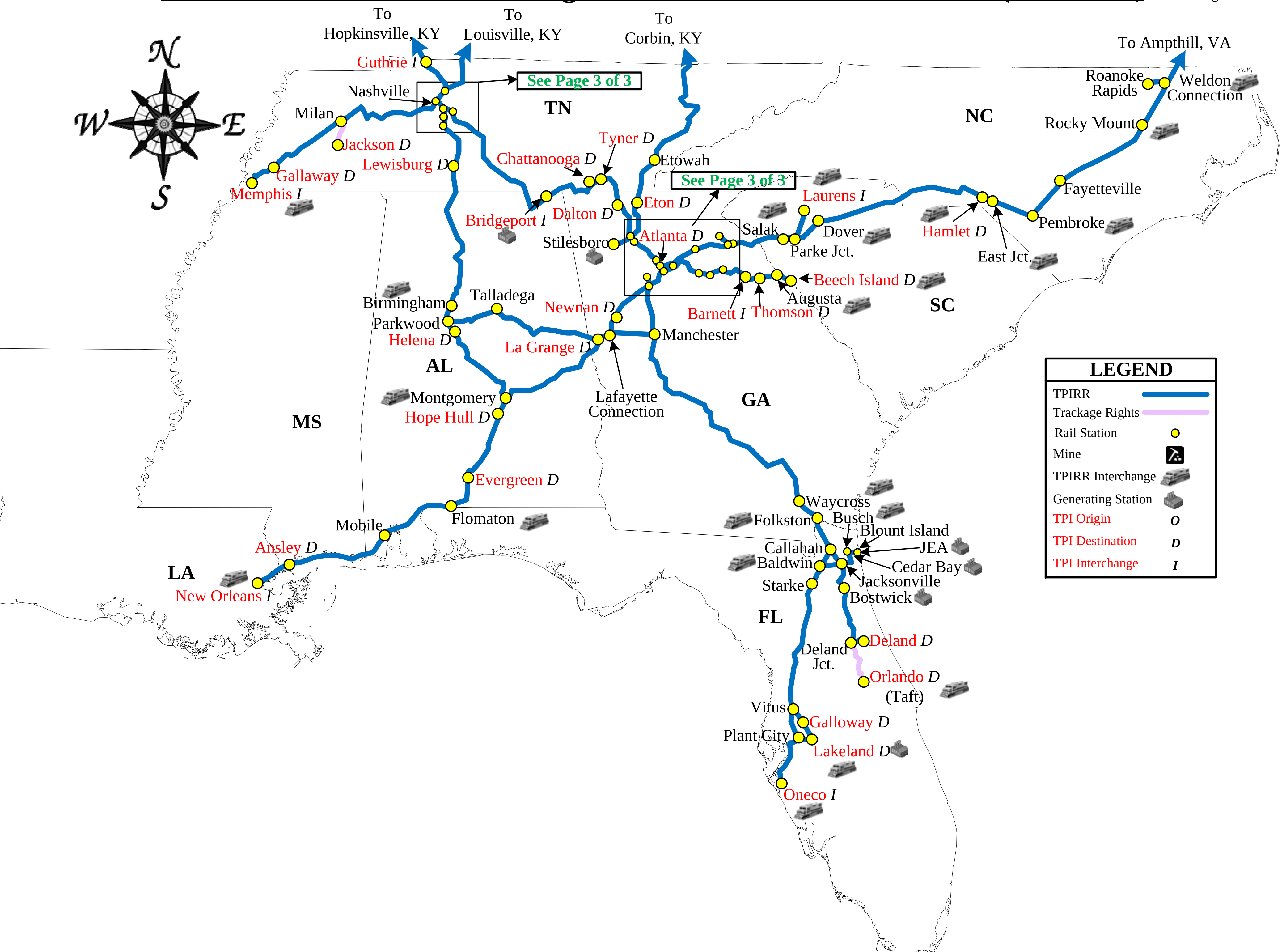
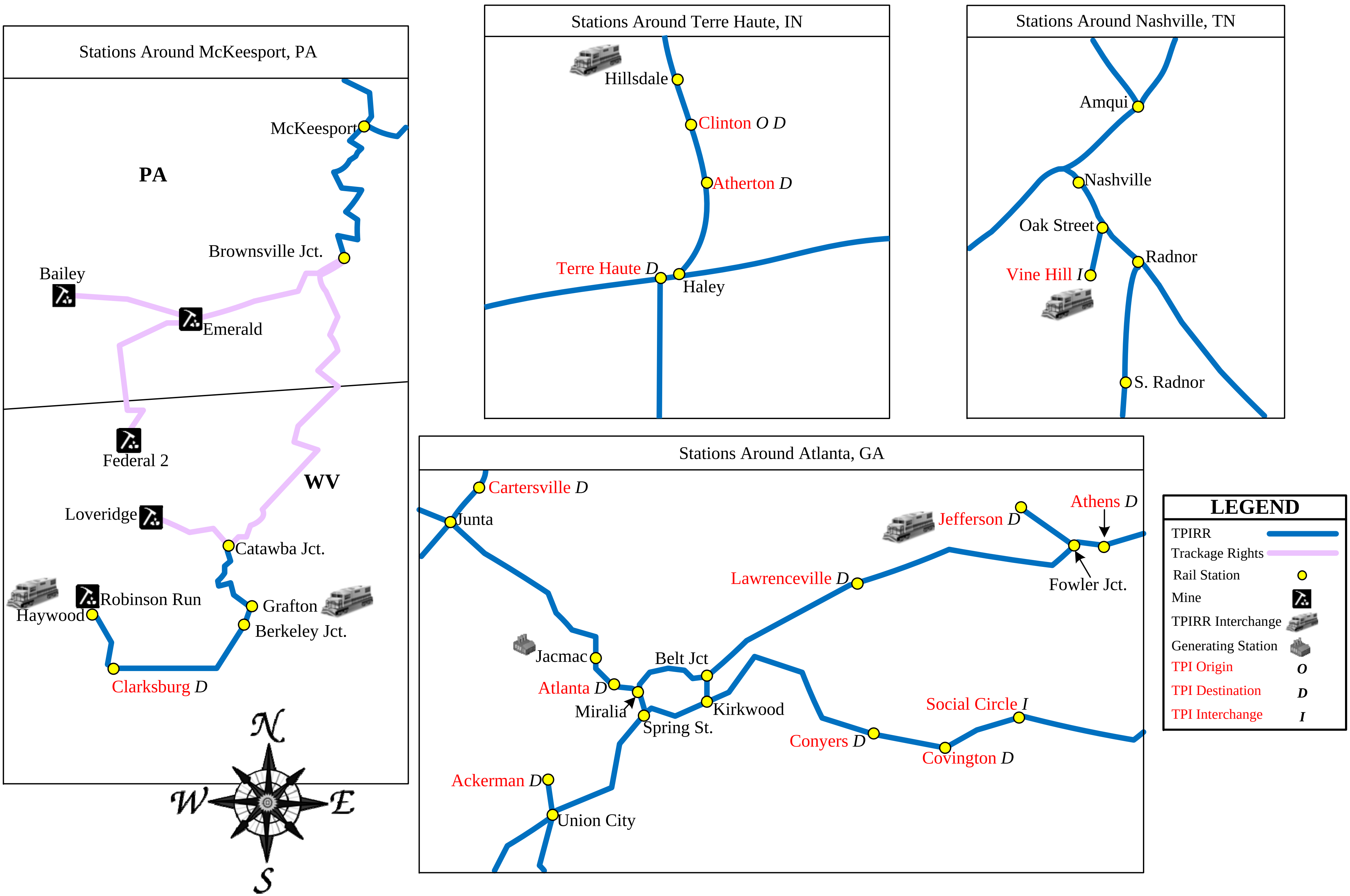
Total Petrochemicals & Refining USA, Inc. Stand-Alone Railroad ("TPIRR")



Total Petrochemicals & Refining USA, Inc. Stand-Alone Railroad ("TPIRR")



Total Petrochemicals & Refining USA, Inc. Stand-Alone Railroad ("TPIRR")



Comparison of the TPIRR System and the Real-World CSXT

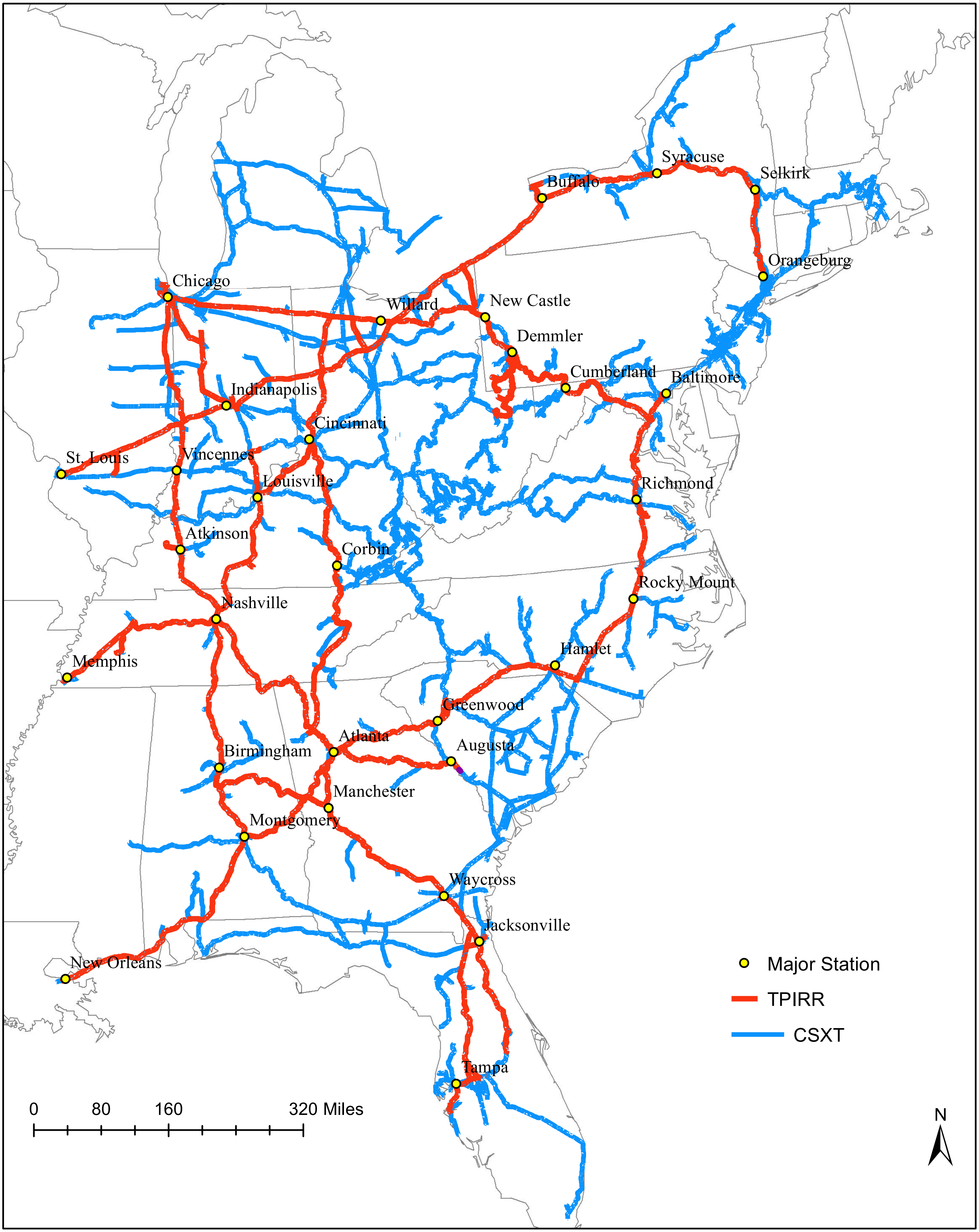


Table of Contents

TPIRR TRAIN LIST DEVELOPMENT

In this Exhibit, as well as Exhibit III-C-2 through Exhibit III-C-5, TPI provides details of the procedures that it has used to develop the list of TPIRR trains from CSXT's traffic data and other discovery responses that TPI then used to prepare the TPIRR's operating plan and to model TPIRR peak period operations in the RTC Model. The procedures described herein incorporate information and suggestions provided by CSXT in an October 11, 2013 discovery letter from CSXT's legal counsel to TPI's legal counsel, which has been reproduced as Exhibit III-C-2 ("October 11 letter").

That nine page October 11 letter reads like a disclaimer and includes several caveats regarding TPI's use of the historical traffic data CSXT provided in this case to develop its opening evidence. CSXT attempts to cast much of the data captured by its highly sophisticated (and very expensive) proprietary equipment tracking software as unreliable and unfit for use in evaluating CSXT's rail operations and developing a plan to replicate portions of those operations. These incredible claims should be critically assessed within the litigation context in which they are offered, which is to corner TPI into adopting CSXT's preferred procedure for developing the TPIRR's operating plan based upon the MultiRail Freight Edition software.

The evidence of this lies in the fact that CSXT produced virtually the same traffic data to TPI from January 2008 through June 2010 without any of the caveats in the October 11 letter that was part of CSXT's supplemental data production. Over the course of several months, TPI and CSXT corresponded on multiple occasions regarding the nature of specific elements of the provided data and how that data could best be used by TPI in developing its Opening Stand-Alone evidence. Never once during the course of that lengthy and involved exchange did CSXT express any reservation regarding the reliability of its traffic data or the validity of that data for use as the primary building blocks for the development of the SARR train list and operating plan. Neither did CSXT ever mention that it believed that a third-party software package would be a useful tool for TPI to use to avoid any problems that may have existed in its provided databases.

In September and October 2013, CSXT supplemented its original production of traffic data with *identically structured data* covering the Supplemental Discovery Period from July 2010 through June 2013. Specifically, in its accompanying 2013 correspondence, CSXT indicated that:

> Each of these three [Car Waybill data, Container Waybill data, and Car Shipment data] types of records contains the same fields as the traffic data that CSXT previously provided to TPI during the Initial Discovery Period.[1]
>
> ***
>
> The car event data is being produced in the same format and with the same fields as the data produced for the Initial Discovery Period.[2]
>
> ***
>
> The Train Sheet data being produced today complements CSXT's earlier productions of traffic data.[3]

However, in its 2013 correspondence, the same databases provided three years earlier were provided with much more detailed descriptions and disclaimers regarding their limitations and the inappropriateness of their use in developing SAC evidence. Specifically:

> This letter and CSXT's productions provide extensive explanatory information in response to TPI's request that CSXT explain how TPI can 'utilize' and 'evaluate' CSXT's traffic data. [Citing TPI RFP 23, which was filed in 2010.]
>
> ***

---

1 Letter from M. Warren to J. Moreno 1 (Sept. 27, 2013). *See* e-workpaper "2013 09 27 MJW to Moreno Re CSXT Hard Drive EHD-004.pdf".

2 Letter from M. Warren to J. Moreno 1 (Oct. 4, 2013). *See* e-workpaper "2013 10 04 MJW to Moreno Re CSXT DVD-103 and EHD-005.pdf".

3 Letter from M. Warren to J. Moreno 2 (Oct. 11, 2013).

> *At the outset*, traffic data provide only a historical archive of CSXT operations at particular points in time and under particular operating conditions. [Emphasis added]
>
> ***
>
> [W]hile TPI may choose to use CSXT's historical event data as a guide to designing its train service plan for its SARR, TPI cannot stop there if it is to "design[] a SARR specifically tailored to serve an identified traffic group."
>
> ***
>
> CSXT cautions TPI *at the outset* of the vulnerabilities of an approach that simply mimics certain trains extracted from CSXT's historical event data and ignores the need to independently develop tailored plans for blocking, car classification, and local train service. [Emphasis added]
>
> ***
>
> As explained in its August 29, 2013 letter, Oliver Wyman will make MultiRail available to TPI for a reasonable price. CSXT encourages TPI to consider using MultiRail or a similar tool to develop a car blocking and train service plan that accords with the SAC requirement that a SARR operating plan "meet the needs of the traffic group selected." [Citing *CP&L.*][4]

CSXT's claims that it provided the cautions and qualifiers included in its October 11 letter "at the outset" are patently false. In fact, CSXT's position regarding the appropriateness of its traffic data for the development of SAC operating evidence has changed 180 degrees in three years.[5]

But as TPI details herein, CSXT's traffic data, even with the limitations claimed by CSXT, provides a solid foundation for developing a feasible operating plan using the same basic

---

[4] Letter from M. Warren to J. Moreno 2-3, 5 (Oct. 11, 2013).

[5] CSXT cannot have it both ways. Either (1) CSXT sandbagged TPI in the first round of evidence three years ago by failing to "provide extensive explanatory information in response to TPI's requests… at the outset" in 2010—TPI was less than one month away from filing its Opening evidence when the case was bifurcated, or (2) CSXT's newly provided cautions and qualifiers are overblown and intended as a means for CSXT to gain control over TPI's development of its Opening evidence.

procedures that both railroads and shippers have used in every SAC case decided by the Board for more than a decade.

The remainder of this exhibit describes the procedures followed to identify the Base Year and peak period trains and train operations under the following topical headings:

A. CSXT's Claims Are Overblown And Often Contradictory

B. TPI's Reasonable Use Of CSXT Provided Traffic Data to Develop Train Lists and Operating Evidence

C. Identification of the Peak Period Trains

A. CSXT'S CLAIMS ARE OVERBLOWN AND OFTEN CONTRADICTORY

CSXT begins its assault on its own historical traffic data by describing the data as, "provid[ing] only a historical archive of CSXT operations at particular points in time under particular operating conditions;" and stating that, "the operating plan that TPI must design for its SARR traffic group necessarily will vary from historical CSXT operations . . . for at least four reasons."[6] The four reasons CSXT cites are: (1) that TPI will select a subset of CSXT's traffic data; (2) TPI will forecast volume growth over its analysis period; (3) TPI's rail system will physically differ from CSXT's in terms of footprint and facilities; and (4) TPI's SARR traffic selection will result in the creation of cross-over traffic. All of these statements, however, have been true for every SAC case presented to the Board, yet they have not provided a basis for rejecting operating plans founded upon historical traffic data.

Moreover, CSXT's fourth reason why CSXT historical traffic data should not be used to develop the SARR operating plan is actually the principal reason why the historical traffic data *must* form the basis for the development of the SARR operating plan. SAC rules clearly restrict the SARR from imposing any downstream operational changes to the residual incumbent on

---

[6] Letter from M. Warren to J. Moreno 2 (Oct. 11, 2013).

cross-over traffic movements.[7] Were TPI to ignore the actual CSXT operations for the non-SARR portions of the cross-over traffic movements, it would necessarily force the residual CSXT to alter its operations for those movements. It is imperative, therefore, that the operating plan maintain a link to CSXT's real-world operations in order to avoid this pitfall and to demonstrate feasibility.

Furthermore, CSXT's claim that an operating plan based on CSXT's historical operations is "doomed to failure,"[8] is inconsistent with statements CSXT makes later in its letter regarding the need to use specific historical data to inform its operating plan. For example, CSXT "produced several databases containing records from its delay reporting system… [that] provide important evidence of the delay incidents *that CSXT encounters in the real world* and *for which TPI's operating evidence must account*."[9] On the one hand, CSXT claims that its historical traffic data are irrelevant to SARR operations because the SARR traffic group, volumes, physical plant, and equipment will differ from those of CSXT, and on the other hand CSXT claims that its historical delay data are perfectly relevant to SARR operations and must be reflected in the SARR operating plan. CSXT cannot have it both ways.

With respect to car and train movement, CSXT states that TPI should use a third party software package—and even specifies which one it should use (i.e., Oliver Wyman's "MultiRail Freight Edition")—without regard for the actual historical operations of the selected traffic, even cross-over traffic that will be originated and/or terminated by CSXT in the future.

As part of its description of the limitations associated with its own historical traffic data, CSXT claims that its data "do not capture the full range of CSXT's operations."[10] CSXT then

---

[7] *E.g., TMPA* at 595.
[8] Letter from M. Warren to J. Moreno 3 (Oct. 11, 2013).
[9] *Id.* at 5 (emphasis added).
[10] *Id.* at 3.

justifies the use of MultiRail to develop the SARR operating plan in part because it has the capabilities to "identify the optimal train service and blocking and classification plans for [the selected] traffic."[11] But, even if CSXT were to create an operating plan for the SARR using MultiRail that it believes to be superior to TPI's operating plan, that would not demonstrate the infeasibility of TPI's operating plan. TPI needs only to demonstrate that its operating plan is feasible, not that it is superior to all other alternatives. *Duke/NS* at 100 ("where the shipper's opening evidence is feasible and supported, it is used in the Board's SAC analysis."); *Guidelines* at 543 ("The proponent of the SAC model must show that the alternative is feasible and could satisfy the shipper's needs.").

TPI's use of CSXT historical data ensures that the SARR operations will reflect "the full range of CSXT's operations," including bad-order setouts and pickups, and routing anomalies and delays caused by planned and unplanned track outages. CSXT well knows that in the real world, things do not always go according to plan. In fact, use of a modeling tool that in CSXT's words reflects the "optimal plans" would necessarily mean that the posited SARR operations could not possibly take into consideration the "incidents *that CSXT encounters in the real world* and *for which TPI's operating evidence must account*."[12]

B. TPI'S REASONABLE USE OF CSXT-PROVIDED TRAFFIC DATA TO DEVELOP TRAIN LISTS AND OPERATING EVIDENCE

As discussed above, CSXT's lengthy diatribe against its traffic data is riddled with contradictory statements and themes regarding the appropriateness of using actual historical data

---

[11] *Id.* at 4.

[12] Letter from M. Warren to J. Moreno 5 (Oct. 11, 2013) (emphasis added). Evidence in a pending SAC case, Dkt. No. NOR 42130, *SunBelt Chlor Alkali Partnership v. Norfolk Southern Ry. Co.*, illustrates this point. SunBelt's operating plan included cars that moved off-route, via an interchange with KCS at New Orleans rather than Meridian, during the period captured by the historical data, while the NS operating plan routed all of the cars via New Orleans. The route deviation through Meridian recorded in the historical data was due to a derailment on the origin carrier, KCS. *See* "Brief of Norfolk Southern Railway Company," Dkt NOR 42130, p. 14 (dated July 26, 2013). This was a real-world incident for which SunBelt was able to account, while NS was not.

vis-à-vis a modeled alternative. However, when the self-serving rhetoric is filtered out, the October 11 letter does provide some useful insights as to the relationships among the provided historical data sets, and their relative strengths and weakness for developing SAC evidence. TPI has used the letter to guide the development of its train lists and operating plan from historical data sources, as discussed in more detail below, including a step-by-step outline in Exhibit III-C-3.

CSXT's October 11 letter identified several important areas where specific deficiencies exist within its provided databases, including certain situations in which its provided data sets contain conflicting information. In some cases, CSXT identified areas where one set of data generally contains more reliable information than others. TPI has accepted CSXT's qualifying statements at face value and constructed train lists accordingly.

It must be noted, however, that while CSXT did provide some useful information regarding the overall strengths, weaknesses, and limitations of its provided databases in its October 11 letter, CSXT often provided very limited information regarding the specific types of data collection issues inherent in its various data sets. For example, CSXT disclosed that, "CSXT's train sheet data do not contain extensive information on local train movements."[13] But CSXT did not elaborate as to what types of data were typically missing from that database with respect to local train movements. Through a laborious process of data analysis and evaluation, TPI was able to develop complicated coding solutions to work around the data limitations generally acknowledged but not specifically identified by CSXT.

TPI principally relied on the following eight CSXT databases to develop its train lists: (1) Car Waybill data, (2) Container Waybill data, (3) Car Shipment data, (4) Car Event data, (5)

[13] Letter from M. Warren to J. Moreno 3 (Oct. 11, 2013).

Network Locations data, (6) Train Sheet Root Records data, (7) Train Sheet Intermediate Station data, and (8) Train Sheet Power data. TPI also relied on the CSA Report[14] customer data, and the Train Profile Information[15] provided by CSXT to evaluate and validate its results. Exhibit III-C-4 shows a high-level overview of the databases and general processes TPI used to develop its train lists.

TPI has used the provided data to design an operating plan based on a set of train lists that "account[] for all necessary blocking, car classification, switching, local service, pickups, and setouts providing complete service from origin (or on-SARR junction) to destination (or off-SARR junction) for its selected traffic."[16] The general procedures TPI used to analyze and develop train lists from the various CSXT databases are described below. These procedures are followed by a description of the procedures and specific components used to compile group-specific train lists to support the operating plan and to be used as inputs to the RTC model.

The discussion is summarized under the following headings and includes references to the CSXT statements that informed the development of the specified train lists:

1. Train List Overview
2. Analysis of Combined Waybill, Car Shipment and Car Event Data
3. Analysis of Train Sheet Data

---

[14] CSA Report data was used to develop customer-specific operating requirements that informed peak period train operations.

[15] TPI used the Train Profile Information data to evaluate its results, but during this evaluation it became clear that the Train Profile Information database provided by CSXT is incomplete. Despite CSXT's claims to the contrary, the provided Train Profile Information does not include profile information for all of the trains moving over the CSXT system in the study period. More specifically, CSXT's claim that the profiles data identifies "all the local trains that are necessary to serve CSXT's customers today" is simply not true. In fact, in the Base Year, there were 1,994 CSXT local trains and 4,476 other trains moving selected traffic as identified in the CSXT traffic data for which no Train Profile Information was provided. [*See*: work paper "Profiles1 Update comp to TPIRR traf Trains.xlsx"] On October 11, 2013, CSXT provided updated train profile data, along with a statement that, "we expect to produce updated Train Profile data for the Supplemental Discovery Period next week." In an October 18, 2013 letter, TPI requested that CSXT "clarify whether TPI should expect additional [train profile data] production." CSXT responded on October 21, 2013, stating, "The fact is that TPI has possessed clearly labelled train profile data since… October 11." See Exhibit III-C-2 at page 6, and workpapers "10-18-13 Matthew Warren Letter re- STB Docket No. NOR 42121.pdf" and "2013 10 21 MJW to Moreno Re Reply to 10 18 2013 Letter.pdf."

[16] Letter from M. Warren to J. Moreno 3 (Oct. 11, 2013).

4. Line-haul Merchandise Train List
5. Unit Train List
6. Local Train List
7. On-SARR and Off- SARR Junctions
8. Trains Carrying TPI Issue Traffic

1. Train List Overview

CSXT indicated in its October 11 letter that:

> CSXT cautions TPI at the outset of the vulnerabilities of an approach that simply mimics certain trains extracted from CSXT's historical event data and ignores the need to independently develop tailored plans for blocking, car classification, and local train service.[17]
>
> ***
>
> [H]istorical train data do not capture the full range of CSXT's operations.[18]
>
> ***
>
> As a general rule, CSXT believes the Car Event data are a more useful source of information for TPI's purposes, because they provide a more granular view of each individual car's movement. Car event data is particularly useful for understanding the service needs of carload traffic. But… TPI cannot solely rely on either Car Event data or Train Sheet data; Rather, TPI must consider all of the operating information sources CSXT produces as a whole if it is to understand CSXT's operations and the service needs of CSXT's traffic.[19]
>
> ***
>
> The event data that CSXT is producing today are the most complete and comprehensive care [sic] movement data in CSXT's possession. That said, a complete picture of CSXT's operations cannot be reconstructed from the event data alone, in part because the sheer size and complexity of CSXT's operations often results in less than uniform data capture.[20]

The data provided by CSXT made it necessary for TPI to use a two-pronged approach to develop and compile complete train lists that capture the full route, loading, unloading, classification, blocking, and switching activities associated with each train moving TPIRR

[17] Letter from M. Warren to J. Moreno 3 (Oct. 11, 2013).
[18] Id.
[19] *Id.* at 8.
[20] Id.

traffic. The data also made it necessary for TPI to use three related but somewhat different train list development protocols for three distinct groups of trains. Specifically, TPI separately developed programs tailored to identify and evaluate: (1) line-haul merchandise trains;[21] (2) unit trains; and (3) local trains. The three independently developed train lists were not combined into a master TPIRR train list until the conclusion of their independent development. On the most basic level, the three train lists are developed from common underpinnings. However, key process differences for the three train groups at critical points in their development enable the production of train lists containing the group-specific elements needed to develop a comprehensive TPIRR operating plan.

The primary source for the routing and mileage data for unit and line-haul merchandise trains was the Train Sheet data,[22] while the primary sources for the loading, unloading, blocking, classification, and switching activities (i.e., handling data) for all trains were the Carload and Container Waybill data and the Car Shipment and Car Event data. In addition, the Car Event and Carload and Container Waybill data were used as required to validate and expand the routing data for unit and line-haul merchandise trains, while the Train Sheet consist, loading, unloading, switching, and blocking data were used to validate and expand the handling data for all trains.

TPI separately analyzed the two groups of databases (Train Sheet and Car Event/Waybill) to develop preliminary train list inputs from each, and then TPI compiled the two separate train lists into a single master train list for each of the three distinct train groups defined above.[23]

---

[21] Intermodal, Auto, and Intercity Manifest Trains.

[22] As discussed in greater detail in the section on local trains below, local train routing was primarily developed using car event and waybill data, but was validated and expanded using train event and train profiles data. In addition, the train mileage developed from the train event data were verified and, where needed, adjusted based on the RTC model output.

[23] *See* Exhibit III-C-4, orange blocks.

As discussed further below, for unit and line-haul merchandise trains, TPI conservatively included trains in its master train list even when the train was only shown to move over the SARR system in the train event data.[24] Based on CSXT's description of the general (un)reliability of its provided traffic data with respect to local train operations, and based on the TPIRR-specific local train operating plan, different rules were needed to identify the final TPIRR local train list. The identification of the final local train list and the development of the route for those trains are discussed later in this exhibit.

2. Analysis of Combined Waybill, Car-Shipment, and Car-Event Data

After identifying the TPIRR revenue traffic, TPI identified the specific shipment keys associated with the cars moving that traffic over the CSXT system.[25] For each of the identified shipment keys, TPI processed the car-event data to identify all of the trains upon which each individual car moved, and to identify the specific locations where each car was placed on[26] and removed from[27] each of the trains on which it moved.[28] Then, TPI identified all of the empty cars moving on all of the CSXT trains moving TPIRR revenue traffic, and all empty CSXT unit trains[29] and conducted the same analysis for those cars.[30]

TPI encountered significant obstacles in developing its car-event and waybill data based train lists, each of which required the development of novel and complex programming solutions to overcome. A few key examples follow.[31]

---

[24] See, Exhibit III-C-3 at I.A-B. The few (well under one percent of total) trains that appeared only in the car event data were excluded from the train list, and the traffic moving on them was excluded from the TPIRR traffic group.

[25] Each railcar moving over the CSXT system has a series of shipment keys associated with it as it moves.

[26] First Node.

[27] Last Node.

[28] *See* Exhibit III-C-3 at I.C-D.

[29] As identified on the CSXT Train Designation Scheme provided at CSX-TPI-C-028892.

[30] *See* Exhibit III-C-3 at I.E-F.

[31] *See* Exhibit III-C-3 for a complete explanation of all novel and complex programming.

CSXT's Traffic and Revenue Database field-definition file contains a cryptic description of the data contained in the TRAIN_SUFFIX field of its Car Event database. It reads: "Train Suffix: the calendar date of the train operation in 'YYYYMMDD' format, but not necessarily the date on which the train first moved." Certainly CSXT could have provided more detail regarding the nature of what the data represents or how it relates to the date on which the train first moved. Through extensive data testing and evaluation, TPI discovered that for certain train types—most notably, line-haul merchandise and certain local trains—the TRAIN_SUFFIX changes en route, despite the fact that the actual train on which the cars are moving does not change. For example, Train ID {{[redacted]}} is a daily manifest train running between {{[redacted]}} with regular scheduled stops. A car that is first placed on the train in {{[redacted]}} and runs the entire route to {{[redacted]}} often will have the TRAIN_SUFFIX change en route when the calendar date turns over. When this happens, the Car Event data will indicate that the car left {{[redacted]}} on {{[redacted]}} 201301**01**, and arrive in {{[redacted]}} on {{[redacted]}} 201301**02**, for example. In this case, the car will actually have been on the same train from Cincinnati to Atlanta, but the car event data would appear to indicate that it moved on two separate trains. To accommodate this data nuance, TPI associated all car event data records for a given SHIPMENT_KEY&TRAIN_ID combination with the first TRAIN_SUFFIX date included in the car event data for that shipment. In the above example, this would mean that the car would have been considered to be on train {{[redacted]}} 20130101 for the entire movement from {{[redacted]}}.[32]

CSXT indicated in its October 11 letter that:

[32] *See* Exhibit III-C-3 at I.I.

> Car event data for local trains contain limited detail for activities at a given station and frequently do not detail customer-specific services or locations.
>
> ***
>
> This data can be derived from other sources, however. Waybill and patron data includes information on shippers and receivers.
>
> ***
>
> Information on particular customers served by CSXT is typically not available in the car event database or the Train Sheet database. However, customer information is available in the Waybill data…
>
> ***
>
> The car event data do not include detail on the connecting carriers for shipments. However, this information is available in the Waybill data CSXT previously produced.[33]

Therefore, after TPI compiled its initial car-event-data summary database containing a data record for each train on which each individual car carrying TPIRR traffic moved, TPI identified the first train and the last train upon which each car movement (defined by shipment key) traveled between its CSXT origin and its CSXT destination. Then, TPI associated the critical CSXT origin location milepost,[34] connecting carrier,[35] and origin customer identification data[36] from the Waybill data with the first train upon which the car moved according to the Car Event data.[37]

Next, TPI associated the critical CSXT destination location milepost,[38] connecting carrier,[39] and destination customer identification data[40] from the Waybill data with the last train upon which the car moved according to the Car Event data. Through a series of logic loops, TPI overwrote Car Event origin/destination location data with Waybill origin/destination location and

---

33 Letter from M. Warren to J. Moreno 9 (Oct. 11, 2013).
34 ON_NET_ORIG_MP.
35 ON_JCT_ROAD_CITY.
36 ORIGIN_IIDS.
37 *See* Exhibit III-C-3 at I.G.1 – 3.
38 ON_NET_DEST_MP.
39 OFF_JCT_ROAD_CITY.
40 DESTINATION_IIDS.

customer data where the Car Event data did "not detail customer-specific services or locations."[41]

As noted above, CSXT indicated in its October 11 letter that:

> The event data that CSXT is producing today are the most complete and comprehensive care [sic] movement data in CSXT's possession. That said, complete picture of CSXT's operations cannot be reconstructed from the event data alone, in part because the sheer size and complexity of CSXT's operations often results in less than uniform data capture.[42]

In an example of "less than uniform data capture," the first few events (and occasionally the last few events, or even events in the middle of a movement) for several car shipments in the provided Car Event data contain invalid data in the TRAIN_ID and/or TRAIN_SUFFIX data fields. These are the two data fields that identify the specific train on which a car is moving at a given point in time along its route. TPI addressed this issue through the application of several logic loops based on the evaluation of the captured first node and last node data for a given train on which a car moved.[43] The programming loops evaluated the train type, location data, and flags included in the Car Event data for the reported locations that indicate activities such as classification, origination, and termination handling events, among others.

As discussed in more detail below in the section on local train list compilation, although the processes used to make the milepost data substitutions generally resulted in enhancements to the CSXT data to make it more "uniform" and complete, they occasionally resulted in faulty substitutions for some movements. TPI manually evaluated the data substitutions its process made for the local trains for which data substitutions were made and then developed a series of add-on programming loops that globally validated or rejected those substitutions.[44]

---

41 *See* Exhibit III-C-3 at I. H. 1 – 3.
42 Letter from M. Warren to J. Moreno 8 (Oct. 11, 2013).
43 *See* Exhibit III-C-3 at I.G.4-9. and I.H.4-7.
44 *See* Exhibit III-C-3 at I.G.10. and I.H.8.

The resulting "SarrAllShTrn" table[45] identifies the first node and last node for each train on which each carload included in the TPIRR traffic group moved between origin and destination, based on a combination of Car Event and Waybill data.

Next, TPI compiled the car-specific train segments included in the table developed as described above into the "SarrAllConsist" table containing a car movement summary on a train-by-train basis.[46] For example, if the prior process determined that 20 individual loaded cars and 10 individual empty cars moved from {{[redacted]}} on train {{[redacted]}} 20130101, the compilation exercise would result in one record showing those 30 cars moving together as a block on that train. For most non-unit trains, this resulted in the identification of several individual blocks of cars moving from point to point along the train route. For example, the {{[redacted]}} 20130101 train may contain three data records, one showing 30 cars moving from {{[redacted]}}, one showing 10 cars moving between {{[redacted]}}, and one showing 20 cars moving between {{[redacted]}}.[47]

3. Analysis of Train Sheet Data

TPI developed routing data for line-haul merchandise trains and unit trains for the July 2012 through June 2013 time period based on a combination of: (1) CSXT provided "Train Sheet Root Records" (TM600) data, which contain overview data for the segments that make up a train's full route, including train size, weight, and car count data; and (2) CSXT provided "Train Sheet Intermediate Station" (TM605) data, which contain routing and mileage detail for intermediate stations along the segments that make up the train route. For a given train, CSXT provided from one to over a dozen TM600 data records, and for each TM600 data record, there

---

[45] The "SarrAllShTrn" table contains Train-specific On-Off data for All SARR Shipments and can be found at electronic workpaper dbo_aSarrAllShTrn.

[46] The "SarrAllConsist" table contains a compilation of the SarrAllShTrn car-specific records into blocks of cars moving together on specific trains and can be found at electronic workpaper dbo_aSarrAllConsist.

[47] *See* Exhibit III-C-3 at I. I.

may be several dozen TM605 records. Therefore, for most trains, hundreds of individual routing detail records were linked, aligned, verified, and analyzed to compile detailed train routing and SARR mileage data.[48]

Specifically, TPI identified the TM605 Train Sheet Intermediate Station data records associated with each of the TM600 Train Sheet Root Records, aligned them, and sorted them by event order and time.[49] Next, TPI manually analyzed the provided Network Locations data table to identify the station mileposts that are situated on the TPIRR network. Then, TPI compared the universe of mileposts included in the TM605 data, and determined that there were over 1,300 mileposts in that table that were not included or identified in the provided Network Locations data. TPI was able to manually align and evaluate most of the mileposts with the Network Locations data, and it expanded the provided Network Locations data table to include all of the mileposts included in the TM605 data with appropriate On-SARR flags.[50]

After the TM605 milepost data could be accurately categorized as On-SARR or Off-SARR, TPI evaluated the combined TM600 and TM605 detailed routing table (i.e., the "TrainsAllEvents" table) for each train carrying cars moving TPIRR traffic. All CSXT stations were identified as On-SARR or Off-SARR, the On-SARR location and Off-SARR location were identified, and the sub-segment miles were summed for all stations flagged as On-SARR.[51]

The train miles developed using this process were later compared to the mileage data produced from the RTC modeling process. Where there was disagreement between the two mileage calculations for specific trains and routes, the RTC-developed miles were used. The

---

48 The TrainsAllEvents table.

49 *See* Exhibit III-C-3 at III.A.

50 On November 18, 2013, TPI requested that CSXT provide the missing data. On November 26, 2013, CSXT provided some but not all the requested data - - See 11/26/13 letter from Warren to Moreno. See: workpaper "2013 11 26 MJW to Moreno Re CSXT DVD 114 and Reply to 11 18 Letter.pdf".

51 *See* Exhibit III-C-3 at III.B-C.

RTC miles were deemed to be more accurate for two primary reasons: (1) the train-event data do not include mileage data for many of the segments over which CSXT (and TPIRR) operates via trackage-rights agreements with landlord carriers; and (2) some train-event data records either contained no mileage data or contained erroneous milepost data that did not allow the segments to be properly classified as on-SARR. In addition, the use of RTC-derived miles ensures consistency between the mileage data and the transit time data used to develop operating statistics and operating costs, as transit time data are also generated by the RTC model.

In instances where a Base Year train had no comparable counterpart in the RTC model output, the miles developed from the train event data for those trains were adjusted based on the ratio of RTC miles-to-train event miles for peak-period trains within the relevant subgroup (e.g., coal trains loading in the Pennsylvania mine fields).

As noted by CSXT in its October 11 letter:

> The Train Sheet Root records in table TM600 include information on each train's total loaded and empty shipments upon arrival and departure at select locations. Total pickups and setouts can be inferred from changes in these fields for stations that are reported in the TM600 records. Pickups and setouts at intermediate stations cannot be inferred using Train Sheet data.[52]

For example, there are generally three TM600 records associated with Train {{[redacted]}}, as follows: (1) {{[redacted]}}; (2) {{[redacted]}}; and (3) {{[redacted]}}. Consist changes at the four locations reported in the TM600 data "can be inferred from changes in these fields . . . that are reported in the TM600 records."[53] However, cars are often set out and picked up at other locations along this train's route that are not reported in the

---

[52] Letter from M. Warren to J. Moreno 8-9 (Oct. 11, 2013).
[53] *Id.* at 9.

TM600 records, including {{[redacted]}}, among others. These {{[redacted]}} pickups and setouts "cannot be inferred using Train Sheet data."[54]

To account for this deficiency in the Train Sheet data, TPI developed TRAIN_SUFFIX data from TrainsAllEvents records using several of the provided data fields in the TM600 table,[55] and linked the TrainsAllEvents table to the SarrAllConsist table it developed as described above—the table contains the train-by-train summary of car movement based on Car Event and Waybill data—using the TRAIN_ID and TRAIN_SUFFIX data fields. Using the link it developed,[56] TPI was able to pull location-specific en route pickup and setout (consist change) information developed from the Car Event and Waybill data into the TrainsAllEvents train routing database it created, including stations like Knoxville, that appear in the TM605 Intermediate Station data but not in the TM600 Train Sheet Root data.[57]

4. Line-haul Merchandise Train List

TPI developed the TPIRR line-haul merchandise train list using building blocks developed as described above. The first step was to identify the trains included in the SarrAllConsist table developed from Car Event and Waybill data as described above and link that file to the Train Sheet data. When the link was made, 99.5% of the roughly 128,000 trains identified in the SarrAllConsist table were found in the Train Sheet data.[58] The remaining 0.5% percent of trains were sampled and manually evaluated to determine the reason for the failed link test. In nearly all cases, the cause of the failure was due to discrepancies in TRAIN_SUFFIX

---

54 *Id.*

55 This was another instance in which the supporting data provided by CSXT was both cryptic and inaccurate, but TPI was able to identify the correct fields based on extensive data evaluation.

56 TPI was required to develop this link using portions of several provided data fields because CSXT did not provide fields that could be used to directly link Car Event data with Train Sheet data.

57 *See* Exhibit III-C-3 at III.B.3-6.

58 *See* Train Matching Between Car Events And Train Sheets V03 11272013.xlsx.

date between the Car Event and Train Sheet data.[59] In other words, the train did exist in the Train Sheet data, but the TRAIN_SUFFIX date was off by a day or two. For the 99.5% of trains where positive links were made, the trains were included in the pool of TPIRR trains and progressed to the SARR routing analysis.

Next, TPI evaluated all line-haul merchandise trains that appeared in the Train Sheet data but that were not included in the SarrAllConsist table. This evaluation included all of the trains described above where the counterpart train did exist in the SarrAllConsist table but could not be linked due to having a slightly different date. It also included several trains repositioning empty cars (such as empty autoracks) that were excluded from the SarrAllConsist compilation process because all cars were non-revenue empties and the trains were not designated as empty trains in the provided CSXT train designation scheme.[60] *All* line-haul merchandise trains that appeared in the Train Sheet data but that were not included in the SarrAllConsist table were included in the pool of TPIRR trains and progressed to the SARR routing analysis.[61]

a. Routing

The SARR train routing evaluation entailed the comparison of each individual station reported in the Train Sheet data for each line-haul merchandise train to the expanded NetworkLocations data developed by TPI. Stations were flagged as being On-SARR or Off-SARR, the first On-SARR location and the last On-SARR location were identified, and miles

---

[59] In addition, some trains are associated with TRAIN_IDs identified as "Re-billable Flagmen" in the Car Event data. According to CSXT's Train Designation Scheme, this means that, "T&E employee is used to protect outside party and expense can be billed to the outside party." See, CSX-TPI-C-028892. However, these train symbols do not appear in the provided Train Sheet data. Some of the trains for which links were not made were caused by CSXT's inconsistent naming convention among its provided databases for these trains.

[60] *See* CSX-TPI-C-028892.

[61] *See* Exhibit III-C-3 at III. E.

were accumulated for each sub-segment of the train route that was identified as being On-SARR.[62]

First, trains that were found in both the SarrAllConsist table and the Train Sheet data were processed.[63] The train routing procedure was run both on the entire train route (all TM600 and TM605 records combined)[64] and it was run on the individual TM600 Train Sheet Root records and corresponding TM605 Intermediate Station records.[65] The individual Train Sheet Root summary records were used to identify trains that exited and reentered the SARR, and the stations at which those interchanges occurred. Affected trains were manually reviewed and split into the required operating segments to develop the operating plan and peak period RTC train list.

Next, trains that were not found in the SarrAllConsist table but that were present in the Train Sheet data were processed.[66] After the train routing procedure was run, trains exiting and reentering the SARR were manually reviewed and split to develop the operating plan and peak period RTC train list.

b. Blocking, Pickups, Setouts, Classification, and Switching

CSXT stated in its October 11 letter that TPI must "demonstrate[] how shipments will be 'blocked and assembled into the appropriate trains for delivery.'"[67]

The SARR train consist change evaluation entailed the comparison of each individual station reported in the Train Sheet data to each individual station for which a SarrAllConsist record was created in the Car Event and Waybill data train list compilation process. Specifically,

---

62 The miles were later validated or adjusted using the mileage data produced in the RTC model output tables.
63 *See* Exhibit III-C-3 at III.C-D.
64 Output table = "dbo_aSarrBaseLhManTrainsTriSum" (Traingulated Train Summary).
65 Output table = "dbo_aSarrBaseLhManTrainsTri" (Traingulated Segment Data).
66 *See* Exhibit III-C-3 at III.F.
67 Letter from M. Warren to J. Moreno 4 (Oct. 11, 2013) (citation omitted).

all locations included in the Train Sheet data were linked to the SarrAllConsist table, and where corresponding blocking data were found, they were imported into the TrainsAllEvents train routing database. Implicit in the SarrAllConsist blocking data are the car-specific pickup and setout events summarized in the SarrAllShTrn table. This process pulled in intermediate switching activities for the trains that were not present in the Train Sheet data (such as the {{[redacted]}} pickups and setouts for the {{[redacted]}} train in the above examples). It also served to validate and supplement the terminal and intermediate switching activities that were present in the Train Sheet Root Records data. For example, the Train Sheet Root Records data may have indicated that train {{[redacted]}} 20130101 left {{[redacted]}} with 18 loaded cars and 10 empty cars. However, the SarrAllConsist data may have indicated that train {{[redacted]}} 20130101 left {{[redacted]}} with 20 loaded cars and 10 empty cars. To be conservative, TPI accepted and used the greater of the two car counts in all cases where there was a conflict between the data sets.[68] After individual station car counts were developed, the running train consist was developed by ticking down through the sequential train events and making consist changes at all stations where one was reported in the combined data sets.[69]

The same process was then used to develop blocking, pick-up, set-out, and switching data for trains that were included in the provided train sheet data but not included in the SarrAllConsist table developed from Car Event and Waybill data. However, because no car-event and waybill data were available for these trains, TPI defaulted to the train data in the development of routing and consist data for these trains.

---

[68] There are many potential reasons for the car counts to be different at a given station. One is that the TRAIN_SUFFIX data changes for individual line-haul merchandise trains while en route in the Car Event data, so on occasion car date reporting slips by a day in the CSXT Car Event data. There are several other valid reasons, including the several disclaimers CSXT made regarding the "less than uniform data capture" implicit in its Car Event data. *See* Letter from M. Warren to J. Moreno (Oct. 11, 2013).

[69] *See* Exhibit III-C-3 at III.B.6.

c. Compilation

After the routing, blocking, pickups, setouts, and switching activities were developed for all line-haul merchandise trains based on a combination of Train Sheet, Car Event, and Waybill data, the SARR operations were evaluated to identify the trains that would be handled by the TPIRR. In order to qualify as a TPIRR train, the train was required to have reported two or more consecutive On-SARR stations and to have cumulative SARR miles of 10 or more. The former qualification ensured that the TPIRR train list did not inadvertently include trains that simply crossed over TPIRR trackage without ever traversing the SARR, and the latter ensured that the SARR avoided short-hauling trains that would reduce the efficiency of both the SARR and the residual incumbent. For example, if a line-haul merchandise train originates in the Waycross, GA yard, and it would move for only a couple of miles before exiting the TPIRR for furtherance over the residual CSXT, the CSXT would simply handle that train in its entirety from Waycross. In other words, this would not be a TPIRR train.

5. Unit Train List

TPI developed the TPIRR unit train list using a somewhat similar model as that used to develop the line-haul merchandise train list, but with some important differences. Unlike other railroads, CSXT often tracks unit trains in its Train Sheet database over an entire cycle of movement.[70] Therefore, an individual train (as identified by a unique combination of Train ID and Train Suffix (or date)) is associated with a given train for an entire cycle. In many cases, particularly for unit coal trains, the full cycle begins at an intermediate point along the empty leg of the movement. For example, Trains with a Train ID of {{[redacted]}} typically begin their route of movement at {{[redacted]}}, move empty to {{[redacted]}} to load, move loaded to

[70] Most railroads' train event data is compiled such that an individual train, as defined by Train ID and Train Suffix (or date) is associated with the loaded portion of a unit train cycle, and a different train is associated with the corresponding empty leg.

{{[redacted]}} where they unload, and finally return empty to {{[redacted]}}. This entire loop is treated as a single train movement in the CSXT data environment.

As with line-haul merchandise trains, the first step was to identify the unit trains included in the SarrAllConsist table developed from Car Event and Waybill data as described above and link that file to the Train Sheet data. When the link was made, 99.3 percent of the roughly 28,000 trains identified in the SarrAllConsist table were found in the Train Sheet data.[71] The remaining 0.7 percent of trains were manually evaluated to determine the reason for the failed link test. In many cases, it appeared that the cause of the failure was due to discrepancies in TRAIN_SUFFIX date between the Car Event and Train Sheet data.[72] For the 99.3% of trains where positive links were made, the trains were included in the pool of TPIRR trains and progressed to the SARR routing analysis.

Next, TPI evaluated all unit trains that appeared in the Train Sheet data but that were not included in the SarrAllConsist table. This evaluation included all of the trains described above where the counterpart train did exist in the SarrAllConsist table but could not be linked due to having a slightly different date or having a coded Rebill TRAIN_ID in the car event data. It also included several trains repositioning empty cars (such as empty ore trains) that were excluded from the SarrAllConsist compilation process because all cars were non-revenue empties and the trains were not designated as empty trains in the provided CSXT train-designation scheme. *All* trains that appeared in the Train Sheet data but that were not included in the SarrAllConsist table were included in the pool of TPIRR trains and progressed to the SARR routing analysis.

---

[71] *See* Train Matching Between Car Events And Train Sheets V03 11272013.xlsx.

[72] In addition, some trains are associated with TRAIN_IDs identified as "Re-billable Flagmen" in the Car Event data.

a. Routing

As with the line-haul merchandise train process, the SARR unit train routing evaluation entailed the comparison of each individual station reported in the Train Sheet data for each unit train to the expanded NetworkLocations data developed by TPI. Stations were flagged as being On-SARR or Off-SARR; the first On-SARR location and the last On-SARR location were identified; and miles were accumulated for each sub segment of the train route that was identified as being On-SARR.[73]

First, trains that were found in both the SarrAllConsist table and the Train Sheet data were processed.[74] The train routing procedure was run both on the entire train route (all TM600 and TM605 records combined)[75] and it was run on the individual TM600 Train Sheet Root records and corresponding TM605 Intermediate Station records.[76] The individual Train Sheet Root summary records were used to identify trains that exited and reentered the SARR, and the stations at which those interchanges occurred. Affected trains were manually evaluated and split into SARR operating segments to develop the operating plan and peak period RTC train list. This process was relatively more complicated and more labor intensive due to the CSXT practice of tracking certain unit trains for full cycles and due to the fact that there was often disagreement between the Waybill/Car Event and Train Sheet data regarding the loading and unloading locations for unit train traffic (discussed in more detail below).

Next, trains that were not found in the SarrAllConsist table but that were present in the Train Sheet data were processed.[77] After the train routing procedure was run, trains exiting and

---

[73] The miles were later validated or adjusted using the mileage data produced in the RTC model output tables.
[74] *See* Exhibit III-C-3 at III.B-D.
[75] Output table = "dbo_aSarrBaseLhManTrainsTriSum" (Triangulated Train Summary).
[76] Output table = "dbo_aSarrBaseLhManTrainsTri" (Triangulated Segment Data).
[77] *See* Exhibit III-C-3 at III. E - F.

reentering the SARR were manually evaluated and split to develop the operating plan and peak-period RTC train list.

b. Loading and Unloading

The first step of the SARR unit train consist change evaluation was identical to the process used for line-haul merchandise trains, it entailed the comparison of each individual station reported in the TrainsAllEvents data table to each individual station for which a SarrAllConsist record was created in the Car Event and Waybill data train list compilation process. Specifically, all locations included in the TrainsAllEvents table were linked to the SarrAllConsist table, and where corresponding loading, unloading, and switching data were found, they were imported into the TrainsAllEvents table.

Implicit in the SarrAllConsist blocking data are the car-specific pickup and setout events summarized in the SarrAllShTrn table. This process pulled in intermediate switching activities for the trains that were not present in the Train Sheet data. For the many unit trains that are tracked for a full cycle in the CSXT Train Sheet data, this means the loading and unloading activities would be reported as consist changes rather than train origins and destinations. For example, the {{[redacted]}} and {{[redacted]}} locations in the Train {{[redacted]}} example above would be reported as consist changes. This process also allowed for TPI to identify and account for operational anomalies such as bad-order setouts and pickups en route. Specifically, if the SarrAllConsist data indicated that a car or two was set out or picked up en route at a reported TM605 Intermediate Station, that activity would be reflected in the unit train statistics for that train.

As with the line-haul merchandise train process, this portion of the analysis also served to validate and supplement the terminal and intermediate switching activities that were present in the Train Sheet data. For example, the Train Sheet data may have indicated that train {{[redacted]}} 20130101 left {{[redacted]}} with no loaded cars and 110 empty cars. However, the SarrAllConsist data may have indicated that train {{[redacted]}} 20130101 left {{[redacted]}} with no loaded cars and 100 empty cars. To be conservative, TPI accepted and used the greater of the two car counts in all cases where there was a conflict between the data sets.[78] After individual station car counts were developed, the running train consist was developed by ticking down through the sequential train events and making consist changes—including bad order pickups and setouts—at all stations where one was reported in the combined data sets.

For many unit trains, the TM605 Intermediate Station routing detail failed to include the location where the SarrAllConsist data indicated the loading and unloading activity occurred for a given unit train. TPI included the SarrAllConsist loading and unloading location data for each unit train in the unit train output tables.[79]

The same process was then used to develop blocking, pick-up, set-out, and switching data for trains that were included in the provided train sheet data but not included in the SarrAllConsist table developed from Car Event and Waybill data. Because no car event and waybill data were available for these trains, TPI defaulted to the train data in the development of routing and consist data for these trains, with one important addition for unit trains. For individual trains that CSXT recorded as full- or partial-cycle trains in its Train Sheet data, and for which TPI was unable to capture related loading and unloading data in the combined Waybill/Car Event data, TPI imposed the predominant loading and unloading locations for that

---

[78] There are many potential reasons for the car counts to be different at a given station. One is that the TRAIN_SUFFIX data changes for individual line-haul merchandise trains while en route in the Car Event data, so on occasion car date reporting slips by a day in the CSXT car event data. There are several other valid reasons, including the several disclaimers CSXT made regarding the "less than uniform data capture" implicit in its event data.

[79] *See* Exhibit III-C-3 at II.C-F. and III. D.2.d.

train symbol on the Train Sheet route. For example, if there were a {{[redacted]}} train in the Train Sheet data for which TPI identified no Car Event or Waybill data, TPI assumed that train loaded at {{[redacted]}} and unloaded at {{[redacted]}} like the other {{[redacted]}} trains for which CSXT provided Waybill data.[80]

After this process was run, TPI manually evaluated every unit-train route and altered the train routes to accommodate the loading and unloading activities and locations as indicated in the combined Waybill/Car Event data.

c. Compilation

After the routing, loading, unloading, pickup, and setout activities were developed for all unit trains based on a combination of Train Sheet, Car Event, and Waybill data, the SARR operations were evaluated to identify the trains that would be handled by the TPIRR. In order to qualify as a TPIRR train, the train was required to have reported two or more consecutive On-SARR stations, and to have cumulative SARR miles of 10 or more. The former qualification ensured that the TPIRR train list did not inadvertently include trains that simply crossed over TPIRR trackage without ever traversing the SARR, and the latter ensured that the SARR avoided short-hauling trains that would reduce the efficiency of both the SARR and the residual incumbent. For example, if a unit train originated in the Chicago, IL, yard and it moved for only a few miles before exiting the system for furtherance over the residual CSXT, the CSXT would simply handle that train in its entirety from Chicago.

---

[80] *See* Exhibit III-C-3 at II.C-F. and III.F.7.d.

6. Local Train List

TPI's procedures for identifying local trains required to serve TPIRR traffic and the development of the TPIRR local train list was significantly different from the processes used for line-haul merchandise and unit trains. There were two primary causes for the differences.

First, CSXT expressed significant reservation regarding the validity of both its Car Event data and particularly its Train Sheets data with respect to data capture for local trains. Specifically:

> CSXT cautions TPI at the outset of the vulnerabilities of an approach that simply mimics certain trains extracted from CSXT's historical event data and ignores the need to independently develop tailored plans for… local train service.[81]
>
> ***
>
> CSXT's train sheet data do not contain extensive information on local train movements. To develop an operating plan that accounts for local service, TPI must consult other sources in the discovery record, including CSXT's car event data, waybill and patron information, [and] train profile information . . . .[82]
>
> ***
>
> <u>Local Operations</u>. Car Event data for local trains contain limited detail for activities at a given station and frequently do not detail customer-specific services or locations. In addition, Train Sheet data for local trains frequently do not contain all details on the train operations or routing. This data can be derived from other sources, however. Waybill and patron data includes [sic] information on shippers and receivers. Moreover, the train profile information provides further details on CSX trains.[83]

However, elsewhere CSXT stated that its car event data are particularly useful for tracking individual carload shipments. For example:

---

[81] Letter from M. Warren to J. Moreno 3 (Oct. 11, 2013).
[82] *Id.*
[83] *Id.* at 9.

> Car event Data is [sic] particularly useful for understanding the service needs of carload traffic.[84]
>
> ***
>
> Car Event data provide a granular account of each car's movement and allows one to infer where individual cars were picked up or set out.[85]

TPI inferred from CSXT's convoluted message that, for local train operations: (1) Waybill data are generally more reliable than car event data; (2) Car Event data are generally more reliable than Train Sheet data; (3) Train Sheet data are useful for limited purposes; and (4) Train Profile information should be used to validate data pulled from the three major CSXT traffic databases. As discussed below, TPI developed its local train list in accordance with these guiding principles.

Second, TPIRR designed its local train operations to streamline and maximize the efficiency of both its own local train service and the local train service of the residual CSXT. Specifically, with the exception of a few local trains carrying issue traffic,[86] all TPIRR local trains are local to the TPIRR. In other words, unless the particular consist and route of a local train moving issue traffic requires that train to be interchanged between TPIRR and the residual CSXT, TPIRR local trains serve only TPIRR stations. All local trains carrying cars that originate and/or terminate at Off-SARR points will be handled by the residual CSXT as they are in the real world. For example, if a real-world CSXT local train moves cars from Off-SARR stations near Birmingham to Birmingham, which is a TPIRR station, residual CSXT will continue to provide that local service (and receive an ATC revenue division reflecting the costs it

---

[84] *Id.* at 8.
[85] *Id.*
[86] Of the 42,208 local trains identified in the Base Year, 1,214 handled the issue traffic. Of the 1,214 issue traffic local trains, 122 moving over thirteen (13) lanes in the Base Year also contained non-issue traffic that would be interchanged with the residual CSXT.

incurs to do so.) TPIRR will provide the line-haul merchandise service for that carload, assuming for example that it moves over the TPIRR from Birmingham to Chicago.

The reasons for TPIRR's treatment of local trains (on both the TPIRR and the residual CSXT) are straightforward. TPIRR has an obligation to ensure that its traffic group receives the same or greater level of service as the traffic group does in the real world. This includes cross-over traffic movements. TPI's treatment of both TPIRR and residual CSXT's local train service ensures that the vast majority of these complex short-haul train movements will be provided by a single railroad, and therefore will not require en route interchanges between the TPIRR and the residual CSXT. Due to CSXT's network structure and the location of customer facilities in many of the urban centers it serves, real-world CSXT local-train routes often exit and reenter the TPIRR multiple times within only a few miles over the course of a relatively short run. The operations that would be required to accommodate multiple interchanges for these trains would severely hamper the ability of both TPIRR and the residual CSXT to efficiently and effectively serve their customers.

The only alternative would be to expand the SARR well beyond the footprint required to serve the TPI issue traffic in order to enable the TPIRR to operate all of these real-world CSXT local trains, as shown in Exhibit III-C-5.[87] Furthermore, this would very quickly cascade into an even greater expansion of the SARR, because every additional segment of track added to accommodate the entire operational cycle of the first group of potentially interline local trains would introduce a new group of local trains whose operations would require even further expansion to accommodate. This sort of expansion would turn the SAC analysis on its head by

---

[87] For example, CSXT local trains {{[redacted]}} and {{[redacted]}} run between {{[redacted]}}. Rather than interchanging the trains five (5) miles south of {{[redacted]}}, CSXT will continue to operate these trains as it does in the real world, and the point of CSXT-TPIRR interchange for all traffic moving on these trains will be {{[redacted]}}.

shifting from a theoretical railroad designed principally to serve the issue traffic and other traffic that shares the facilities required to serve the issue traffic to a railroad designed principally to serve all of the incumbent's local train traffic of which the issue traffic happens to share only a small portion of the required facilities.

a. Routing

The SARR local-train routing evaluation differed significantly from the routing evaluation used for line-haul merchandise and unit trains. TPI placed great emphasis on capturing relevant Waybill data, and combining it with Car Event data to develop the foundation of its local-train operational data. TPI also consulted the Train Sheet data and Train Profile information to verify, evaluate, and develop the train routing and train miles for the local trains it included in its train list.[88]

As discussed in general terms above, the primary building blocks for the TPI local-train list are the SarrAllShTrn and SarrAllConsist tables developed from combined CSXT Car Event and Waybill data. These data tables incorporate the association of CSXT origin location milepost,[89] connecting carrier,[90] and origin customer identification data[91] from the waybill data with the first train upon which the car moved according to the car event data (often a local train for carload traffic), and the association of CSXT destination location milepost,[92] connecting carrier,[93] and destination customer identification data[94] from the waybill data with the last train upon which the car moved according to the Car Event data (again, often a local train for carload traffic).

---

88 The miles were later validated or adjusted using the mileage data produced in the RTC model output tables.
89 ON_NET_ORIG_MP.
90 ON_JCT_ROAD_CITY.
91 ORIGIN_IIDS.
92 ON_NET_DEST_MP.
93 OFF_JCT_ROAD_CITY.
94 DESTINATION_IIDS.

As discussed above, the processes used to make the initial milepost data substitutions generally resulted in enhancements to the CSXT data that better reflected actual operations and better identified customers served by local trains. However, after the initial substitution programs were run, TPI evaluated the output tables containing the data substitutions its process made for local trains. This evaluation was based on a review of the substituted origins and destinations, and involved cross-referencing every substitution against the Train Profiles routing data for every local train for which CSXT provided Train Profiles data. Where the train profiles route validated the substitution, it was retained.

The process also involved a check based on the mileage between the replacement Origin/Destination milepost from the Waybill data and the Car Event data sourced Origin/Destination milepost for which data substitutions were made. This test was required because CSXT did not provide Train Profiles data for all local trains and because the Train Profiles route does not always include all stations served by a particular train. If the replacement origin/destination from the Waybill data were found to be proximate to the corresponding Car Event origin/destination and Train Profiles route, the replacement Waybill origin/destination locations were deemed to have been reasonably served by the local train in question. If the replacement data failed either test, it was manually reviewed to identify any anomalies that the two tests would not capture, and ultimately, a judgment call was made regarding the validity of the replacement.

After the local train service location validation analysis was complete, an additional programming loop was added to the Car Event and Waybill data processing protocol to reject unreasonable location substitutions, and the entire process was rerun to develop the final SarrAllShTrn and SarrAllConsist train lists.[95]

Next, the SarrAllConsist table was evaluated to identify local trains that either served only TPIRR stations, or that served TPI issue traffic in the Base Year. Trains that passed either test were included in the TPIRR local train list.

The event timestamps captured in the SarrAllConsist table were used to determine the route of movement for all TPIRR local trains.

b. Pickups and Setouts

After the route was established, the carload pickups and setouts reported in the SarrAllConsist file were assigned to the corresponding en route stations for each train, and compiled train consist data were generated.

Implicit in the SarrAllConsist blocking data are the car-specific pickup and setout events summarized in the SarrAllShTrn table. For local trains, TPI deferred to the Waybill/Car Event data for pickup and setout detail. However, in many cases the terminal stations reported in the Waybill and Car Event data were also reported in the Train Sheet data. In those cases, the Train Sheet data were used to validate and supplement the terminal switching activities as reported in the combined Waybill and Car Event data.

c. Compilation

After the routing, pickups, setouts, and switching activities were developed for all local trains based on a combination of Car Event and Waybill data, TPI compared the TPIRR local train list to the TrainAllEvents table to evaluate the validity of local-train routing and mileage data reported in the Train Sheet data. For TPIRR local trains for which Train Sheet data were

---

[95] *See* Exhibit III-C-3 at I.G.10. and I.H.8.

available and for which the Train Sheet data route appeared reasonable (i.e., the Train Sheet data placed the train on the TPIRR system at the correct locations on the correct date), train-mileage data were collected. The average train-mileage data for trains of a given TRAIN_ID that did move over the TPIRR route were used as a surrogate for other TPIRR local trains with the same TRAIN_ID but for which no reliable Train Sheet mileage data were available.[96]

7. On-SARR and Off-SARR Junctions

To ensure that the residual incumbent remained whole from a revenue perspective, the ATC calculation was adjusted to allocate revenues to the residual CSXT for individual movement segments that are not operated by TPIRR (i.e., trains that are not included in the combined TPIRR train list). Specifically, revenues were only allocated to the TPIRR for portions of a movement that were *both* on the TPIRR network *and* moving on a train included in the combined TPIRR train list. Revenues were allocated to the residual CSXT for portions of a movement that were *either* off the TPIRR network *or* moving on a train that was not included in the combined TPIRR train list. This means that, in some cases, the On-SARR and Off-SARR junctions are not at the geographical end of the TPIRR physical plant, but rather are in a major TPIRR/CSXT yard.

8. Trains Carrying TPI Issue Traffic

In most cases, the TPIRR network and train operations allow for TPIRR to provide service to issue traffic in the same manner as CSXT provides in the real world. Specifically, the issue traffic moves in the same trains over the same routes on the TPIRR as it does over the CSXT.

---

[96] As noted above, the miles were later validated or adjusted using the mileage data produced in the RTC model output tables.

However, for some issue traffic movements in the Base Year, the traffic is internally rerouted over alternate routes. In all such cases, this requires the reassignment of the carloads carrying issue traffic to alternate trains that follow a different route than the CSXT trains on which the traffic moves in the real world. Each of the affected lanes and the specific operational adjustments are described individually below.

a. Issue Lanes B62 and B113 (Chicago to Clarksburg, WV)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. To eliminate the Off-SARR routing in the Base Year, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR—{{[redacted]}}.

b. Issue Lane B12 (New Orleans to Oneco, FL)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. However there are some actual CSXT movements for this lane from {[redacted]} in the Base Year that travel completely On-SARR. To eliminate the Off-SARR routing in the Base Year for the movements that do not travel completely On-SARR, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR based on CSXT actual routing for this lane —{{[redacted]}}.

c. Issue Lane B16 (New Orleans to Galloway, FL)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. To eliminate the Off-SARR routing in the Base Year, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR—{{[redacted]}}.

d. Issue Lanes B38 and B104 (New Orleans to Deland, FL)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. To eliminate the Off-SARR routing in the Base Year, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR—{{[redacted]}}.

e. Issue Lane B18 (Chicago to Cincinnati, OH)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. However there are some actual CSXT movements for this lane from {[redacted]} in the Base Year that travel completely On-SARR. To eliminate the Off-SARR routing in the Base Year for the movements that do not travel completely On-SARR, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR based on CSXT actual routing for this lane—{{[redacted]}}.

f. Issue Lane B84 (Chicago to Wapakoneta, OH)

Based on CSXT's actual routing, the trains for these lanes typically travel from {[redacted]}. However there are some actual CSXT movements for this lane from {[redacted]} in the Base Year that travel completely On-SARR. To eliminate the Off-SARR routing in the Base Year for the movements that do not travel completely On-SARR, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR based on CSXT actual routing for this lane—{{[redacted]}}.

g. Issue Lanes B109 and B110 (Chicago to Lima, OH)

Based on CSXT's actual routing, the trains for these lanes typically travel completely On-SARR from {[redacted]}. The few trains that do not travel completely On-SARR travel from {[redacted]}. To eliminate the Off-SARR routing in the Base Year for the movements that do not travel completely On-SARR, TPI has rerouted the issue traffic on these Off-SARR trains onto the following trains that travel On-SARR based on CSXT actual routing for this lane—{{[redacted]}}.

C. IDENTIFICATION OF THE PEAK-PERIOD TRAINS

TPI compiled the complete Base Year TPIRR train list from the CSXT provided traffic data and related sources and applied the relevant growth factors to determine the number of trains that must be added to serve the TPIRR traffic group in the peak year. Specifically, TPI slotted the required growth trains into the peak year based on the distribution implicit in the Base Year train list. This ensured that the seasonality implicit in the Base Year is reflected in the peak year. The procedures TPI used are described in detail below under the following topical headings:

1. Application Of TPI Volume Forecast To Base Year Trains
2. Combined TPIRR Train List
3. Development Of Peak Period Train Counts
4. Development Of Peak Period RTC Input Train List

1. Application Of TPI Volume Forecast To Base Year Trains

The Base Year train list was developed from the latest available 12 months of historical traffic data provided by CSXT, from July 2012 through June 2013. The peak train list represents the last 12-months of the 10-year SAC analysis from July 2019 through June 2020. TPI applied its volume forecast to the Base Year trains to determine the number and size of trains the TPIRR would be moving in the peak year. As a general rule, the projected aggregate volume change from 2012-2019 was applied to Base Year trains that moved between July and December 2012 to generate the July-December 2019 portion of the peak-year train list, and the projected aggregate volume change from 2013-2020 was applied to Base Year trains that moved between January and June 2013 to generate the January-June 2020 portion of the peak-year train list. The specific procedures used to develop the peak-year trains varied by train group. Each group is discussed separately below.

a. Unit Trains

Unit trains were split into five (5) groups: coal, grain, other, extra (non-coal), and empty. Within each group, the trains were further split into multiple subgroups based on the train origin-destination ("O-D") pair and the year of movement. For coal, the subgroup O-D pairs were based on the loading (or interchange received) and unloading (or interchange forwarded) locations for the loaded portion of the train movement. For other unit train groups, the subgroup O-D pairs were based on the CSXT origin (or interchange received) and destination (or interchange forwarded) states for the train movement.[97] This resulted in the creation of 1,597 subgroups of unit trains.

For each of the subgroups, the Base Year train count, aggregate car count, average cars per train, and maximum cars per train statistics were developed from the associated Base Year trains.[98] Next, the peak year average train size was developed for each subgroup based on the following rule—the Base Year average car count per train was increased by the lesser of 10 percent of the Base Year average car count or 10 cars, unless the result exceeded the Base Year maximum car count per train (in which case the Base Year maximum train size would be used as the peak year maximum train size.)[99] The difference between the peak-year average train size and the Base Year average train size was then multiplied by the Base Year train count to determine the number of available growth slots available on the historical trains.[100]

The next step was to identify the appropriate growth factor applicable to each subgroup of trains. O-D specific projected volume changes were applied to each of the coal-train subgroups. These O-D specific growth indices reflect the EIA volume projections specific to the

---

[97] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "UnitPeakCalc", columns A through E.
[98] *Id.* columns F through H and K.
[99] *Id.* column I.
[100] *Id.* columns J and O.

relevant origin coal fields and they reflect the plant capacities of the TPIRR coal shippers. The TPIRR system-wide STCC 01 projected volume change was applied to each of the grain train subgroups. Similarly, a system-wide industrial traffic composite volume change was applied to each of the non-coal, non-grain unit trains. These growth factors were applied to the Base Year car counts to develop the peak-year car requirements for each subgroup.[101]

The available growth slots on historical trains were then subtracted from the peak-year car requirements to determine whether additional trains would be required to handle the peak-year volume growth. If additional peak trains were required, the excess growth cars were divided by the peak-year average car count per train to determine the number of growth trains required to serve the TPIRR traffic group.[102]

b. Line-Haul Merchandise Trains

Line-haul merchandise trains were split into three (3) groups: intermodal, auto, and manifest. Within each group, the trains were further split into multiple subgroups based on the train origin-destination ("O-D") pair and the year of movement. Specifically, the subgroup O-D pairs were based on the O-D pair region and train number group, i.e. 0-99, 100-199, etc., of the train movement. This resulted in the creation of 4,290 subgroups of merchandise trains.

For each of the subgroups, the Base Year train count, aggregate car count, average cars per train, and maximum cars per train statistics were developed from the associated Base Year trains.[103] Next, the aggregate growth cars were calculated for each train in the Base Year. The TPIRR system-wide STCC 37 projected volume change was applied to each train in the auto train subgroup. Similarly, a system-wide industrial-traffic composite volume change was applied to each of the manifest trains, and a system-wide intermodal-traffic composite volume

[101] *Id.* columns M and N.
[102] *Id.* columns Q through V.
[103] *See* "Manifest Train Peak Period Analysis_Opening_v3.xlsx" at level "Growth Trains by year".

change was applied to each of the intermodal trains. These growth factors were applied to the Base Year car counts to develop the peak year car requirements for each subgroup.[104] Once the number of growth cars per train was developed, the peak-year train size was developed for each train based on the following rule—the Base Year car count per train was increased by the number of growth carloads calculated above, unless the result exceeded either the Base Year maximum car count per train or a train length of 1.75 miles[105] (in which case the peak year maximum train size would be set at the Base Year maximum train size or the number of cars required to reach the 1.75 mile limit based on an average car length per train, as appropriate.)[106] The difference between the peak year train size and the Base Year train size was then calculated to determine the available growth slots and any overage in the projected number of cars per train was distributed amongst other trains in the subject subgroup. After all available growth slots per train in a given subgroup were filled, the remaining cars were aggregated to determine the total number of excess growth cars needed to move peak year traffic volumes for each subgroup.[107]

The aggregate growth cars per subgroup were then divided by the peak year average train size per subgroup to determine the number of additional growth trains required to handle the peak year volume growth.[108]

---

[104] *Id.* at level "Combined" column BE.

[105] Additionally, there were 477 trains identified in the peak week with train lengths greater than 2 miles that were capped at Base Year train sizes. Due to en route consist changes and other factors, portions of these trains were larger than 2 miles in length in the peak period. For example, a train starts with 150 cars and ends with 50 cars for an average train size of 100 cars. However, the 150 car train for the first part of the movement produced a train length greater than 2 miles. For these specific trains, the maximum train size was capped at the Base Year train size and any growth cars for these trains were distributed in accordance with the procedures identified in this section.

[106] *Id.* at level "Growth Trains by Year", column M.

[107] *Id.* at level "Growth Trains by Year", column N.

[108] *Id.* at level "Growth Trains by Year", column P.

c. Local Trains

Local trains were split into two (2) groups in line with the real-world CSXT groupings: coal mine runs and merchandise locals. Within each group, the trains were further split into multiple subgroups based on the train home station (origin), and the year of movement.[109] This resulted in the creation of 424 subgroups of local trains.

For each of the subgroups, the Base Year train count, aggregate car count, average cars per train, and maximum cars per train statistics were developed from the associated Base Year trains.[110]

The next step was to identify the appropriate growth factor applicable to each subgroup of trains. A system-wide industrial-traffic composite volume change was applied to each of the merchandise local trains, and a system-wide coal-traffic composite volume change was applied to each of the coal mine run local trains. These growth factors were applied to the Base Year car counts to develop the peak year car requirements for each subgroup.[111]

Next, the peak-year average train size was developed for each subgroup based on the following rules: the peak-year aggregate car count divided by the Base Year train count was used, unless the result exceeded the Base Year maximum car count per train. For coal mine run trains, if the calculated peak-year average train size (car count) exceeded the Base Year maximum train size, the average train size was capped at the greater of the Base Year maximum size or 50 cars per train. For merchandise locals, if the calculated peak-year average train size (car count) exceeded the Base Year maximum train size, the average train size was capped at the

[109] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "Local Trains BY", columns A through J.
[110] *Id.* columns L through O.
[111] *Id.* column T.

greater of the Base Year maximum size or 100 cars per train.[112] If the calculated peak-year train size could not accommodate all projected growth, trains were added to the peak year.[113]

2. Combined TPIRR Train List

After the individual train lists (described above) were developed, they were compiled into a single table showing daily train counts for the Base Year, determined based on the TRAIN_SUFFIX date.[114] Based on the TRAIN_SUFFIX data, there were two seven-day periods in the Base Year[115] with the greatest combined number of trains moving TPIRR traffic: one was from December 8, 2012 through December 14, 2012, and the other was from December 10, 2012 through December 16, 2012. Specifically, of the 187,906 trains moving in the Base Year, 3,789 trains moved in the two peak weeks.[116]

3. Development Of Peak Period Train Counts

Peak period daily train counts were developed by allocating the projected growth train requirements developed as described above within the specific train groups according to the distribution that was implicit in the Base Year, and then adding those slotted growth trains to the Base Year daily train counts. The specific procedures followed are discussed below.

a. Unit Trains

Using the procedures described above, TPI determined that it must add 3,469 net unit trains in the peak year to accommodate TPIRR projected volume growth.[117] Specifically, TPI must add 1,417 unit coal trains, 136 unit grain trains, and 1,916 other unit trains.[118] Then, TPI calculated the daily distribution (percent of annual total dispatched on each day) in the Base Year

---

112 *Id.* column U.
113 *Id.* columns V.
114 *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", columns A through Q.
115 July 1, 2012 through June 30, 2013.
116 *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", cells P374, Q379, R175, and R177.
117 *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "UnitPeakCalc", cell P3.
118 *Id.* range P6:P10.

for each of the three unit train categories.[119] TPI determined the number of daily net train additions that would be required for each group on each day in the peak year to accommodate the projected TPIRR volume growth by multiplying the total additional train requirement by the calculated daily distribution for each day in the peak year.[120] The required daily additional trains were then added to the Base Year historical train counts for each day to determine the peak year daily train count for each group.[121]

b. Line-Haul Merchandise Trains

Using the procedures described above, TPI determined that it must add 1,048 line-haul merchandise trains in the peak year to accommodate TPIRR projected volume growth.[122] Specifically, TPI must add 790 intermodal trains, 21 auto trains, and 237 manifest trains.[123] Then, TPI calculated the daily distribution (percent of annual total dispatched on each day) in the Base Year for each of the three unit train categories.[124] Next, TPI determined the number of daily net train additions that would be required for each group on each day in the peak year to accommodate the projected TPIRR volume growth by multiplying the total additional train requirement by the calculated daily distribution for each day in the peak year.[125] The required daily additional trains were then added to the Base Year historical train counts for each day to determine the peak year daily train count for each group.[126]

---

119 *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", columns S through U.
120 *Id.* columns Z through AB.
121 *Id.* columns AG through AI.
122 *See* "Manifest Train Peak Period Analysis_Opening_v3.xlsx" at level "Growth Trains by year", column P.
123 *Id.* range P4306:4308
124 *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", columns V through X.
125 *Id.* columns AC through AE.
126 *Id.* columns AJ through AL.

c. Local Trains

Using the procedures described above, TPI determined that it must add two local trains in the peak year to accommodate TPIRR projected growth.[127] Specifically, TPI must add one merchandise local and one coal mine run train. Then, TPI calculated the daily distribution (percent of annual total dispatched on each day) in the Base Year for local trains.[128] TPI determined the number of daily net train additions that would be required on each day in the peak year to accommodate the projected TPIRR volume growth by multiplying the total additional train requirement by the calculated daily distribution for each day in the peak year.[129] The required daily additional trains were then added to the Base Year historical train counts for each day to determine the peak year daily train count.[130]

d. Combined Trains and Peak Period Determination

After the peak year daily train counts were developed for each train group, they were summed to determine the total peak year daily train counts.[131] TPI determined that the seven-day period in the peak year[132] with the greatest combined number of trains moving TPIRR traffic was from December 10, 2019 through December 16, 2019. Specifically, of the 192,425 trains moving in the peak year, 3,882 trains will move in the peak week.[133] TPI used a two-day warm-up period and a one-day cool down period in accordance with recent SAC cases. As a result the RTC model peak period was determined to be December 8, 2019 through December 17, 2019.

---

[127] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "Local Trains BY", column Y.
[128] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", column Y.
[129] *Id.* column AF.
[130] *Id.* column AM.
[131] *Id.* column AN.
[132] July 1, 2019 through June 30, 2020.
[133] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", cells AN374, AO379, and AP177.

4. Development Of Peak Period RTC Input Train List

After the peak period was identified, the corresponding Base Year trains were identified and used to form the basis for the peak period train list. The train consist data were updated to reflect the peak year train sizes based on the application of the relevant growth factors (up to the train-specific size limits). After the required adjustments were made to the Base Year trains, the growth trains were added according to the distribution implicit in the peak period calculation as discussed in the preceding section.[134] As shown in the work papers,[135] due to the need to add whole (not partial) trains, TPI added 131 total trains in the peak period, although the peak period calculation required only the addition of 128 trains.

The specific procedures used to develop the peak period train list are discussed by train group below.

a. Unit Trains

There were 764 total unit trains included in the Base Year data for the ten-day peak period.[136] In many cases, due to dispatching delays or due to the fact that the peak period trains were originated by CSXT miles from the SARR system and did not enter the SARR until well after the train was initially dispatched, the On-SARR time for TPIRR trains lagged behind the TRAIN_SUFFIX date. In some cases, this resulted in On-SARR times for peak period trains occurring after the peak period ended. More generally, it led to a light train load in the early part of the peak period and a regular train load in the middle and end of the peak period. Therefore, TPI altered the on-SARR times to ensure that the peak period analysis reflected the full load of

---

[134] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", range AR168:AY181.
[135] *Id.*
[136] *See* "Peak Period Unit Trains v1.xlsx" at level "Base Train Raw Data", cell H773; and "Train List Unit V0912162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", range G169-178.

trains reflected in its peak period calculation.[137] Specifically, for trains with On-SARR times occurring after the peak period ended, TPI set the On-SARR time back 10 days. For example, if a train originated Off-SARR at 5:00 PM on 12/17/2012 and did not report having entered the SARR until 3:00 AM on 12/19/2012, TPI adjusted the On-SARR time to 3:00 AM on 12/09/2012 and let the train run through the RTC model from that point forward. This resulted in a total of 101 trains having the clock turned back, and it balanced the peak period train load.[138]

TPI then evaluated the Base Year trains based on the On-SARR times and determined that, if it had simply removed these 101 trains and added in their place the trains whose On-SARR times were in the base period window, it would only have added 93 additional trains.[139] TPI's approach is conservative and ensures that its train list reflects the TRAIN_SUFFIX-based model it used to determine the peak period.

TPI manually evaluated each of the peak period trains to determine the precise route of movement, On-SARR and Off-SARR locations, loading and unloading locations, linking requirements, and On-SARR times. In many cases, particularly for unit coal trains, this process required TPI to split the CSXT train cycle into loaded and empty segments and create flags to link them at the mine and plant. TPI also split trains that exited and reentered the SARR into separate train segments for modeling.[140]

After it had evaluated and adjusted all of the Base Year trains included in the peak period, TPI added the required growth trains. TPI did this by creating duplicates of trains that

---

[137] TPI developed its base and peak year train lists from many disparate databases provided by CSXT in discovery. The TRAIN_SUFFIX data field was the common data point that allowed all of the databases to be linked and compiled in a coordinated manner. The TRAIN_SUFFIX data field was the appropriate field for purposes of universally classifying train movements by date and determining the peak period. As discussed in the following paragraphs, this approach actually led to overstated (and conservative) peak period train counts and operating statistics. The peak period does not need to precisely mirror the base period, it simply has to be a fair representation of the peak period operations.

[138] *See* "Peak Period Unit Trains v1.xlsx" at level "Base Train Raw Data", cell {{[redacted]}}.

[139] *Id.* cell H775.

[140] *See* "Peak Period Unit Trains v1.xlsx" at level "Peak Train List Base".

moved in the peak period.[141] The determination of which trains would be duplicated was done on a train subgroup basis and was based on the likelihood that a growth train would be required.[142] For example, if one subgroup required 20 growth trains to move its peak year traffic and another subgroup required two growth trains, the first subgroup would be ten-times as likely to have a duplicate train added in the peak period as the second subgroup.[143] This approach eliminated bias and required TPI to add trains in its heaviest growth lanes in the peak year.

b. Line-Haul Merchandise Trains

There were 3,366 total line-haul merchandise trains included in the Base Year data for the ten-day peak period.[144] As with unit trains, in some cases, the On-SARR time for TPIRR trains did not match the TRAIN_SUFFIX date. Where this resulted in On-SARR times for peak period trains occurring before or after the peak period ended, TPI altered the On-SARR times to ensure that the peak period analysis reflected the full load of trains reflected in its peak period calculation. This resulted in a total of 44 trains having the On-SARR time adjusted, and it balanced the peak period train load.[145]

TPI manually evaluated each of the merchandise trains to determine the precise route of movement, on- and off-SARR locations, pick-up and set-out locations, consist changes, and on-SARR times. In many cases, this process required TPI to split trains that exited and reentered the SARR into separate train segments for modeling.[146]

After it had evaluated and adjusted all of the Base Year trains included in the peak period, TPI added the required growth trains. As with coal trains, TPI did this by creating

[141] *See* "Peak Period Unit Trains v1.xlsx" at level "Peak Adds".
[142] *See* "Peak Period Unit Trains v1.xlsx" at level "Peak Adds Worksheet".
[143] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "UnitPeakCalc", column AA.
[144] *See* "Train List Unit V09 12162013 With Peak Calc v2.xlsx" at level "BsYrPeakAll", range L169:L178.
[145] *See* "Manifest Train Routing for RTC_v4.xlsx" at level "Train Routing", column L; and "Manifest Train Peak Period Analysis_Peak Week_v5.xlsx" at level "dbo_aSarrTeManTrainsNotInCeSum", column Z.
[146] *See* "TPI RTC Peak Train List_Manifest_v6.xlsx" at level "Manifest Train List."

duplicates of trains that moved in the peak period.[147] The determination of which trains would be duplicated was done on a train subgroup basis and was based on the likelihood that a growth train would be required.[148] This approach avoided bias and ensured that TPI added trains in its heaviest growth lanes in the peak year.

c. Local Trains

There were 1,089 total local trains included in the Base Year data for the ten-day peak period.[149] As with unit and manifest trains, in some cases, the On-SARR time for TPIRR trains did not match the TRAIN_SUFFIX date. Where this resulted in On-SARR times for peak period trains occurring before or after the peak period ended, TPI altered the On-SARR times to ensure that the peak period analysis reflected the full load of trains reflected in its peak period calculation. This resulted in a total of 31 trains having the On-SARR time adjusted, and it balanced the peak period train load.[150]

TPI manually evaluated each of the 1,089 local trains to determine the precise route of movement, pick-up and set-out locations, consist changes and On-SARR times. All of the TPIRR local trains in the peak period are local to the TPIRR, i.e. do not interchange with the residual CSXT.[151] There were 204 local trains that did not initially produce a route of movement based on the combined CSXT car event and car waybill data. These 204 unique trains performed industry switching, so the pickup and setout of cars happened at the same location. Of those 204 local trains, there were 31 that traveled less than 0.7 miles (19 traveled 0 miles) and 173 that

---

[147] *Id.*
[148] *See* "Manifest Train Peak Period Analysis_Opening_v3.xlsx" at level "Growth Trains by year", column AK.
[149] *See* "Peak Period Local Trains v5 wDwell v3.xlsx"at level "Peak Train List."
[150] *Id.* at level "Base Train Raw Data" column BL and FX.
[151] Three (3) local trains are interchanged with CSXT at the destination of the issue traffic (Laurens, SC) and CSXT serves the additional 30+ miles.

traveled greater than 0.7 miles based on the Train Sheet data.[152] The 31 trains that traveled less than 0.7 miles were not input into the RTC as they represent yard operations, which the RTC does not model. For the 173 trains that traveled greater than 0.7 miles, a combination of the Train Sheet and Train Profile data was evaluated to determine the route these trains traveled.

No local growth trains were required in the peak period.

d. Other Considerations

Using the SarrAllShTrn table developed as part of the Base Year train list development procedures, TPI identified the connecting road for trains that were interchanged with other short line and Class I rail carriers.[153] TPI also used the SarrAllShTrn table to determine which of the peak period trains were moving TIH traffic.[154]

---

[152] *See* "RTC Locals with No Turn Point v2.xlsx."
[153] *See* "IF Location Sum MU PP.xlsx" and "IR Location Sum MU PP.xlsx."
[154] *See* "TIH_FLAG_SHIPMENT_KEYS_PEAK_TRAINS_v2.xlsx."

SIDLEY AUSTIN LLP
SIDLEY

SIDLEY AUSTIN LLP
1501 K STREET, N.W.
WASHINGTON, D.C. 20005
(202) 736 8000
(202) 736 8711 FAX

BEIJING
BOSTON
BRUSSELS
CHICAGO
DALLAS
FRANKFURT
GENEVA
HONG KONG
HOUSTON
LONDON
LOS ANGELES
NEW YORK
PALO ALTO
SAN FRANCISCO
SHANGHAI
SINGAPORE
SYDNEY
TOKYO
WASHINGTON, D.C.

pmoates@sidley.com
(202) 736 8175

FOUNDED 1866

October 11, 2013

Jeffrey O. Moreno
Thompson Hine LLP
1919 M Street, N.W.
Washington, DC 20036-1600

Re: *Total Petrochemicals & Refining USA, Inc. v. CSX Transportation, Inc.*, STB Docket No. 42121

Dear Jeff:

Enclosed are documents that CSX Transportation, Inc. ("CSXT") is producing to Total Petrochemicals & Refining USA, Inc. ("TPI") as part of the agreed supplemental discovery in the above-referenced proceeding. The enclosed DVD labeled CSX-TPI-HC-DVD-104 and the documents it contains have been designated "Highly Confidential" pursuant to the June 23, 2010 Protective Order entered by the Surface Transportation Board in this proceeding.

CSX-TPI-DVD-104 contains additional transportation contracts being produced in response to TPI Request for Production 26, delay data being produced in response to TPI Request for Production 42, joint facility agreements being produced in response to TPI Request for Production 75, maintenance of way wage rates being produced in response to TPI Request for Production 95, affiliate bills being produced in response to TPI Request for Production 114, and intermodal contracts being produced in response to TPI Request for Production 156. CSX-TPI-DVD-104 also contains failed equipment detector ("FED") costs being produced in response to TPI Request for Production 141. The spreadsheet "Fed Costs Update.xls" fully replaces the "Fed Costs.xls" spreadsheet previously produced on September 29, 2010.

The enclosed hard drive CSX-TPI-HC-EHD-006 and the Train Sheet data it contains has been designated "Highly Confidential." Because CSX-TPI-HC-EHD-006 contains traffic event data for the Supplemental Discovery Period,[1] it has also been designated as Sensitive Security

[1] "Supplemental Discovery Period" has the meaning that term had in CSXT's prior discovery letters, *i.e.*, the time period between July 1, 2010 and June 30, 2013.

Sidley Austin (DC) LLP is a Delaware limited liability partnership doing business as Sidley Austin LLP and practicing in affiliation with other Sidley Austin partnerships.

Information ("SSI") that is controlled under 49 C.F.R. Parts 15 and 1520.[2] The hard drive is encrypted; a password to decrypt it is being sent to you under separate cover.

The Train Sheet data being produced today complements CSXT's prior productions of traffic data, including its September 25 production of Waybill, Car Shipment, and Container Shipment data on CSX-TPI-HC-EHD-004 and its October 4 production of Car Event data on CSX-TPI-HC-EHD-005. In addition, this letter and CSXT's productions provide extensive explanatory information in response to TPI's request that CSXT explain how TPI can "utilize" and "evaluate" CSXT's traffic data. *See* TPI Request for Production 23. Section I of this letter explains four key concepts that TPI should have in mind as it evaluates the traffic event data. Section II describes the event data and the decoders CSXT has provided for it, and discusses some ways that TPI can link and better understand the data.

I. KEY CONCEPTS FOR EVALUATING AND USING CSXT'S CAR EVENT AND TRAIN SHEET DATA.

A. Car and Train Data Are a Historical Archive of CSXT Operations at Particular Points in Time.

At the outset, traffic data provide only a historical archive of CSXT operations at particular points in time and under particular operating conditions. CSXT's operations are dynamic—train and yard operations change regularly based on traffic volumes, track conditions, weather, and other factors. While this historical data provides a snapshot of customer service requirements and operating practices as they existed at that point in time, the operating plan that TPI must design for its SARR traffic group necessarily will vary from historical CSXT operations. This is so for at least four reasons: (1) TPI will be selecting a subset of CSXT's historical traffic, not all of CSXT's traffic; (2) TPI must posit Peak Year operations for a traffic base that will (in all likelihood) have expanded in accordance with TPI's traffic volume projections; (3) TPI's SARR presumably will be transporting its traffic over a network that has different facilities, geographic reach, and track capacity than CSXT's existing network; and (4) TPI's SARR likely will be positing crossover traffic movements that convert local CSXT movements into interline or overhead movements on the SARR. All these factors mean that, while TPI may choose to use CSXT's historical event data as a guide to designing its train

[2] The enclosed hard drive CSX-TPI-HC-EHD-006 contains Sensitive Security Information ("SSI") that is controlled under 49 C.F.R. Parts 15 and 1520. No part of the records contained in the enclosed hard drive may be disclosed to persons without a "need to know" as defined in 49 C.F.R. Parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release or disclosure of SSI may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. § 552 and 49 C.F.R. Parts 15 and 1520.

service plan for its SARR, TPI cannot stop there if it is to "design[] a SARR specifically tailored to serve an identified traffic group."[3] On the contrary, TPI must design a "detailed operating plan" that accounts for all necessary blocking, car classification, switching, local service, pickups, and setouts providing for complete service from origin (or on-SARR junction) to destination (or off-SARR junction) for its selected traffic.[4] Some of the tools and data detailed below can aid TPI in meeting the STB's requirement that it produce an operating plan "specifically tailored" to the service needs of its selected traffic.

CSXT cautions TPI at the outset of the vulnerabilities of an approach that simply mimics certain trains extracted from CSXT's historical event data and ignores the need to independently develop tailored plans for blocking, car classification, and local train service. Any "operating plan" based solely on historical operations out of CSXT's event data is doomed to failure, both because it fails to account for the different traffic group that TPI's SARR will serve and because historical train data do not capture the full range of CSXT's operations. For example, CSXT's train sheet data do not contain extensive information on local train movements. To develop an operating plan that accounts for local service, TPI must consult other sources in the discovery record, including CSXT's car event data, waybill and patron information, train profile information, and data on local train crew starts and assignments. This letter identifies certain additional data sources produced by CSXT that TPI can use in conjunction with the traffic event data.

B. TPI Must Develop a Full Train Service, Car Classification, and Blocking Plan Tailored to the Needs of Its Own Traffic.

While TPI has broad discretion to select traffic for its SARR traffic group, it is likely that its traffic group will contain substantial amounts of carload traffic. Indeed, the traffic whose rates TPI has challenged is carload traffic that requires significant switching and car classification at intermediate points to move across CSXT's network.[5] And TPI may elect to select significant amounts of other carload traffic for its SARR traffic group. If TPI does so,

---

[3] *See AEPCO v. BNSF & UP*, STB Docket No. 42113, at 4 (served Nov. 16, 2011)

[4] *Id.* ("Based on the traffic group to be served, the level of services to be provided, and the terrain to be traversed, a detailed operating plan must be developed for the SARR."); *Texas Mun. Power Auth. v. BNSF*, 6 S.T.B. 573, 589 (2003) ("[T]he SARR must meet the transportation needs of the traffic in the group by providing service that is equal to (or better than) the existing service for that traffic.").

[5] *See Total Petrochemicals & Refining USA, Inc. v. CSX Transp., Inc.*, STB Docket No. NOR 42121, at 34 n.89 (May 30, 2013) ("The fact that TPI's shipments move in carload traffic means that the shipments must often be transported to one or more classification yards to be blocked and assembled into the appropriate trains for delivery.").

then its operating plan for that traffic must include not only a train service plan, but also a detailed car classification and blocking plan that demonstrates how shipments will be "blocked and assembled into the appropriate trains for delivery."[6] Train service and blocking and classification plans must be carefully designed to provide complete service from origin (or on-SARR junction) to destination (or off-SARR junction) and to ensure that all rail customers are receiving complete service in a way that meets the customers' needs.[7]

Real-world railroads typically use computer software to help them identify optimal train service and blocking and classification plans for their traffic. The MultiRail Freight Edition created by Oliver Wyman is one such modeling tool. MultiRail generates optimized blocking and train service plans for a selected traffic group, based on the characteristics of the traffic, the railroad's network configuration, customer service requirements, and other carrier inputs. CSXT uses a version of MultiRail as a tool for its own real-world planning and service design, and published materials indicate that MultiRail is used by many other railroads to plan their day-to-day operations.[8]

To be sure, it is technically possible to develop a feasible carload blocking and train service plan without the use of MultiRail or similar tools. Indeed, before the advent of MultiRail and other computerized modeling tools, railroads developed their operating plans without the assistance of such technology. But computerized modeling tools like MultiRail are both a labor-saving device and a powerful means for identifying efficiencies that human operators may miss and avoiding human error in developing an operating plan, particularly when that operating plan involves millions of carloads moving between thousands of locations. The real-world efficiency improvements that Class I railroads achieved after adopting computerized modeling are apt

---

[6] *Id.*

[7] *See, e.g.*, *Carolina Power & Light Co. v. Norfolk So. Ry. Co.*, 7 S.T.B. 235, 259 (2003) (a complainant "carries the burden of demonstrating that its operating plan would meet the needs of the traffic group selected").

[8] *See, e.g.*, *Ultimate Technology—Software That Made the Uncontrollable Controllable*, TRAINS MAGAZINE, Nov. 2010, *available at* http://rail.railplanning.com/files/2010/11/Trains-Nov2010_38-39.pdf (describing MultiRail's success in improving service at six Class I railroads); *This is How to Run a Railroad*, FORBES, Feb. 13, 2006, *available at* http://www.forbes.com/forbes/2006/0213/094.html (describing use of MultiRail to improve operational efficiency).

SIDLEY AUSTIN LLP
SIDLEY

evidence of what a useful tool MultiRail can be to develop a least-cost, most-efficient blocking and train service plan for a SARR that meets the needs of the SARR's selected customers.[9]

As explained in CSXT's August 29, 2013 letter, Oliver Wyman will make MultiRail available to TPI for a reasonable price. CSXT encourages TPI to consider using MultiRail or a similar tool to develop a car blocking and train service plan that accords with the SAC requirement that a SARR operating plan "meet the needs of the traffic group selected." *Carolina Power & Light Co. v. Norfolk So. Ry. Co.*, 7 S.T.B. at 259.

C. TPI Must Use the Event Data As One of Multiple Tools to Develop a Full Operating Plan for The SARR Traffic.

In addition to waybill, car event, and train sheet data, CSXT has produced multiple data sets with operational information that can be used by TPI to supplement information provided in the traffic data and to develop its own operating plan. We have detailed some of this information below.

1. Accidents, Delay, and Incident Reports: CSXT has produced several databases containing records from its delay reporting system. While CSXT's delay reporting systems require human input (and thus do not capture all delays on the railroad), they provide important evidence of the delay incidents that CSXT encounters in the real world and for which TPI's operating evidence must account. "Car Delay Database.xls" produced on DVD-036[10] and "Car Delay Database Update.xls" produced on DVD-104 include car delays associated with incidents occurring on the Line-of-Road. "Locomotive Delay Database.xls" produced on DVD-036 and "Locomotive Delay Database Update.xls" produced on DVD-104 include locomotive delays associated with incidents occurring on the Line-of-Road. "TCIS Incidents.xlsx" produced on DVD-041 and "TCIS Incidents Update.xlsx" produced on DVD-104 include additional data on signal delays not captured in the above-listed databases. In addition, "Incident List.xls" produced on DVD-036 and "Incident List Update.xls" produced on DVD-104 list both train accidents and road crossing accidents.

---

[9] *See, e.g., Ultimate Technology—Software That Made the Uncontrollable Controllable*, TRAINS MAGAZINE, Nov. 2010, *available at* http://rail.railplanning.com/files/2010/11/Trains-Nov2010_38-39.pdf.

[10] All references to production DVDs in this letter are to the CSXT-TPI series of DVDs that CSXT produced to TPI. CSXT has omitted the prefix from each DVD reference for simplicity's sake.

SIDLEY AUSTIN LLP
SIDLEY

2. Train Profile Information: The extensive train profile data CSXT has provided include information that may be useful to TPI. The "Profiles" folder on DVD-41 contains a pdf file explaining CSXT's train designation scheme and several spreadsheets with detailed data on CSXT's historical train service plans. Further explanatory data was provided on DVD-068 and DVD-078, and we expect to produce updated train profile data for the Supplemental Discovery Period next week. Updated train profile data is also included on the enclosed hard drive. This train profile information can be used both to clarify any ambiguities in the traffic event data and to inform TPI's development of its own train service plan (*e.g.*, by identifying all the local trains that are necessary to serve CSXT's customers today).

3. Yard and Local Train Information. TPI should also incorporate the information CSXT produced on yard and local train service into TPI's operating plan analysis. "Yard Crew Size and Starts.xls," produced on DVD-063, includes data on yard operations and local train crew starts throughout the CSXT network. DVD-063 also includes yard diagrams and "Yard Matrix.xls," a spreadsheet with detailed information on each CSXT yard that includes scheduled yard jobs, local switch assignments, and average daily cars switched and handled. CSXT expects to produce updated data for the Supplemental Discovery Period soon.

4. Intermodal Lift Information. If TPI chooses to select intermodal traffic as part of its traffic group, it will find useful information in "Intermodal Costs and Volume.xls" (produced on DVD-042), which contain information on loads and lifts at each CSXT intermodal terminal. Updated information for the Supplemental Discovery Period will be produced soon.

5. Road Crew Districts. CSXT has produced detailed information on its road crew districts and road crew assignments at "Detail District maps update.pdf" on DVD-025. While TPI is not required to replicate these road crew districts and assignments for its SARR, this data on CSXT's real-world staffing requirements should inform TPI's analysis of the road crews necessary to serve the SARR's traffic.

6. Helper Service Details. Detailed information on the helper service required on CSXT's network was made available to TPI in "Helper Services.xls" (produced on DVD-063) and "Helper Service Detail.xls" (produced on DVD-069). This data includes information about helper locations, helper assignments, and helper crew starts, all of which should be useful to TPI as it designs its operating plan.

SIDLEY AUSTIN LLP
SIDLEY

7. Shortline Information. Information regarding short line railroads with which CSXT connects—including several that play a role in some of the issue movements—has also been produced. "Shortline Matrix.xls" produced on DVD-074 includes information on CSXT's operating relationships with shortlines and interchange locations, and DVD-066 contains several CSXT agreements with shortlines.

8. Sidetrack Agreements. "All Track Agmt.xlx" produced on DVD-029 summarizes, and DVDs 030, 031, and 080 include, multiple sidetrack agreements between CSXT and customers on its network, which must be taken into account if TPI selects traffic from those customers.[11]

9. Interline Service Agreements. On DVD-037, CSXT produced intercompany service agreements with a host of connecting railroads, which among other things detail interchange locations, procedures, and schedules for a significant number of railroads with which TPI's SARR likely will need to interchange traffic

10. Trip Plans. In response to TPI's interrogatory 5 requesting a description of each TPI movement whose rate was challenged in the complaint, CSXT created trip plans for the complaint traffic that were produced on DVD-041. These trip plans provide useful evidence of the blocking, classification, and local service necessary to serve the issue traffic.

11. HazMat Operating Procedures. CSXT produced information on operating practices for the transportation of hazardous materials on DVD-010 and DVD-098.

D. CSXT Remains Willing To Answer Further Questions If Necessary.

CSXT has undertaken a significant effort to eliminate any confusion and provide TPI with the most complete and accurate data possible. The parties have had a series of exchanges about CSXT's traffic data, and CSXT provided extensive instructions, explanations, and decoders for that data.[12] This letter and the accompanying production provide further explanations of how TPI can "utilize" and "evaluate" CSXT's traffic data.[13] If TPI has any

---

[11] "All Track Agmt.xlsx" includes fields that allow TPI to identify relevant sidetrack agreements by customer name and location.

[12] *See, e.g.*, CSXT discovery productions of September 23, 2010; October 22, 2010, and January 25, 2011, and CSXT letter responses dated November 4, 2010, December 10, 2010, December 23, 2010, and January 19, 2011.

[13] TPI Request for Production 23.

SIDLEY AUSTIN LLP
SIDLEY

additional questions after reviewing this information, please advise us of these questions before TPI files its opening evidence in this case.

II. DESCRIPTION OF CSXT'S CAR EVENT AND TRAIN SHEET DATA.

CSXT's September 27, 2013 production on CSX-TPI-HC-EHD-004 contained Car Waybill data, Container Waybill data, and Car Shipment data for the entire Supplemental Discovery Period, along with decoders and instructions to help TPI analyze that data. CSXT's October 4, 2013 production on CSX-TPI-HC-EHD-005 contained Car Event data and updated decoders for the Supplemental Discovery Period. Today's production on CSX-TPI-HC-EHD-006 completes CSXT's traffic data production with the Train Sheet data for the Supplemental Discovery Period.

Like CSXT's previous supplemental traffic productions, the Train Sheet data for the Supplemental Discovery Period is being produced in the same format and with the same fields as the data produced for the Initial Discovery Period.

As a general rule, CSXT believes that the Car Event data are a more useful source of information for TPI's purposes, because they provide a more granular view of each individual car's movement. Car Event Data is particularly useful for understanding the service needs of carload traffic. But as discussed above in Section I.C., TPI cannot solely rely on either Car Event data or Train Sheet data; rather, TPI must consider all of the operating information sources CSXT produces as a whole if it is to understand CSXT's operations and the service needs of CSXT's traffic.

The event data that CSXT is producing today are the most complete and comprehensive care movement data in CSXT's possession. That said, a complete picture of CSXT's operations cannot be reconstructed from the event data alone, in part because the sheer size and complexity of CSXT's operations often results in less than uniform data capture. To design an operating plan that is specifically tailored to meet the service needs of the selected traffic, TPI must also use other sources to derive information that is not captured in the Car Event or Train Sheet data. A few examples of how TPI can do this are detailed below.

Timestamps. Car Event data contain timestamp information for car events when data is collected for that particular car. As a general rule, Car Event timestamp data is collected for "nodal events"—*i.e.*, individual events during transport such as classification, switches, origin and termination activity—but not for "link events"—*i.e.* when particular rail segments are traversed. Additional timestamps can be found in the Train Sheet data associated with train activities at locations.

Pickups and Setouts. Car Event data provide a granular account of each car's movement and allows one to infer where individual cars were picked up or set out. In addition, the Train

SIDLEY AUSTIN LLP
SIDLEY

Sheet Root records in table TM600 include information on each train's total loaded and empty shipments upon arrival and departure at select locations. Total pickups and setouts can be inferred from changes in these fields for stations that are reported in the TM600 records. Pickups and setouts at intermediate stations cannot be inferred using the Train Sheet data.

Local Operations. Car event data for local trains contain limited detail for activities at a given station and frequently do not detail customer-specific services or locations. In addition, Train Sheet data for local trains frequently do not contain all details on the train operations or routing. This data can be derived from other sources, however. Waybill and patron data includes information on shippers and receivers. Moreover, the train profile information provides further details on CSX trains—including customers served and schedule activities. TPI should also consult the local and yard operational data discussed above in Section I.C.3. as it designs local train operations for the SARR.

Customer Details. Information on particular customers served by CSXT is typically not available in the Car Event database or the Train Sheet database. However, customer information is available in the Waybill data and accompanying Patron file that CSXT has produced. In addition, the train profile information that CSXT expects to produce next week contains details on customer activities performed by trains.

Connecting carriers. The Car Event data do not include detail on the connecting carriers for shipments. However, this information is available in the Waybill data CSXT previously produced.

*　　*　　*

CSXT will be producing additional responsive documents on a rolling basis.

Sincerely,

G. Paul Moates
Paul A. Hemmersbaugh
Matthew J. Warren

July 2012-June 2013 TPIRR Train List Development

I. Compile Train Data from Car Waybill ("**CW**") & Container Waybill ("**UW**") & Car Event ("**CE**") data for Selected TPIRR Traffic into "**SARR_L_SH_TRN**" table:

A. Link selected TPIRR carloads and containers from the **CW** and **UW** data[1] to **CE** data

B. Sort **CE** data by [1] SHIPMENT_KEY[2] (Ascending), [2] YYYYMM (Ascending), [3] SEQUENCE_NBR (Ascending), [4] TIMESTAMPS (Ascending)

C. Using the sorted database, for each selected shipment (car), identify first and last Nodal record (TRANS_MP <> "UNKNOWN") associated with each TRAIN_ID with a valid TRAIN_SUFFIX[3] on which the SHIPMENT_KEY moves[4] (Note, first Nodal record sometimes equals last Nodal record for a given SHIPMENT_KEY&TRAIN_ID combination)[5]

1) For the first Nodal record for each individual SHIPMENT_KEY&TRAIN_ID, capture: [1] TRAIN_ID, [2] TRAIN_SUFFIX, [3] TRANS_MP, [4] TIMESTAMPS, [5] SW_CLASS_ON, [6] RECIP_SWITCH_FLAG, [7] INTER_SWITCH_FLAG, [8] SW_IX_IN, [9] SW_IND_OUT, [10] ORIGINATIONS

a) Flag each first Nodal location as On- or Off-SARR, insert new field containing ON/OFF toggle.

b) For the first Nodal event for the first valid TRAIN_ID reported in the **CE** Data for each SHIPMENT_KEY:

i. FOR CARLOAD SHIPMENTS: From the relevant **CW** data, pull in fields [1] ON_NET_ORIG_MP, [2] ON_JCT_ROAD_CITY, [3] ORIGIN_IIDS – These fields will be blank for all trains except the first train for a SHIPMENT_KEY.

ii. Flag the CW ON_NET_ORIG_MP as On- or Off-SARR, insert new field containing ON/OFF toggle. [6]

---

1 Waybill records where INSCOPE=1 .and. ONSARR>0.

2 Note: a single car event shipment key is associated with a flatcar movement, and this will often be associated with multiple containers. Flat Cars are only be counted once regardless of the number of containers moving on them for purposes of developing the TPIRR train list. Each Record contains a flag to identify it as having moved containers (i.e., flatcars) or not.

3 Exclude Car Event Records Where TRAIN_SUFFIX="UNKNOWN".

4 Records with TRAIN_ID="UNKNOWN" are excluded from this portion of the analysis.

5 For ShipmentKey&TrainID combinations with reliable flagging in the classification, switching, industry spot/pull, and origination/termination fields, only those flagged records were included in this data capture loop, but for ShipmentKey&TrainID combinations with unreliable flagging in the relevant fields for the records car event considered for this portion of the analysis (i.e., records with valid TRAIN_ID and TRAIN_SUFFIX data), all records were included in the data capture loops. This ensured the reliance on appropriate flags when they were present and the use of next-best data where they were not.

6 Blank for container traffic, as MP data are not provided in the container waybill data.

July 2012-June 2013 TPIRR Train List Development

iii. FOR CONTAINER SHIPMENTS: populate field ON_NET_ORIG_MP with “FirstT”

2) For last Nodal record for each individual SHIPMENT_KEY&TRAIN_ID, capture: [1] TRAIN_ID, [2] TRAIN_SUFFIX, [3] TRANS_MP, [4] TIMESTAMPS, [5] SW_CLASS_OFF, [6] RECIP_SWITCH_FLAG, [7] INTER_SWITCH_FLAG, [8] SW_IX_OUT, [9] SW_IND_IN, [10] TERMINATIONS

a) Flag each Nodal location as ON or OFF SARR, insert new field containing ON/OFF toggle.

b) For the last Nodal event for the last TRAIN_ID reported in the **CE** Data for each SHIPMENT_KEY:

i. FOR CARLOAD SHIPMENTS: From the relevant **CW** data, pull in fields [1] ON_NET_DEST_MP, [2] OFF_JCT_ROAD_CITY, [3] DESTINATION_IIDS – These fields will be blank for all trains except the last train for a SHIPMENT_KEY.

ii. Flag the CW ON_NET_DEST_MP as On- or Off-SARR, insert new field containing ON/OFF toggle.[7]

iii. FOR CONTAINER SHIPMENTS: populate field ON_NET_DEST_MP with “LastT”

3) For All **CE** records with the relevant SHIPMENT_KEY&TRAIN_ID (links and nodes), Sum [1] CAR_HOURS, [2] CAR_MILES, [3] TON_MILES_LADING, [4] TON_MILES_TARE

4) Output from Step I.C. should be as follows: one record for each valid TRAIN_ID[8] on which a SHIPMENT_KEY moved (e.g., if a SHIPMENT_KEY moved on three trains, there will be three output table records for that SHIPMENT_KEY). Each output record will contain the SHIPMENT_KEY, First and Last Nodal record data capture (including handling and OnSARR flags) for a given TRAIN_ID, and summed Hours and Miles data for that SHIPMENT_KEY&TRAIN_ID combination.

a) Output Table Name = “**SARR_L_SH_TRN**”

D. Using the **SARR_L_SH_TRN** database, identify unique combinations of TRAIN_ID&TRAIN_SUFFIX for the First Nodal Events[9]

---

[7] Blank for container traffic, as MP data are not provided in the container waybill data.

[8] I.e., not “UNKNOWN”.

[9] Note: TRAIN_SUFFIX sometimes changes for a given train (particularly line-haul merchandise trains, including intermodal, auto, and intercity manifest trains) along a route to reflect the movement date, not the date the train originates (e.g., A car may be reported in the CE data as first moving on TRAIN_ID Q539 with

July 2012-June 2013 TPIRR Train List Development

1) Output table = "**SARR_L_SH_TRN_FN_SFX**"

E. Using the entire **CE** database:

1) Identify Empty carload and flatcar movements in the **CE** data as follows

a) Filter **CE** data to include empty moves only[10]

b) Sort **CE** data by [1] SHIPMENT_KEY (Ascending), [2] YYYYMM (Ascending), [3] SEQUENCE_NBR (Ascending), [4] TIMESTAMPS (Ascending)

c) Using the sorted database, for each selected shipment (car), identify first and last Nodal record (TRANS_MP <> "UNKNOWN") associated with each TRAIN_ID[11] with a valid TRAIN_SUFFIX[12] on which the SHIPMENT_KEY moves (Note, first Nodal record sometimes equals last Nodal record for a given SHIPMENT_KEY&TRAIN_ID combo)[13]

d) Identify First Nodal events for each SHIPMENT_KEY&TRAIN_ID

i. Capture: [1] TRAIN_ID, [2] TRAIN_SUFFIX, [3] TRANS_MP, [4] TIMESTAMPS, [5] SW_CLASS_ON, [6] RECIP_SWITCH_FLAG, [7] INTER_SWITCH_FLAG, [8] SW_IX_IN, [9] SW_IND_OUT, [10] ORIGINATIONS

ii. Flag each Nodal location as ON or OFF SARR, insert new field containing ON/OFF toggle.

iii. If the identified first Nodal event is for the first TRAIN_ID reported in the **CE** Data for the SHIPMENT_KEY:

a. FOR CARLOAD SHIPMENTS: From the relevant **CW** data, pull in fields [1] ON_NET_ORIG_MP, [2] ON_JCT_ROAD_CITY, [3] ORIGIN_IIDS – These fields will be blank if the TRAIN_ID is not the first TRAIN_ID for the empty SHPMENT_KEY

b. Flag the CW ON_NET_ORIG_MP as On- or Off-SARR, insert new field containing ON/OFF toggle[14]

TRAIN_SUFFIX 20130115 and later moving on TRAIN_ID Q539 with TRAIN_SUFFIX 20130116, but the actual train on which it moved will not have changed.)

[10] Car event data associated with Waybill records where INSCOPE=0.

[11] NOTE: Records with TRAIN_ID="UNKNOWN" are excluded from this analysis.

[12] Exclude Car Event Records Where TRAIN_SUFFIX="UNKNOWN".

[13] For ShipmentKey&TrainID combinations with reliable flagging in the classification, switching, industry spot/pull, and origination/termination fields, only those flagged records were included in this data capture loop, but for ShipmentKey&TrainID combinations with unreliable flagging in the relevant fields for the records car event considered for this portion of the analysis (i.e., records with valid TRAIN_ID and TRAIN_SUFFIX data), all records were included in the data capture loops. This ensured the reliance on appropriate flags when they were present and the use of next-best data where they were not.

[14] Blank for container traffic, as MP data are not provided in the container waybill data,

July 2012-June 2013 TPIRR Train List Development

c. FOR CONTAINER SHIPMENTS: populate field ON_NET_ORIG_MP with “FirstT”

e) Identify Last Nodal events for each SHIPMENT_KEY&TRAIN_ID

i. Capture: [1] TRAIN_ID, [2] TRAIN_SUFFIX, [3] TRANS_MP, [4] TIMESTAMPS, [5] SW_CLASS_OFF, [6] RECIP_SWITCH_FLAG, [7] INTER_SWITCH_FLAG, [8] SW_IX_OUT, [9] SW_IND_IN, [10] TERMINATIONS

ii. Flag each Nodal location as ON or OFF SARR, insert new field containing ON/OFF toggle

iii. If the identified last Nodal event is for the last TRAIN_ID reported in the **CE** Data for the SHIPMENT_KEY:

a. FOR CARLOAD SHIPMENTS: From the relevant **CW** data, pull in fields [1] ON_NET_DEST_MP, [2] OFF_JCT_ROAD_CITY, [3] DESTINATION_IIDS – These fields will be blank if the TRAIN_ID is not the last TRAIN_ID for the empty SHPMENT_KEY

b. Flag the CW ON_NET_DEST_MP as On- or Off-SARR, insert new field containing ON/OFF toggle[15]

c. FOR CONTAINER SHIPMENTS: populate field ON_NET_DEST_MP with “LastT”

f) For All **CE** records with the relevant SHIPMENT_KEY&TRAIN_ID (links and nodes), Sum [1] CAR_HOURS, [2] CAR_MILES, [3] TON_MILES_LADING, [4] TON_MILES_TARE

g) Filter the results to include only output records where either:

i. The TRAIN_ID&TRAIN_SUFFIX for the first Node is present in Output table **SARR_L_SH_TRN_FN_SFX** .or.

ii. The TRAIN_ID begins with “E” .or.

iii. The TRAIN_ID is between G700 and G999 (INCLUSIVE)

h) Output from Step I.D. should be as follows: one record for each SHIPMENT_KEY&TRAIN_ID for empties moving on: (1) trains included in table **SARR_L_SH_TRN_FN_SFX** (based on TRAIN_ID&TRAIN_SUFFIX for first Nodal event) (e.g., if an empty SHIPMENT_KEY moved on a train carrying loaded selected traffic, there will be an output table record for that SHIPMENT_KEY&TRAIN_ID); and (2) trains defined as empty unit trains in the supporting documentation provided by CSXT. Each output record will contain the SHIPMENT_KEY, First and Last Nodal record data capture and

[15] Blank for container traffic, as MP data are not provided in the container waybill data.

July 2012-June 2013 TPIRR Train List Development

flags for a given TRAIN_ID, and summed Hours and Miles data for the SHIPMENT_KEY&TRAIN_ID.

i. Output Table Name = "**SARR_E_SH_TRN**"

F. Combine the I.C. and I.E. Output Tables into one master Train Table

1) Table Name = "**SARR_ALL_SH_TRN**"

2) NOTE: Each Record contains a flag (**L/E**) to identify it as having been generated as part of the **SARR_L_SH_TRN** or **SARR_E_SH_TRN** process

G. Supplement First Node CE data with Alternate data for Records where complete CE data records do not accurately report origin station operations (i.e., train and/or locations)

1) Add three (3) new fields to SARR_ALL_SH_TRN:

a) ADJ_FIRST_NODE_MP

b) ADJ_FIRST_NODE_ONSARRFLAG

c) ADJ_FIRST_NODE_TS

2) Identify GROUP A[16] carload records where:

a) First node ON_NET_ORIG_MP is populated .and.

b) First Node TRANS_MP <> First Node ON_NET_ORIG_MP .and.

c) First Node RECIP_SWITCH_FLAG = 0 .and.

d) First Node SW_IX_IN[17] = 0 .and.

e) First Node SW_IND_OUT[18] = 0 .and.

f) First Node ORIGINATION = 0 .and.

g) First Node SW_CLASS_ON = 0

3) For identified GROUP A carload records:

a) Replace ADJ_FIRST_NODE_MP with First Node ON_NET_ORIG_MP

---

[16] For a given car movement, when the location (CSXT transportation milepost) of the first chronological node included the car event data for which valid train symbol data were provided did not match the CSXT origin location (CSXT transportation milepost) indicated in the waybill data for that movement, the waybill location data were used in lieu of the car event data. This replacement was required because in some cases the CSXT car event data did not include valid train symbol data for the first few event records. It is also consistent with CSXT's statements that, "Car event data for local trains contain limited detail for activities at a given station and frequently do not detail customer-specific services or locations…." And "Waybill and patron data includes information on shippers and receivers."

[17] Interchange Received.

[18] Industry Pull.

July 2012-June 2013 TPIRR Train List Development

b) Replace ADJ_FIRST_NODE_ONSARRFLAG with First Node ORIG On-SARR flag

c) Replace ADJ_FIRST_NODE_TS with minimum (first chronological) CE TIMESTAMP that is greater than 1/1/2000 in CE data [NOTE: Include CE data records where TRAIN_ID=”UNKNOWN”]

4) Identify GROUP B[19] carload records where:

a) First node ON_NET_ORIG_MP is NULL .and.

b) First Node TRANS_MP = Last Node TRANS_MP .and.

c) First Node RECIP_SWITCH_FLAG = 0 .and.

d) First Node SW_IX_IN[20] = 0 .and.

e) First Node SW_IND_OUT[21] = 0 .and.

f) First Node ORIGINATION = 0 .and.

g) First Node SW_CLASS_ON = 0

5) For identified GROUP B carload records:

a) Replace ADJ_FIRST_NODE_TS with minimum (first chronological) CE TIMESTAMP that is greater than 1/1/2000 in CE data [NOTE: Include CE data records where TRAIN_ID=”UNKNOWN”]

b) Replace ADJ_FIRST_NODE_MP with TRANS_MP included in the record identified in the previous step. [Note: In many cases, the TRAIN_ID and/or TRAIN_SUFFIX fields associated with the first reported TRANS_MP will be “UNKNOWN”]

c) Determine whether this node is ONSARR and Populate ADJ_FIRST_NODE_ONSARRFLAG accordingly

6) For all other carload records not in GROUP A or GROUP B:

a) Replace ADJ_FIRST_NODE_MP with First Node TRANS_MP

b) Replace ADJ_FIRST_NODE_ONSARRFLAG with First Node CE ONSARR Flag

c) Replace ADJ_FIRST_NODE_TS with First node TIMESTAMPS

---

19 For some car movements, car event data records do not include valid train symbol and handling flag data for all nodes (CSXT transportation milepost) where the car was handled. Therefore, TPI had to associate the car event data for the nodal events without valid train symbol and/or handling flags with a given train based on the subsequent or prior records for that car movement. A replacement was often required in cases the CSXT car event data did not include valid train symbol data for the first few car event records.

20 Interchange Received.

21 Industry Pull.

July 2012-June 2013 TPIRR Train List Development

7) Identify flatcar records where:
   a) First Node SW_IX_IN[22] = 0 .and.
   b) First Node SW_IND_OUT[23] = 0 .and.
   c) First Node ORIGINATION = 0.and.
   d) First Node SW_CLASS_ON = 0 .and.
   e) First Node RECIP_SWITCH_FLAG = 0 .and.
   f) First node ON_NET_ORIG_MP = "FirstT"
8) For identified flatcar records:
   a) Replace ADJ_FIRST_NODE_TS with minimum (first chronological) CE TIMESTAMP that is greater than 1/1/2000 in CE data [NOTE: Include CE data records where TRAIN_ID="UNKNOWN"]
   b) Replace ADJ_FIRST_NODE_MP with TRANS_MP included in the record identified in the previous step. [Note: In many cases, the TRAIN_ID and/or TRAIN_SUFFIX fields associated with the first reported TRANS_MP will be "UNKNOWN"]
   c) Determine whether this node is ONSARR and Populate ADJ_FIRST_NODE_ONSARRFLAG accordingly
9) For all other flatcar records:
   a) Replace ADJ_FIRST_NODE_MP with First Node TRANS_MP
   b) Replace ADJ_FIRST_NODE_ONSARRFLAG with First Node CE ONSARR Flag
   c) Replace ADJ_FIRST_NODE_TS with First node TIMESTAMPS
10) Revise First Node CE data for Local Trains based on Validated Alternate Origin Data Table [LocalOsideValidatedReplacements]:
   a) For records where First Character of TRAIN_ID = "A" .or. "B" .or. "C" .or. "D" .or. "F" .or. "H" .or. "J" .or. "M" .or. "O"
   b) Link to [LocalOsideValidatedReplacements] on fields [FirstNodeTrainsportationMP], [AdjustedFirstNodeMP]
      i. If link is made, skip record
      ii. ELSE:
         a. Replace AdjustedFirstNodeMP with FirstNodeTrainsportationMP

[22] Interchange Received.
[23] Industry Pull.

July 2012-June 2013 TPIRR Train List Development

b. Replace AdjustedFirstNodeTimestamp with FirstNodeTimestamps

c. Replace AdjustedFirstNodeOnSarr with FirstNodeCeOnSarr

H. Supplement Last Node CE data with Alternate data for Records where CE data do not accurately report destination station operations (i.e., trains and/or locations)

1) Add three (3) new fields to SARR_ALL_SH_TRN:

a) ADJ_LAST_NODE_MP

b) ADJ_LAST_NODE_ONSARRFLAG

c) ADJ_LAST_NODE_TS

2) Identify carload records where:

a) Last node ON_NET_DEST_MP is populated .and.

b) Last Node TRANS_MP <> Last Node ON_NET_DEST_MP .and.

c) Last node RECIP_SWITCH_FLAG = 0 .and.

d) Last node SW_IX_OUT[24] = 0 .and.

e) Last node SW_IND_IN[25] = 0 .and.

f) Last node TERMINATIONS = 0 .and.

g) Last node SW_CLASS_OFF = 0 .and.

h) First Character of TRAIN_ID <> "L" .and.

i) First Character of TRAIN_ID <> "Q" .and.

j) First Character of TRAIN_ID <> "R" .and.

k) First Character of TRAIN_ID <> "S" .and.

l) First Character of TRAIN_ID <> "X"

3) For identified carload records:

a) Replace ADJ_LAST_NODE_MP with Last Node ON_NET_DEST_MP

b) Replace ADJ_LAST_NODE_ONSARRFLAG with Last Node DEST On-SARR flag

c) Replace ADJ_LAST_NODE_TS with maximum (last chronological) CE TIMESTAMP in CE data [NOTE: Include CE data records where TRAIN_ID="UNKNOWN"]

4) For all other carload records:

a) Replace ADJ_LAST_NODE_MP with Last Node TRANS_MP

---

24 Interchange Forwarded.
25 Industry Place.

July 2012-June 2013 TPIRR Train List Development

b) Replace ADJ_LAST_NODE_ONSARRFLAG with Last Node CE ONSARR Flag

c) Replace ADJ_LAST_NODE_TS with Last node TIMESTAMPS

5) Identify flatcar records where:

a) Last node SW_IX_OUT[26] = 0 .and.

b) Last node SW_IND_IN[27] = 0 .and.

c) Last node TERMINATIONS = 0.and.

d) Last node SW_CLASS_OFF = 0 .and.

e) Last node RECIP_SWITCH_FLAG = 0 .and.

f) Last node ON_NET_DEST_MP = "LastT"

g) First Character of TRAIN_ID <> "L" .and.

h) First Character of TRAIN_ID <> "Q" .and.

i) First Character of TRAIN_ID <> "R" .and.

j) First Character of TRAIN_ID <> "S" .and.

k) First Character of TRAIN_ID <> "X"

6) For identified flatcar records:

a) Replace ADJ_LAST_NODE_TS with maximum (last chronological) CE TIMESTAMP in CE data [NOTE: Include CE data records where TRAIN_ID="UNKNOWN"]

b) Replace ADJ_LAST_NODE_MP with TRANS_MP included in the record identified in the previous step. [Note: In some cases, the TRAIN_ID and/or TRAIN_SUFFIX fields associated with the last reported TRANS_MP will be "UNKNOWN"]

c) Determine whether this node is ONSARR and Populate ADJ_LAST_NODE_ONSARRFLAG accordingly

7) For all other flatcar records:

a) Replace ADJ_LAST_NODE_MP with Last Node TRANS_MP

b) Replace ADJ_LAST_NODE_ONSARRFLAG with Last Node CE ONSARR Flag

c) Replace ADJ_LAST_NODE_TS with Last node TIMESTAMPS

---

[26] Interchange Forwarded.
[27] Industry Place.

July 2012-June 2013 TPIRR Train List Development

8) Revise Last Node CE data for Local Trains based on Validated Alternate Origin Data Table [LocalDsideValidatedReplacements]:

   a) For records where First Character of TRAIN_ID = "A" .or. "B" .or. "C" .or. "D" .or. "F" .or. "H" .or. "J" .or. "M" .or. "O"

   b) Link to [LocalDsideValidatedReplacements] on fields [LastNodeTransportationMP], [AdjustedLastNodeMP]

      i. If link is made, skip record

      ii. ELSE:

         a. Replace AdjustedLastNodeMP with LastNodeTransportationMP

         b. Replace AdjustedLastNodeTimestamp with LastNodeTimestamps

         c. Replace AdjustedLastNodeOnSarr with LastNodeCeOnSarr

I. Summarize data included in file **SARR_ALL_SH_TRN** into output records containing fields into new table "**SARR_ALL_CONSIST**" as follows:

1) TRAIN_ID

2) First Node TRAIN_SUFFIX

3) Adj Nodal TIMESTAMP[28]

4) Adj Nodal TRANS_MP

5) Adj On-SARR Flag for this TRANS_MP

6) LOADED_FIRST = Count of L First Nodal SHIPMENT_KEYs at this TIME&MP

7) EMPTY_FIRST = Count of E First Nodal SHIPMENT_KEYs at this TIME&MP

8) LOADED_LAST = Count of L Last Nodal SHIPMENT_KEYs at this TIME&MP

9) EMPTY_LAST = Count of E Last Nodal SHIPMENT_KEYs at this TIME&MP

II. Using table **SARR_ALL_CONSIST** (Developed in Section I.D. above):

A. Query for unique: TRAIN_ID & First Node TRAIN_SUFFIX

1) Where: TRAIN_SUFFIX>20120630

2) Output table = "**SARR_ALL_ON_TRN_SFX**"

B. Link **SARR_ALL_ON_TRN_SFX** trains to Train Sheets ("**TS**") data based on:

---

28 Include one record for every unique TimeStamps&TransMP combination IN THE "ADJ" FIELDS CREATED IN STEPS I.G. and I.H. for a given TrainID&FirstNodeTrainSuffix combination and order ascending by ADJ TimeStamp. Note that the TimeStamp&TrainsMP combinations will come from BOTH ADJ FirstNode and ADJ LastNode events in the SARR_ALL_SH_TRN input file.

July 2012-June 2013 TPIRR Train List Development

1) TS: CsxTrainID & TpiTrainYY & TpiTrainMM & TrainSheetDay (NOTE: Must account for date formatting differences between tables)

2) Determine and report link rate (break out by TRAIN_ID first character).

C. Query **SARR_ALL_CONSIST** to Identify for unique: TRAIN_ID (for UNIT trains only)

1) Location (MP) with the greatest LoadedFirst car count (i.e., where most loaded cars originate on the CSXT system)

2) Where: TRAIN_SUFFIX>20120630

3) Output table = "**UTRN_SYMBOL_LOAD_LOC1**"

D. Query **SARR_ALL_CONSIST** to Identify for unique: TRAIN_ID (for UNIT trains only)

1) Location (MP) with the greatest LoadedLast car count (i.e., where most loaded cars terminate on the CSXT system)

2) Where: TRAIN_SUFFIX>20120630

3) Output table = "**UTRN_SYMBOL_UNLOAD_LOC1**"

E. Query **SARR_ALL_CONSIST** to Identify for unique: TRAIN_ID & <u>First</u> Node TRAIN_SUFFIX (for UNIT trains only)

1) Location (MP) with the greatest LoadedFirst car count (i.e., where most loaded cars originate on the CSXT system)

2) Where: TRAIN_SUFFIX>20120630

3) Output table = "**UTRN_TRAIN_LOAD_LOC1**"

F. Query **SARR_ALL_CONSIST** to Identify for unique: TRAIN_ID & <u>First</u> Node TRAIN_SUFFIX (for UNIT trains only)

1) Location (MP) with the greatest LoadedLast car count (i.e., where most loaded cars terminate on the CSXT system)

2) Where: TRAIN_SUFFIX>20120630

3) Output table = "**UTRN_TRAIN_UNLOAD_LOC1**"

III. Train Sheet Data Analysis:[29]

A. For all **SARR_ALL_ON_TRN_SFX** trains for which **TS** data are available (a positive link was made in Section II. above):

1) Evaluate TS600 Data Records for unit trains:[30]

---

[29] See level "COMBOfile" of workpaper "Train Classification Analysis V07 11252013 WITH SUMMARY PROTOCOL FOR Q-L-R-S-X TRAINS.xlsx". This Analytical Framework was first developed based on analysis of manifest train data but is applied to all trains.

July 2012-June 2013 TPIRR Train List Development

a) Add New data field to TS600 called “SheetType”

b) Populate SheetType with “L” [Load] where:

   i. DeptLoads >= (DeptLoads+DeptEmpties)*0.75 .and. DeptEmpties <= (DeptLoads+DeptEmpties)*0.25 .and. ArrvlLoads >= (ArrvlLoads+ArrvlEmpties)*0.75 .and. ArrvlEmpties <= (ArrvlLoads+ArrvlEmpties)*0.25 .and. DeptLoads >=10 .and. DeptLoads <=160 .and. ArrvlLoads >=10 .and. ArrvlLoads <=160

c) Populate SheetType with “E” [Empty] where:

   i. DeptLoads <= (DeptLoads+DeptEmpties)*0.25 .and. DeptEmpties >= (DeptLoads+DeptEmpties)*0.75 .and. ArrvlLoads <= (ArrvlLoads+ArrvlEmpties)*0.75 .and. ArrvlEmpties >= (ArrvlLoads+ArrvlEmpties)*0.25 .and. DeptEmpties >=10 .and. DeptEmpties <=160 .and. ArrvlEmpties >=10 .and. ArrvlEmpties <=160

d) Populate SheetType with “OT” [Origin Turn] where:

   i. DeptLoads <= (DeptLoads+DeptEmpties)*0.25 .and. DeptEmpties >= (DeptLoads+DeptEmpties)*0.75 .and. ArrvlLoads >= (ArrvlLoads+ArrvlEmpties)*0.75 .and. ArrvlEmpties <= (ArrvlLoads+ArrvlEmpties)*0.25 .and. DeptEmpties >=10 .and. DeptEmpties <=160 .and. ArrvlLoads >=10 .and. ArrvlLoads <=160

e) Populate SheetType with “DT” [Dest Turn] where:

   i. DeptLoads >= (DeptLoads+DeptEmpties)*0.75 .and. DeptEmpties <= (DeptLoads+DeptEmpties)*0.25 .and. ArrvlLoads <= (ArrvlLoads+ArrvlEmpties)*0.25 .and. ArrvlEmpties >= (ArrvlLoads+ArrvlEmpties)*0.75 .and. DeptLoads >=10 .and. DeptLoads <=160 .and. ArrvlEmpties >=10 .and. ArrvlEmpties <=160

f) Populate SheetType with “X” [Light] where:

   i. DeptLoads+DeptEmpties <10 .and. ArrvlLoads+ArrvlEmpties <10

g) Populate SheetType with “F” [Heavy] where:

   i. DeptLoads+DeptEmpties >160 .and. ArrvlLoads+ArrvlEmpties >160

h) Else, Populate SheetType with “U” [Undetermined]

i) Query TS600 data as follows:

   i. List of Unique Trains: defined as TrainID&TrainSuffix [TpiTrainYY&TpiTrainMM&TrainSheetDay] where TS600 Record SheetType = “OT”

---

[30] Trains with first Character = E, G, K, N, T, U, V, or W.

July 2012-June 2013 TPIRR Train List Development

a. Output Table = **"UnitTrainOT"**

ii. List of Unique Trains: defined as TrainID&TrainSuffix [TpiTrainYY&TpiTrainMM&TrainSheetDay] where TS600 Record SheetType = "DT"

a. Output Table = **"UnitTrainDT"**

2) Develop Summary Train Data from **TS** (**600-605**)

a) First TS 600 Record:[31] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7] CsxCalledDateTime, [8] CsxOriginAlpha, [9] OriginMilePost, [10] DeptLoads, [11] DeptEmpties [12] DeptTons, [13] DeptLength [Note: DeptLoads and DeptEmpties are populated for X000 records and NULL for X999 records]

b) First Block of Sequential TS 605 Records:[32] [1] TrainSheetID, [2] OnStationTime, [3] StationName, [4] StationMilePost, [5] SequenceNumber, [6] Mileage, [7] Direction

i. Note, include the first TS 605 record only where the StationName and StationMilePost differ from the corresponding TS600 CsxOriginAlpha and OriginMilepost

ii. Note 2: include TS605 records only where the StationName and StationMilePost differ from the prior TS605 record.

c) Subesquent TS 600 Record:[33] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7] CsxCalledDateTime, [8] CsxOriginAlpha, [9] OriginMilePost, [10] DeptLoads, [11] DeptEmpties [12] DeptTons, [13] DeptLength [Note: DeptLoads and DeptEmpties are populated for X000 records and NULL for X999 records]

d) Subsequent Blocks of Sequential TS 605 Records:[34] [1] TrainSheetID, [2] OnStationTime, [3] StationName, [4] StationMilePost, [5] SequenceNumber, [6] Mileage, [7] Direction

i. Note, include the first TS 605 record only where the StationName and StationMilePost differ from the corresponding TS600 CsxOriginAlpha and OriginMilepost

---

31 NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).

32 NOTE: TS605 Sort order is based on field OnStationTime (Asc) for a given TrainSheetID.

33 NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).

34 NOTE: TS605 Sort order is based on field OnStationTime (Asc) for a given TrainSheetID.

July 2012-June 2013 TPIRR Train List Development

ii. Note 2: include TS605 records only where the StationName and StationMilePost differ from the prior TS605 record.

e) Final TS 600 Record:[35] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7] CsxCalledDateTime, [8] DestAlpha, [9] DestMilePost, [10] ArrvlLoads, [11] ArrvlEmpties [Note: ArrvlLoads and ArrvlEmpties are populated for X999 records and NULL for X000 records]

i. Note, include the final TS 600 record destination data as a record only where the DestAlpha and DestMilepost differ from the last StationName and StationMilePost from the corresponding TS 605 block

3) Output Table = **TRAINS_ALL_EVENTS**

B. Using table **TRAINS_ALL_EVENTS**:

1) Add five new fields:

a) ENGR_MP

b) CITY

c) STATE

d) SPLC

e) SARRFLAG

2) Link to expanded **NETWORK_LINKS** table based on TRANS_MP and populate the five new fields listed above.

3) Add four new fields:

a) Sum Of CE LastNodeLoads

b) Sum Of CE LastNodeEmpties

c) Sum Of CE FirstNodeLoads

d) Sum Of CE FirstNodeEmpties

4) Link to **SARR_ALL_CONSIST** (Developed in Section I above) based on TRAIN_ID&TRAIN_SUFFIX&TRANS_MP and populate the four new fields listed above. (NOTE: these are summed values, not lookup values).

5) Add four new fields:

a) DepConsistL

b) DepConsistE

[35] NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).

July 2012-June 2013 TPIRR Train List Development

c) DeptTonsAll

d) DeptLengthAll

6) Populate as Follows:

a) For each TrainSheetID: First Record DepConsistL: Max of **TS600** DeptLoads or **SARR_ALL_CONSIST** Sum Of CE FirstNodeLoads

b) For each TrainSheetID: First Record DepConsistE: Max of **TS600** DeptEmpties or **SARR_ALL_CONSIST** Sum Of CE FirstNodeEmpties

c) For each TrainSheetID: First Record DepTonsAll: **TS600** DeptTons

d) For each TrainSheetID: First Record DepLengthAll: **TS600** DeptTons

e) Subsequent TS 605 Records DepConsistL:

i. Calculate Prior record DepConsistL minus Sum Of CE_LastNodeLoads plus Sum Of CE_FirstNodeLoads

ii. Max of above calculation or zero.

f) Subsequent TS 605 Records DepConsistE:

i. Calculate Prior record DepConsistE minus Sum Of CE LastNodeEmpties plus Sum Of CE First NodeEmpties

ii. Max of above calculation or zero

g) Subsequent TS 605 Records DepTonsAll: Linked **TS600** DeptTons

h) Subsequent TS 605 Records DepLengthAll: Linked **TS600** DeptLength

C. Summarize expanded table **TRAINS_ALL_EVENTS** as follows:

1) For each train, show:

a) TrainSheetID

b) CsxTrainID

c) TpiTrainYY

d) TpiTrainMM

e) TrainSheetDay

f) TpiSequenceNumber

g) OriginStationName

h) OriginStationTransMP

i) OriginStationEngrMP

j) OriginStationCity

July 2012-June 2013 TPIRR Train List Development

k) OriginStationState
l) OriginStationSPLC
m) DestStationName
n) DestStationTransMP
o) DestStationEngrMP
p) DestStationCity
q) DestStationState
r) DestStationSPLC
s) OnSARRStationName
t) OnSARRTransMP[36]
u) OnSARREngrMP
v) OnSARRCity
w) OnSARRState
x) OnSARRSPLC
y) OnSARRTime
    i. (Use AdjDeptTime if First OnSARR is TS600 or OnStationTime if First OnSARR is TS605)
z) OffSARRStationName
aa) OffSARRTransMP[37]
bb) OffSARREngrMP
cc) OffSARRCity
dd) OffSARRState
ee) OffSARRSPLC
ff) SARRMiles[38]
gg) SARRAvgLoads[39]
hh) SARRAvgEmpties[40]
ii) SARRAvgTons[41]

---

36 First Record where SARRFLAG = 1.
37 Last Record where SARRFLAG = 1.
38 Sum of Mileage values for records flagged as OnSARR.
39 Average of DepConsistL values for records flagged as OnSARR.
40 Average of DepConsistE values for records flagged as OnSARR.

July 2012-June 2013 TPIRR Train List Development

jj) SARRAvgLength[42]

2) Output Table = **SARR_BASE_TRAINS_TRI**[43]

a) Apply filter to output so that this table only includes Trains with two or more consecutive OnSARR Locations in the **TS 600/605** data

D. Separately Summarize expanded table **TRAINS_ALL_EVENTS** as follows:

1) For each train, show:

a) CsxTrainID

b) TpiTrainYY

c) TpiTrainMM

d) TrainSheetDay

e) OriginStationName

f) OriginStationTransMP

g) OriginStationEngrMP

h) OriginStationCity

i) OriginStationState

j) OriginStationSPLC

k) DestStationName

l) DestStationTransMP

m) DestStationEngrMP

n) DestStationCity

o) DestStationState

p) DestStationSPLC

q) OnSARRStationName

r) OnSARRTransMP[44]

s) OnSARREngrMP

t) OnSARRCity

u) OnSARRState

---

[41] Average of DepTons values for records flagged as OnSARR.
[42] Average of DepLength values for records flagged as OnSARR.
[43] Specific to train type (i.e., SarrBaseLhMerchTrainsTri, SarrBaseUnitTrainsTri).
[44] First Record where SARRFLAG = 1.

July 2012-June 2013 TPIRR Train List Development

v) OnSARRSPLC

w) OnSARRTime

i. (Use AdjDeptTime if First OnSARR is TS600 or OnStationTime if First OnSARR is TS605)

x) OffSARRStationName

y) OffSARRTransMP[45]

z) OffSARREngrMP

aa) OffSARRCity

bb) OffSARRState

cc) OffSARRSPLC

dd) SARRMiles[46]

ee) SARRAvgLoads[47]

ff) SARRAvgEmpties[48]

gg) SARRAvgTons[49]

hh) SARRAvgLength[50]

2) Output Table = **SARR_BASE_TRAINS_TRI_SUM**[51]

a) Apply filter to output so that this table only includes Trains with two or more consecutive OnSARR Locations in the **TS 600/605** data

b) For unit and line-haul merchandise trains, apply filter to output so that this table excludes Trains with less than 10 OnSARR miles[52]

c) Apply filter to output so that this table excludes Trains with Train Symbols between W001 and W099 INCLUSIVE

d) For unit trains only, add new data fields to table and populate as follows:

i. TrainOrigMP: Populate based on link to table **UtrnTrainLoadLoc1**

ii. TrainOrigEngMP: Populate based on link to **iNetworkLocations**

iii. TrainOrigCity: Populate based on link to **iNetworkLocations**

---

45 Last Record where SARRFLAG = 1.
46 Sum of Mileage values for records flagged as OnSARR.
47 Average of DepConsistL values for records flagged as OnSARR.
48 Average of DepConsistE values for records flagged as OnSARR.
49 Average of DepTons values for records flagged as OnSARR.
50 Average of DepLength values for records flagged as OnSARR.
51 Specific to train type (i.e., SarrBaseLhMerchTrainsTriSum, SarrBaseUnitTrainsTriSum).
52 This filter is not applied to local trains.

July 2012-June 2013 TPIRR Train List Development

iv. TrainOrigState: Populate based on link to **iNetworkLocations**

v. TrainOrigSPLC: Populate based on link to **iNetworkLocations**

vi. TrainOrigSarrFlag: Populate based on link to **iNetworkLocations**

vii. SymbolOrigMP: Populate based on link to table **UtrnSymbolLoadLoc1**

viii. SymbolOrigEngMP: Populate based on link to **iNetworkLocations**

ix. SymbolOrigCity: Populate based on link to **iNetworkLocations**

x. SymbolOrigState: Populate based on link to **iNetworkLocations**

xi. SymbolOrigSPLC: Populate based on link to **iNetworkLocations**

xii. SymbolOrigSarrFlag: Populate based on link to **iNetworkLocations**

xiii. TrainOriginTurn: Populate based on link to table **UnitTrainOT** ("Y" if linked, / "N" if no link)

xiv. TrainDestMP: Populate based on link to table **UtrnTrainUnloadLoc1**

xv. TrainDestEngMP: Populate based on link to **iNetworkLocations**

xvi. TrainDestCity: Populate based on link to **iNetworkLocations**

xvii. TrainDestState: Populate based on link to **iNetworkLocations**

xviii. TrainDestSPLC: Populate based on link to **iNetworkLocations**

xix. TrainDestSarrFlag: Populate based on link to **iNetworkLocations**

xx. SymbolDestMP: Populate based on link to table **UtrnSymbolUnloadLoc1**

xxi. SymbolDestEngMP: Populate based on link to **iNetworkLocations**

xxii. SymbolDestCity: Populate based on link to **iNetworkLocations**

xxiii. SymbolDestState: Populate based on link to **iNetworkLocations**

xxiv. SymbolDestSPLC: Populate based on link to **iNetworkLocations**

xxv. SymbolDestSarrFlag: Populate based on link to **iNetworkLocations**

xxvi. TrainDestTurn: Populate based on link to table **UnitTrainDT** ("Y" if linked, / "N" if no link)

e) For unit trains, apply filter to output so that this table excludes Trains where OriginTransMP=DestTransMP and TrainOrigMP=TrainDestMP and SymbolOrigMP=SymbolDestMP

E. Identify trains the traverse the SARR per the **TS** data but that were not included in the list of trains identified from the combined waybill and car events data for SARR traffic. (i.e., all **TS** trains with Train Dates (TpiTrainYY & TpiTrainMM & TrainSheetDay) after 20130630 that are not present in table **SARR_ALL_ON_TRN_SFX** (a positive link was <u>not</u> made in Section II. above)

July 2012-June 2013 TPIRR Train List Development

1) Develop Summary Train Data from **TS** (**600-605**)

   a) First TS 600 Record:[53] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7] CsxCalledDateTime, [8] CsxOriginAlpha, [9] OriginMilePost, [10] DeptLoads, [11] DeptEmpties [12] DeptTons, [13] DeptLength [Note: DeptLoads and DeptEmpties are populated for X000 records and NULL for X999 records]

   b) First Block of Sequential TS 605 Records:[54] [1] TrainSheetID, [2] OnStationTime, [3] StationName, [4] StationMilePost, [5] SequenceNumber, [6] Mileage, [7] Direction

      i. Note, include the first TS 605 record only where the StationName and StationMilePost differ from the corresponding TS600 CsxOriginAlpha and OriginMilepost

      ii. Note 2: include TS605 records only where the StationName and StationMilePost differ from the prior TS605 record.

   c) Subesquent TS 600 Record:[55] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7] CsxCalledDateTime, [8] CsxOriginAlpha, [9] OriginMilePost, [10] DeptLoads, [11] DeptEmpties [12] DeptTons, [13] DeptLength [Note: DeptLoads and DeptEmpties are populated for X000 records and NULL for X999 records]

   d) Subsequent Blocks of Sequential TS 605 Records:[56] [1] TrainSheetID, [2] OnStationTime, [3] StationName, [4] StationMilePost, [5] SequenceNumber, [6] Mileage, [7] Direction

      i. Note, include the first TS 605 record only where the StationName and StationMilePost differ from the corresponding TS600 CsxOriginAlpha and OriginMilepost

      ii. Note 2: include TS605 records only where the StationName and StationMilePost differ from the prior TS605 record.

   e) Final TS 600 Record:[57] [1] TrainSheetID, [2] CsxTrainID, [3] TpiTrainYY, [4] TpiTrainMM, [5] TrainSheetDay, [6] AdjDeptTime, [7]

[53] NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).
[54] NOTE: TS605 Sort order is based on field OnStationTime (Asc) for a given TrainSheetID.
[55] NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).
[56] NOTE: TS605 Sort order is based on field OnStationTime (Asc) for a given TrainSheetID.

July 2012-June 2013 TPIRR Train List Development

CsxCalledDateTime, [8] DestAlpha, [9] DestMilePost, [10] ArrivlLoads, [11] ArrivlEmpties [Note: ArrvlLoads and ArrvlEmpties are populated for X999 records and NULL for X000 records]

i. Note, include the final TS 600 record destination data as a record only where the DestAlpha and DestMilepost differ from the last StationName and StationMilePost from the corresponding TS 605 block

f) Output Table = **TSONLY_TRAINS_ALL_EVENTS**

F. Using table **TSONLY_TRAINS_ALL_EVENTS**:

1) Add five new fields:

a) ENGR_MP

b) CITY

c) STATE

d) SPLC

e) SARRFLAG

2) Link to expanded **NETWORK_LINKS** table based on TRANS_MP and populate the five new fields listed above.

3) Determine which of the evaluated trains have two or more consecutive OnSARR Locations in the **TS 600/605** data

4) Report the number of trains that pass this test.

5) Add four new fields

a) DepConsistL

b) DepConsistE

c) DeptTons

d) DeptLength

6) Populate as Follows:

a) For each TrainSheetID: First Record DepConsistL: **TS600** DeptLoads

b) For each TrainSheetID: First Record DepConsistE: **TS600** DeptEmpties

c) For each TrainSheetID: First Record DepTonsAll: **TS600** DeptTons

d) For each TrainSheetID: First Record DepLengthAll: **TS600** DeptTons

e) Subsequent TS 605 Records DepConsistL:

---

[57] NOTE: TS600 Sort order is: [1] TpiTrainYY (Asc), [2] TpiTrainMM (Asc), [3] TrainSheetDay (Asc), [4] AdjDeptTime (Asc), [5] CsxCalledDateTime (Asc).

July 2012-June 2013 TPIRR Train List Development

i. Use TS600 DeptLoads

f) Subsequent TS 605 Records DepConsistE:

i. Use TS600 DeptEmpties

g) Subsequent TS 605 Records DepTonsAll: Linked **TS600** DeptTons

h) Subsequent TS 605 Records DepLengthAll: Linked **TS600** DeptLength

7) Develop and populate a table containing these trains in _TRI_SUM format.

a) Apply filter to output so that this table only includes Trains with two or more consecutive OnSARR Locations in the **TS 600/605** data

b) For unit and line-haul merchandise trains, apply filter to output so that this table excludes Trains with less than 10 OnSARR miles[58]

c) Apply filter to output so that this table excludes Trains with Train Symbols between W001 and W099 INCLUSIVE

d) For unit trains, add new data fields to table and populate as follows:

i. SymbolOrigMP: Populate based on link to table **UtrnSymbolLoadLoc1**, else NULL

ii. SymbolOrigEngMP: Populate based on link to **iNetworkLocations**

iii. SymbolOrigCity: Populate based on link to **iNetworkLocations**

iv. SymbolOrigState: Populate based on link to **iNetworkLocations**

v. SymbolOrigSPLC: Populate based on link to **iNetworkLocations**

vi. SymbolOrigSarrFlag: Populate based on link to **iNetworkLocations**

vii. SymbolDestMP: Populate based on link to table **UtrnSymbolUnloadLoc1**, else NULL

viii. SymbolDestEngMP: Populate based on link to **iNetworkLocations**

ix. SymbolDestCity: Populate based on link to **iNetworkLocations**

x. SymbolDestState: Populate based on link to **iNetworkLocations**

xi. SymbolDestSPLC: Populate based on link to **iNetworkLocations**

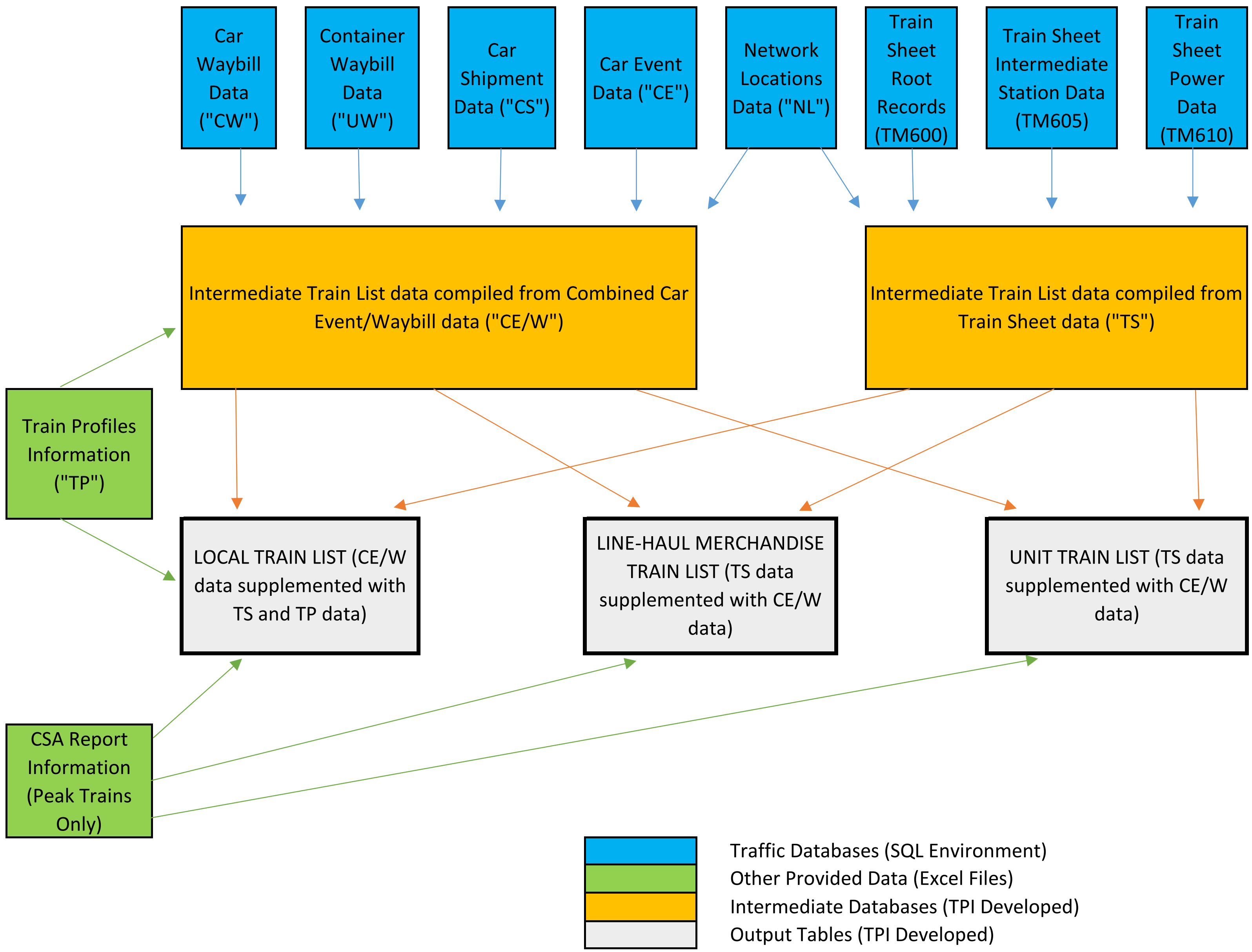
xii. SymbolDestSarrFlag: Populate based on link to **iNetworkLocations**

e) Apply filter to output so that this table excludes unit trains where OriginTransMP=DestTransMP .and. SymbolOrigMP=SymbolDestMP

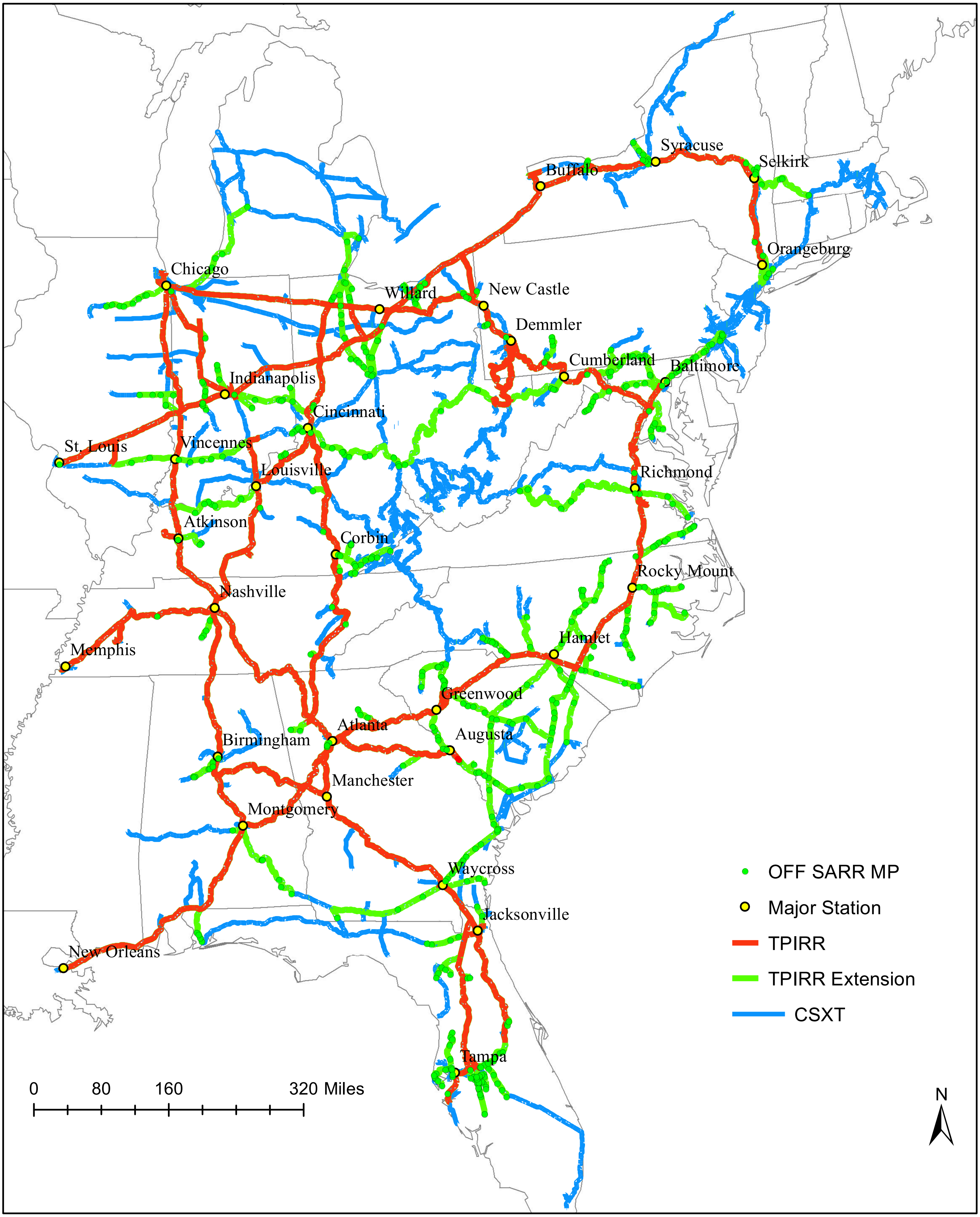
[58] Mileage requirement not applicable to local trains.

July 2012-June 2013 TPIRR Train List Development

TPI Train List Development Process



First Step in Identifying Additional Segments for All Local Trains Traversing the TPIRR



ROUTE MILEAGE BREAKDOWN

Item (1)	Total Miles (2)
1. TPIRR (Red)	7,357
2. TPIRR Extension (Green) 1/	6,200
3. Total CSXT	20,740

1/ Source: "Exhibit III-C-5-miles.xlsx"

TPIRR RTC MODELING PROCEDURES AND RESULTS

Table of Contents

TPIRR RTC MODELING PROCEDURES AND RESULTS

The TPI Stand-Alone Railroad ("TPIRR") utilized the Rail Traffic Controller ("RTC") model[1] to optimize the TPIRR's system track configuration and provide the basis for many of the TPIRR's annual operating metrics. The RTC model has been relied upon by the STB in numerous prior maximum rate reasonableness cases[2] to evaluate the feasibility of the SARR's operating plan and to demonstrate the maximization of the SARR's infrastructure.

The process followed to develop the needed metrics for TPIRR's rail operations, based on the RTC model simulation, is discussed in the remainder of this Exhibit under the following topical headings:

A. Development of The TPIRR System

B. Operating Inputs Used in The RTC Model

C. Development of The Peak Train List

A. DEVELOPMENT OF THE TPIRR SYSTEM

The TPIRR system is made up of 7,357 route miles. This is one of the largest stand-alone systems constructed and presented to the STB. The system includes track in seventeen (17) states and the District of Columbia. A schematic of the entire TPIRR is included at Exhibit III-A-1.

B. OPERATING INPUTS USED IN THE RTC MODEL

The following elements of the TPIRR's operating plan were developed by Messrs. McDonald, Fapp, Mulholland, Crowley and Humphrey and input into the RTC Model by Messrs. Fapp, Crowley and Humphrey for purposes of simulating the TPIRR's peak-period operations and developing train transit times:

---

[1] Version 69E.
[2] *See*, e.g., *AEPCO* at 28, *WFA/Basin I* at 15-16, *PSCo/Xcel I* at 614 and *Otter Tail* at 19.

TPIRR RTC MODELING PROCEDURES AND RESULTS

1. Road Locomotives
2. Train size
3. Helpers
4. Maximum train speeds
5. Dwell times
6. Time required to interchange trains with other railroads
7. Local Train Operations
8. Crew-change locations/times
9. Time for a train to reverse direction
10. Track inspections and maintenance windows
11. Time for random outages

Each of these elements is discussed below.

1. Road Locomotives

The RTC simulation demonstrated that most road trains can operate over the TPIRR system (other than the helper districts described below) with two ES44AC locomotives in a 1/1 DP configuration, except some heavy trains that need additional power at certain locations. The additional locomotives were generally placed on the head-end of the train, usually at crew-change locations, during crew-change time.[3]

The TPIRR will operate its local trains with a single SD40-2 locomotive where possible. Where this is not possible, due to local train sizes or topography, the TPIRR adds a second SD40-2 locomotive or instead uses ES44AC locomotives on the local trains. In addition, TPIRR worktrains will utilize SD40-2 locomotives. Finally, the TPIRR will use SD40-2 and SW1500 locomotives in its yards to perform its switching, car classification and blocking operations.

The July 1, 2010 through June 30, 2011 ("First Year") locomotive requirements, which were developed from the RTC simulation statistics of the TPIRR are shown in Table 1 below.

[3] In some cases, additional locomotives were added to the rear of the train to equalize power and minimize train slack.

TPIRR RTC MODELING PROCEDURES AND RESULTS

Exhibit III-C-6
Table 1
TPIRR First Year Locomotive Requirements

Unit Type	Number of Units
(1)	(2)
1. ES44AC	709
2. SD40-2	167
3. SW1500	181
4. Total Units	1,057

Source: e-workpaper "TPIRR Operating Statistics_Open.xlsx."

2. Train Size

The peak period forecast trains for the RTC simulation are based on comparable trains moving in the Base Year. The maximum train size was determined based on the largest trains by train type and lane operated by CSXT in the Base Year. All growth trains are limited to the same size and weight of actual Base Year trains, and no growth train has more than seven (7) locomotives (excluding helpers).

3. Helpers

TPIRR's helper districts were determined based on information provided by CSXT in discovery and correspond with locations on the TPIRR network where CSXT currently provides helper service. A summary of the helper locations and locomotives required at each location is shown in Table 2 below.

TPIRR RTC MODELING PROCEDURES AND RESULTS

Exhibit III-C-6
Table 2
TPIRR Helper Districts And Locomotive Requirements

	Helper District	Distance (Miles) Helped	Helper Locomotives
	(1)	(2)	(3)
1.	Hancock to Shen	34	2
2.	Hyndman to Sandpatch	18	2
3.	Connellsville to Sandpatch	59	2
4.	Grafton to Bridgeport	19	2
5.	Smithfield to Grafton	23	2
6.	Livingston to Kilsyth	73	1
7.	Ford to North Fort Estill	14	1
8.	Ford to Sanderson	9	1
9.	No Holmes Gap to Middle Holmes Gap	7	1
10.	Cowan to Tantallon	8	1
11.	Sherwood to South Cowan	10	1

Source: e-workpaper “Helper Crews Per Day.xlsx.”

Mr. McDonald instructed Messrs. Fapp, Crowley and Humphrey to allow twenty (20) minutes to add helper locomotives at the beginning of the helper district for each train requiring helper assistance and to allow fifteen (15) minutes to detach the helper locomotives at the end of the helper district.

The coupling and uncoupling of helper locomotives is a straight-forward process that takes a few minutes in terms of the physical operations. The allotted twenty (20) minutes for adding helper locomotives provides sufficient time to perform a brake test after the lead helper locomotive is coupled to the train. Modern technology permits helpers to be removed without stopping the train but Mr. McDonald has conservatively assumed the train will stop for the removal of helpers and has allotted fifteen (15) minutes for this process. This includes the time the helper crew needs to verify that the brakes on the distributed power (“DP”) road locomotive at the rear of the train have been released.

TPIRR RTC MODELING PROCEDURES AND RESULTS

After being detached from a train (regardless of direction), each helper consist returns light to its point of origin. Light helper movements follow trains moving in the same direction, on the same block, with dispatcher authority (unless there is a long interval between trains, in which case they move on a separate block). This is consistent with real-world railroad practices based on Mr. McDonald's personal observation and experience. Light helper movements are not treated as separate trains for purposes of the RTC simulation.

4. Maximum Train Speeds

The maximum permissible train speeds input into the RTC Model are 70 mph for intermodal trains and 60 mph for non-intermodal trains (50 mph for TIH traffic and other "Key" trains as well as loaded coal and bulk grain trains) on the TPIRR's main lines. All trains are limited to a maximum speed of 40 mph on the TPIRR's branch lines except where existing CSXT timetable speeds are higher. These maximum speeds are consistent with CSXT's real-world practice on the lines being replicated by the TPIRR and FRA requirements.

Maximum train speeds are reduced below those specified above where a speed restriction is required by CSXT's operating timetables for the divisions and subdivisions in question. These restrictions exist for safety reasons (such as to maintain a safe braking distance), to reduce underbalance in curve super elevation per FRA track safety regulations and reduce track/curve wear, and to avoid high-speed gage separation on curves exceeding three (3) degrees. In addition, trains do not reach maximum authorized speed in some areas due to grades and curves. All of these restrictions and limitations have been incorporated into the RTC Model for application to the TPIRR's peak-period operations.

TPIRR RTC MODELING PROCEDURES AND RESULTS

5. Dwell Times

Dwell times have been allotted for trains at the TPIRR's yards based on the kind of activities being performed. These activities include 1,000/1,500-mile car inspections and associated bad-order car switching, locomotive fueling and 92-day inspections and crew changes.

Mr. McDonald has allotted a total of five (5) hours of dwell time at each yard for through trains requiring an inspection. This includes time for the inspection itself (three hours) and removal of any bad order cars from the train and addition of spare or repaired cars (one hour).[4]

Locomotives requiring FRA-mandated 92-day inspections are removed from the train upon arrival and replaced with fresh locomotives when the inspection and bad-order switching processes are completed. If locomotives that are not removed for a 92-day inspection require fueling, it is performed while the car inspection is taking place and the train is "blue-flagged." Another hour of dwell time has been allotted for these procedures, as well as for train staging time and contingencies.

TPI has also taken into consideration the need to inspect and fuel locomotives used in interline service to fulfill the common reciprocity with connecting carriers. TPI ensures all TPIRR's locomotives on originating trains are fully fueled and serviced prior to departure from the originating yard. Further, all trains that are to be interchanged to connecting carriers and

---

[4] Six (6) hours of yard dwell time was allotted for empty coal trains to be consistent with the dwell time allotted for empty coal trains in the *WFA/Basin I* case. Less dwell time would be needed to inspect and service the TPIRR's non-coal trains because they tend to be shorter, there is less need to remove bad-order cars and replace them with spare cars, and no need to swap all locomotives on each train for new locomotives, which was the procedure used for empty SARR coal trains in *WFA/Basin I*. See "Opening Evidence of Complainants Western Fuels Association, Inc. and Basin Electric Power Cooperative (Public Version)" filed April 19, 2005 at III-C-41 and *WFA/Basin I* at 17.

TPIRR RTC MODELING PROCEDURES AND RESULTS

move a long distance on the TPIRR network are re-inspected and fueled at an intermediate point prior to being delivered to the connecting carrier.[5]

Since the RTC model simulation is a snapshot of the TPIRR's operations over a ten (10)-day simulation period, there is no way to tell in advance which road locomotives on which trains require a 92-day inspection or fueling upon arrival at one of the TPIRR's yards during that period. Based on Mr. McDonald's experience, it is likely that trains received in interchange from CSXT or another railroad will have locomotives with sufficient fuel and do not require a 92-day inspection while on the TPIRR. However, to be conservative, for all empty coal trains (and certain loaded coal trains as described earlier) and for all non-coal trains that move at long distances on the TPIRR, Mr. McDonald has assumed that the locomotives on the train will need fueling and or a 92-day locomotive inspections at one of the TPIRR's yards, as well as a 1,000-mile or 1,500-mile car inspection. These inspections occur at one of the following yards: Willard, Buffalo, Cincinnati, Nashville or Atlanta.

6. Time Required to Interchange Trains With Other Railroads

The TPIRR interchanges complete trains, including locomotives, with six (6) Class I railroads (BNSF, CSXT, CN, CP, NS and UP) as well as over 75 regional or short-line railroads.[6]

Mr. McDonald has allotted 30 minutes for the interchange of trains at all of these points. The interchange of run-through trains requires a change of crews, a brake set/release and a roll-by inspection, which can easily be accomplished within 30 minutes. The same 30 minutes for

---

5 Some of these trains are intermodal or auto trains that qualify for extended-haul status, thus permitting a 1,500-mile interval between inspections but to be conservative Mr. McDonald has assumed a 1,000-mile inspection is required.

6 *See* e-workpaper "TPIRR Yard Matrix Opening Grading.xlsx" for a complete list of TPIRR interchange locations and the railroads involved.

TPIRR RTC MODELING PROCEDURES AND RESULTS

SARR interchange time were accepted by the Board in *WFA/Basin II*.[7] In locations where CSXT and its connecting carriers do not have run-through agreements, three (3) hours are allocated for interchange dwell time in the RTC model based on Mr. McDonald's experience.

A train received in interchange may have more locomotives than the TPIRR needs to move the train over its system, or may not have the locomotives arranged in a DP configuration. The inbound TPIRR road crew removes any extra locomotives and leaves them on the setout track at the interchange point during the time allotted for the interchange, and the outbound TPIRR crew rearranges locomotives into a DP configuration, if necessary, during the interchange time.[8]

7. Local Train Operations

In order to model all the TPIRR operations, local train movements were included in the RTC model. TPI identified 1,058 local trains[9] that moved within the peak period which were included in the RTC model. All local trains are powered by SD-40-2 locomotives. Where possible, local trains are powered by a single SD-40-2 locomotive. Heavier local trains are powered by two SD-40-2 locomotives on the front-end of the train and the heaviest local trains are powered by ES44AC locomotives.

All local trains, except unit coal trains, utilize front-end power in order to facilitate efficient set out and pick up of blocks of cars. The single exception is where local trains are transporting coal and are too heavy to operate without distributed power. In these instances, the

---

7 *See WFA/Basin II* at 17-18.

8 The Class I railroads are converting to DP at a rapid pace; for example, Union Pacific reported at a recent RTC Model users' conference that 70 to 75 percent of its road trains now have a DP locomotive configuration. With the peak RTC simulation period ten years hence, it is reasonable to assume that the TPIRR will have in place run-through agreements that specify trains are to be received with DP power and that foreign-road locomotives will be equipped for DP operation.

9 *See* Exhibit III-C-1 at 51 for the development of local trains.

TPIRR RTC MODELING PROCEDURES AND RESULTS

trailing tonnage is so great that the knuckles connecting the cars would break without the use of distributed power. Therefore, TPI equipped these local trains with ES44AC locomotives in a distributed power configuration.

Due to the nature of local train service, many of the local trains run in turnaround service. All locations where local trains operate in turnaround service are configured so that the locomotive can be detached, moved around the cars, and reattached for movement in the reverse direction.

TPI used the customer survey reports provided by CSXT in discovery to identify switching times at each location served by a local train.[10] Each local train was assigned a switching time based on location and train number. Some CSXT local trains served as many as six (6) different customers during a single workday. When long switching times and a high number of assigned stops would have resulted in a local crew exceeding the maximum hours of service, the crew was instructed to only set out the cars at the customer's siding. A subsequent local train switched those cars, if necessary. In each instance where cars were set on a customer's siding, 30 minutes of dwell time was included in the RTC model to set out the cars.

8. Crew-Change Locations/Times

At TPIRR crew-change points where the change of crews is the only function performed, Mr. McDonald has allotted 15 minutes for this function. Again, this is consistent with the time allotted for SARR crew changes in *WFA/Basin I*.[11]

The RTC simulation confirms that the distance for each crew assignment, as well as the allotted time at points served by turn crews, can be covered by a single tour of duty including an

---

[10] *See* "CSA Report_Dwell Time_V6 Dwell and loading Analysis.xlsx".
[11] *See WFA/Basin I* Opening Evidence of Complainants (Public Version), filed April 19, 2005 at III-C-30.

TPIRR RTC MODELING PROCEDURES AND RESULTS

allowance of one hour for crew preparation/taxi time. A few crews expire under the Hours of Service law and need to be taxied to their next terminal, while some trains are able to skip a crew change point and the crew can run through to the next crew-change point. Since the TPIRR is a new, start-up, non-unionized operation, its crew districts can be, and have been, designed for maximum efficiency.

9. Time for a Train to Reverse Direction

The TPIRR's track configuration is such that certain of the TPIRR's trains must reverse direction. This occurs with local trains that require reversal of traveling direction in order to serve the subsequent customer. This also occurs with any other train where it enters a yard for operational activities, or otherwise to reach its destination.

Mr. McDonald has allotted 45 minutes of dwell time to reverse direction for local trains that do not change crews at the reverse-direction point and are not providing pick-up or set-out services which are discussed in Local Train Operations above. This accounts for any switching occurring at the turn location and the time needed for the crew to move the locomotive to the opposite end of the train. For trains running in a Distributed Power configuration, 30 minutes was allotted since reversing a train with DP does not require movement of the locomotives. No additional time is allotted for reversing direction if the procedure occurs at a location where the train is interchanged with another railroad or otherwise undergoes a crew change. No extra time is needed beyond the normal 30 minutes allotted for interchange or 15 minutes allotted for crew changes at non-interchange locations.

TPIRR RTC MODELING PROCEDURES AND RESULTS

10. Track Inspections and Maintenance Windows

FRA rules require twice-weekly inspections for Class 4 track, which is the classification for the TPIRR's main tracks. As described in Exhibit III-D-3 (which describes the TPIRR's maintenance-of-way plan), the TPIRR's main and branch lines are inspected twice a week by the railroad's Track Inspectors using hi-rail vehicles (SUV-type vehicles equipped with retractable flanged wheels so they can operate either on highways or on railroad tracks). These inspections have to be performed during the peak traffic (RTC simulation) period. However, they can be performed between train movements and during periods of heavy traffic or the hi-rail vehicle can follow a train on the same block (with the dispatcher's approval). Accordingly, there is no need to allot separate time for FRA-prescribed track inspection in the RTC Model.

Consistent with the STB's decision in *AEPCO*, Messrs. Fapp, Crowley and Humphrey have included delay times in the RTC simulation to reflect maintenance being performed on the TPIRR's line. Specifically, they identified the times that CSXT trains were delayed due to maintenance activity based on train delay time data provided in discovery by CSXT.[12] These include, but are not limited to, delays due to rail grinding activities and Sperry Test cars on the tracks.

11. Time for Random Outages

Random events that affect track and equipment are a part of everyday railroading. It is unrealistic to expect that no such events would occur during the TPIRR's peak traffic period used for the RTC simulation, or that such events would not affect train operations during that period. Accordingly, time for random outages has been input into the RTC Model.

---

[12] *See* e-workpaper "Peak Period Delays (Final).xlsx."

TPIRR RTC MODELING PROCEDURES AND RESULTS

Track capacity is also impacted by program maintenance performed by the SARR. The STB indicated in its *AEPCO* decision that, while parties in prior SAC proceedings had not included track delays caused by program maintenance in their SARR simulations, such maintenance was common in the "real world" and therefore should be reflected in a SARR's hypothetical world.[13]

It is impossible to determine exactly what events would impact train operations during the July 1, 2019 through June 30, 2020 peak year, or when they will occur. However, CSXT did provide data in discovery on events of an unexpected or "random" nature that affected train operations on the lines being replicated by the TPIRR for the period from 2010 through June, 2013, including train-related and track-related events. It also identified delays caused by MOW.[14] Mr. McDonald utilized this data to identify the outages and delays that occurred on CSXT track replicated by the TPIRR during the peak period's comparable time in the Base Year. They then provided this information to Messrs. Fapp, Crowley and Humphrey for input into the RTC Model during the 10-day simulation period.

Mr. McDonald selected the kinds of outages that he deemed most likely to occur including operational outages, such as a broken knuckle or drawbar, a train going into emergency braking mode, or a broken rail. Mr. McDonald excluded, however, those outages experienced by CSXT that would not be incurred by the TPIRR due to differences in the two railroads' operations. For example, Mr. McDonald excluded delays caused by Amtrak operating on the TPIRR's line since, unlike CSXT, Amtrak would not be a TPIRR tenant railroad. Similarly, Mr. McDonald also excluded outages caused by CSXT's traditional signaling system as the TPIRR

---

13 *See AEPCO* at 28.
14 *See* e-workpaper "Peak Period Delays (Final).xlsx."

TPIRR RTC MODELING PROCEDURES AND RESULTS

would operate from the beginning with a purpose built PTC system in place of traditional signals.

Consistent with the STB's decision in *AEPCO*, Mr. McDonald also identified maintenance work performed by CSXT that would cause train delays. As discussed above, this includes delays caused by rail grinding and ultrasonic testing. These delays are in addition to the random maintenance outages caused by such things as broken rails and power switch failures.

Additionally, Mr. McDonald identified locations where intersections with foreign railroads would interfere with TPIRR traffic and instructed Messrs. Fapp, Crowley and Humphrey to insert delays caused by foreign railroads at these locations. Accordingly, CSXT's own reported delays caused by foreign railroads were used as a surrogate. All of these delays were input into the RTC model.

Mr. McDonald also assumed an average duration for each outage indicated in CSXT train delay data that would occur in the Peak Year operations. In other words, if CSXT experienced a one hour delay in its December 2012 operation at a particular location, then the TPIRR would experience a one hour delay in the peak period at the same location. Mr. McDonald then instructed Messrs. Fapp, Crowley and Humphrey to include the outages on the TPIRR's lines (including the date and time for each outage) at the same location where CSXT experienced the outage.

The end result of the analysis was to include 452 operational and maintenance outages as inputs to the RTC Model. The 452 total outages included in the RTC simulation are shown, by date and time, location and type in TPI's workpapers.[15]

---

[15] *See* e-workpaper "Peak Period Delays (Final).xlsx."

TPIRR RTC MODELING PROCEDURES AND RESULTS

C. DEVELOPMENT OF THE PEAK TRAIN LIST

Once the TPIRR network was developed and tested in the RTC model and the operating inputs were identified, the next step in the process was to identify the peak period trains that would be included for evaluation in the RTC model.

The modeling period included a two-day warm-up, the peak week and a one-day cool down. A complete discussion of TPI's development of the peak train list is included in Exhibit III-C-1.

Table of Contents

TPIRR OPERATING PERSONNEL

Consistent with the stand-alone concept of identifying the least-cost, most-efficient, feasible hypothetical alternative to the incumbent, the TPIRR is a non-union railroad that is built from the ground up to handle a defined traffic group.[1]

TPI's experts have developed a staffing plan for the TPIRR to handle its projected peak traffic volume safely and efficiently by taking full advantage of modern technology. This staffing plan also permits the railroad to maintain its facilities in good condition while minimizing cost.

A. Staffing Requirements

The TPIRR's operating personnel include train-crew, line-supervisory, and field employees in Transportation, Engineering/Maintenance-of-Way, and Mechanical departments. The senior operating staff (headquartered at Atlanta, GA) report directly to the Vice President Operations. The TPIRR's operating-personnel requirements are discussed below in two general categories: Train/Switch Crew Personnel and Non-Train Operating Personnel.

1. Train/Switch Crew Personnel

The TPIRR requires a total of 3,108 train and engine ("T&E") crew members to transport its First Year (July 1, 2010 through June 30, 2011) trains. This count, which includes helper crews and switch crews located at the TPIRR's yards, is based on the number of trains moving over the various parts of the TPIRR system during the Base Year (July 1, 2012 through June 30, 2013), indexed to First Year traffic levels. The road-crew assignments and yard-crew assignments at the TPIRR yards were developed by Mr. McDonald (as described in Part III-C-1).

[1] The Board has accepted the concept of a non-unionized SARR. *See TMPA* at 687; *PSCo/Xcel I* at 651.

The RTC Model simulation performed by Messrs. Fapp, Crowley, and Humphrey was used to confirm that train crews operating in these crew districts generally could complete each tour of duty within 12 hours and otherwise comply with the federal hours-of-service law, as amended.[2]

Consistent with Board precedent, T&E crews were developed using the total number of crew starts as determined by the actual train counts over an entire year.[3] In this instance, crews were determined for all trains moving in the Base Year. The total crew starts from each crew base were then increased to reflect the 1.0068 percent re-crewing requirements based on the RTC simulation results that indicate the number of crews whose on-duty time expired under the Hours of Service law.

Given the large size and number of trains moving on the TPIRR, imbalances in trains moving along various routes are inevitable. Like any efficient railroad, the TPIRR seeks to minimize imbalances along the different routes, but in some instances deadheading is necessary to offset unavoidable imbalances. The number of crew starts was adjusted upward to reflect any imbalance of train flows. The procedure used to adjust the number of crew starts to reflect train-flow imbalances is included in TPIRR's workpapers.[4] The adjusted crew count was then used to determine the total number of T&E crews required using the standard formula employed by the Board to determine how many crews are required to cover the number of crew starts assuming that each crew member is available 270 days a year.[5]

---

2 *See* e-workpaper "TPI Open.DELAY."
3 *See PSCo/Xcel I* at 645.
4 *See* e-workpapers "Crew Rebalancing.xlsx" and "TPIRR Operating Statistics_Open.xlsx."
5 *Id.* This number is not affected by the hours-of-service provisions of RSIA.

2. Non-Train Operating Personnel

The staffing of TPIRR's non-train operations has been developed based on the experience of TPI's witness McDonald. Non-train operating personnel on the TPIRR, which includes operating personnel other than train and switch crews and maintenance-of-way ("MOW") personnel, are summarized in Table 1 below. MOW personnel are discussed separately in Part III-D(5).

Exhibit III-D-1
Table 1
TPIRR Non-Train Operating Personnel

Position	No. of Employees
(1)	(2)
a. Executive Office	
Vice President–Operations	1
Administrative Assistant	1
Administrative pool (secretaries)	4
(1) Assistant Vice President–Stations & Customer Service	1
Director–Customer Service	3
Manager–Customer Service	3
Customer Service Agent	15
(2) Director–Operations Planning and Joint Facilities	1
Manager–Joint Facilities	2
Analyst–Operations Planning	2
(3) Director–Budgets	1
Analyst–Budgets	2
b. Transportation Department	
Vice President–Transportation	1
(1) Assistant Vice President–Transportation Center	1
(a) Director–Operations Control	1
Managers–Operations Control	9
(b) Chief Dispatcher	2
Assistant Chief Dispatcher (9 positions manned 24/7)	40
Dispatchers (32 desks manned 24/7)	140
(c) Director–Crew Management	1
b. Transportation Department (continued)	

Exhibit III-D-1
Table 1
TPIRR Non-Train Operating Personnel

Position	No. of Employees
(1)	(2)
Crew Callers	35
(d) Director–Coal Operations	1
Manager–Coal Operations	4
(e) Director–Intermodal Operations	1
Manager–Intermodal Operations	4
(2) Assistant Vice President–Safety & Materials	1
(a) Director–Rules, Safety & Training	3
Managers–Rules, Safety & Training	14
(b) Director–Environmental Control	2
(c) Director–Purchasing & Material Management	1
Manager–Purchasing & Inventory Control	4
Manager–Material Management	4
(3) General Manager	2
(a) Directors–Field Operations	14
(i) Managers–Field Operations	73
Assistant Manager–Field Operations	24
(ii) Managers–Locomotive Operations	15
(b) Managers–Yard Operations	79
Assistant Managers-Yard Operations	41
Administrative Assistants - Major Yards	12
c. Mechanical Department	
Vice President–Equipment Management	1
Manager–Administration	2
(1) Assistant Vice President–Motive Power	1
(a) Director–Engineering & Tech Service	1
(b) Director–Operating Research & IE	1
Manager–Testing & Environmental	1
(c) Superintendent–Motive Power, Field Operations	7
Manager–Budget, Motive Power	1
(d) Superintendent–Water & Fuel Services	1
(2) Assistant Vice President–Equipment Maintenance	1
Chief Mechanical Engineer	1
c. Mechanical Department (continued)	
Superintendent–Equipment Maintenance, Field Operations	7

Exhibit III-D-1
Table 1
TPIRR Non-Train Operating Personnel

Position	No. of Employees
(1)	**(2)**
Car Inspectors	281
Manager–Budgets, Car Maintenance	1
Clerk–Car Repair Accounts	2
Total Non-Train Operating Personnel	**874**

Source: e-workpaper "TPIRR Operating Expense_Open.xlsx."

Mr. McDonald relied on his 35 years of experience in railroad operations, engineering, and management, including a number of senior positions at C&NW, a Class 1 Railroad, in addition to other management positions early in his career at Penn Central, now a part of the CSX system, to develop non-train operating personnel for the TPIRR. Mr. McDonald designed the non-train operating personnel staff for the TPIRR from the ground up. He reviewed the number of trains moving on the TPIRR by direction over the entire TPIRR system, including general freight, intermodal, unit trains, and local trains. These trains are those actually moved by CSXT in the Base Year and reflect the same blocking and classification switching that CSXT performs for the carloads moving on the TPIRR.

Mr. McDonald spent a large portion of his career with C&NW where he served as Vice President ("VP") Western Railroad Properties Inc., VP–Operating Administration, VP–Engineering, VP–Transportation, and VP–Operations. C&NW was similar in size to the TPIRR and was a cost effective, efficient railroad, like the TPIRR. Table 2 below compares non-train operations staffing levels of C&NW to those of TPI as a demonstration of the reasonableness of the TPIRR staffing developed by Mr. McDonald.

Exhibit III-D-1
Table 2
Comparison of C&NW Non-Train Operations Staffing With TPIRR

	Department	1994 C&NW	TPI Opening
	(1)	(2)	(3)
1.	Office of VP–Operations	12	36
2.	Transportation	387	527
3.	Mechanical [1/]	49	28
4.	Engineering	2	2
5.	Total	450	593

1/ Excludes car inspectors.
Source: A complete listing of the non-train operating staff for both C&NW and TPIRR are included in TPI Opening e-workpaper "TPIRR Staffing Comparisons.xlsx", tab "Table Ex III-D-1."

As Table 2, above, indicates, TPIRR staffing levels exceed those for C&NW in 1994 by 143 employees. This compares favorably with C&NW, which was 80% the size of TPIRR in 1994. Descriptions of each of TPIRR's operating positions are provided below, in hierarchical fashion by department.[6]

a. Operations Executive Office

The Operations department is led by the VP–Operations who reports to the President-CEO and is a member of the TPIRR Board of Directors. The VP–Operations is responsible for all operating functions and supervises the VP–Transportation and the VP–Equipment Management. Also reporting to the VP–Operations is the Assistant VP ("AVP")–Stations and Customer Service, a Director–Operations Planning and Joint Facilities, and a Director–Budgets. The Operations department is supported by five (5) Administrative Assistants.

6 In *WFA/Basin I* the Board treated Customer Service personnel as Operating personnel and Marketing personnel as G&A staff. *WFA/Basin I* at 42, 45-46,

(1) Assistant Vice President–Stations and Customer Service

The AVP–Stations and Customer Service is responsible for preparing consists and switch lists for train crews and coordinating service with customers on the railroad. Reporting to the AVP–Stations and Customer Service are three (3) Directors–Customer Service, who oversee a staff of three (3) Managers and 15 Agents. Customer Service Agents work shifts to provide support 24/7.

(2) Director–Operations Planning and Joint Facilities

This position is responsible for designing and updating the most efficient routing, blocking, and scheduling of car and train movements, called service design and service management. In addition, the position is responsible for preparing and monitoring all joint-facility and industry contracts. There are two (2) manager positions and two (2) analyst positions assigned to assist the Director–Operations Planning and Joint Facilities.

(3) Director–Budgets

This position is responsible for preparation of the budget for the office of the VP–Operations as well as the entire Transportation Department. There are two (2) Analyst positions assigned to assist the Director–Budgets.

b. Transportation Department

The VP–Transportation is responsible for all transportation functions on the TPIRR. The AVP–Transportation Center, AVP–Safety and Materials, and two General Managers report to the VP–Transportation.

(1) Assistant Vice President–Transportation Center

The AVP–Transportation Center is responsible for managing and coordinating Operations Control, Dispatching, Crew Management, Intermodal, and Coal Operations.

Reporting to the AVP–Transportation Center are the Director–Operations Control, two (2) Chief Dispatchers, Director–Crew Management, Director–Coal Operations, and Director–Intermodal Operations.

(a) Director–Operations Control

The Director–Operations Control is responsible for all locomotive assignments on the railroad. This individual also monitors and maintains records of run-through operations with other railroads and, in concert with the Mechanical Department, handles the timely dispatch of locomotive power for required inspections. Nine (9) Managers–Operations Control assist the Director–Operations Control in performance of his/her responsibilities, with two Managers on shift 24/7. The Director and Managers are responsible for assignment of locomotives to trains and for maintaining applicable records, including run-through operations with other railroads. They also handle the dispatch of locomotive power for required inspections in concert with the Mechanical Department. In addition, this office is the centralized location for reporting incidents and accidents requiring notification to Federal, State, and local agencies. It is also the central point of contact for outside agencies to report any incident or accident that has the potential to disrupt rail operations.

(b) Chief Dispatchers

There are two Chief Dispatcher positions on the TPIRR that are responsible for managing the Dispatching staff and are ultimately responsible for dispatching trains, track inspection vehicles and work equipment. In addition, the Chief Dispatchers coordinate a variety of related tasks, including crew calling, taxi service, track-outage scheduling for MOW program work, and special requests from the Sales and Marketing Department and customers. Other duties include notifying local authorities about highway-crossing incidents and derailments and handling locomotive and equipment failures. To assist the Chief Dispatchers with management duties and coordination of movements between dispatcher desks are 40 Assistant Chief Dispatchers that man 9 supervisory positions on a 24/7 basis. The Assistant Chief Dispatchers oversee 32 dispatching desks located at the Atlanta headquarters. The 32 Dispatcher desks are responsible for controlling the movement of all trains and equipment operating within their respective territories, including road trains, local trains, work trains, and MOW equipment, including inspection vehicles. Each desk is manned by 1 dispatcher per shift with 3 shifts per day, 7 days per week. A total of 140 employees are required to man the 32 dispatcher positions on a 24/7 basis.[7]

(c) Director–Crew Management and Crew Callers

The TPIRR utilizes an automated crew-management system.[8] The automated crew-management system is designed to handle virtually all basic crew interactions via automated calling and response, including calling crews, routing calls from dispatchers to crews, and selecting the correct crew for each job. Still it requires some augmentation by human personnel to troubleshoot any technical problems and interface with crews as necessary. Accordingly, Mr. McDonald has staffed the TPIRR with a Director–Crew Management and 8 Crew Caller desks. The Director–Crew Management manages the crew-calling system, supervises and assists the crew callers as needed, handles exceptions, and assigns crew vacations. The Director also interfaces with TPIRR's Information Technology personnel as needed. The 8 crew-caller positions (35 callers in total) are on duty on a 24/7 basis to augment the automated crew-management system.

---

7 A listing of the territory covered by each of the 32 dispatch desks is included in e-workpaper "TPIRR Dispatcher Districts.xlsx."

8 *See* Exhibit III-D-2.

(d) Director–Coal Operations

The Director–Coal Operations is responsible for monitoring unit coal train shipments between mines and utilities, both on-line and off-line. Reporting to the Director–Coal Operations are 4 Managers–Coal Operations who assist the Director with his/her responsibilities. The four managers provide 24/7 coverage for one position.

(e) Director–Intermodal Operations

The Director–Intermodal Operations is responsible for monitoring on- and off-line intermodal-train shipments for customers and shippers. Reporting to the Director–Intermodal Operations are 4 Managers–Intermodal Operations who assist the Director with his/her responsibilities. The 4 managers provide 24/7 coverage for one position.

(2) Assistant Vice President–Safety and Materials

The AVP–Safety and Materials is responsible for all safety and training on the TPIRR. In addition, the AVP–Safety and Materials heads the Materials Department. Reporting to the AVP–Safety and Materials are 3 Directors–Rules, Safety, and Training, 2 Directors–Environmental Controls, and a Director–Purchasing and Material Management.

(a) Directors–Rules, Safety and Training

The 3 Directors–Rules, Safety, and Training are responsible for safety, rules, and training on the TPIRR system. These positions are also responsible for the operating timetable, rules, and related instructions and for interfacing with the FRA and other government agencies in matters pertaining to rules and operating practices.

Reporting to the Directors are 14 Managers–Rules, Safety, and Training who monitor safety, conduct rules and training classes for transportation, maintenance, and mechanical operating personnel in their respective territories, and assist the Director in the performance of his/her duties.

(b) Director–Environmental Controls

The two (2) Directors–Environmental Controls are responsible for monitoring practices and activity in the field as well as testing where applicable on TPIRR to insure compliance with all State and Federal environmental regulations.

(c) Director–Purchasing and Material Management

The Director–Purchasing and Material Management is responsible for purchases of all materials and equipment, negotiating and enacting contracts with vendors, maintaining inventories, and handling distribution of materials and equipment as required. Assisting the Director are 4 Managers–Purchasing and Inventory Control and 4 Managers–Material Management. The Managers–Purchasing and Inventory Control are responsible for purchasing needs of all departments on the railroad, negotiating and making contracts with vendors, and accounting for and insuring proper inventories are maintained. The Managers-Material Management are responsible for the proper use of materials and equipment and the management and distribution of materials and equipment, including leased vehicles on the railroad.

(3) General Managers–Transportation

The General Managers–Transportation for the Northern and Southern Regions are responsible for all transportation field operations and supervise the TPIRR's Directors–Field Operations on their respective territories.

(a) Directors Field–Operations

The Directors–Field Operations and Managers–Field Operations are responsible for train operations in their respective territories and for supervising train crews. They also perform

FRA-mandated and other appropriate testing and respond to and investigate accidents and day-to-day operating problems that may be encountered.

The TPIRR has 14 Directors–Field Operations positioned throughout the system. These positions are the equivalent of Transportation Superintendents on a Class I railroad. The specific locations and number of Directors–Field Operations at each location are included in our workpapers.[9]

(i) Manager–Field Operations

The TPIRR has 73 Managers–Field Operations positions—32 are stationed at major terminals and 41 at outlying points. All Managers report to their respective Directors–Field Operations. These positions are equivalent to a Trainmaster on a Class I railroad. The specific locations and number of Managers–Field Operations at each location are included in our workpapers.[10] Supporting the staff of 73 Managers–Field Operations are 24 Assistant Managers–Field Operations.

(ii) Managers–Locomotive Operations

The TPIRR has 15 Managers–Locomotive Operations ("MLO"), who are responsible for the safe and efficient handling of locomotives and trains by the TPIRR's engineers. These Managers must, in compliance with FRA guidelines, annually monitor Locomotive Engineers. Their duties are similar to those of a Road Foreman of Engines or Traveling Engineer on a Class I railroad. They are FRA-certified locomotive engineers, qualified on their respective territories, and required to ride with any Engineer that must be recertified. They are responsible for training and qualifying any engineer who is unfamiliar with a given territory or has not run over a

9 *See* e-workpaper "NonTrainStaffingbyLocation.xlsx."
10 *Id.*

territory in more than a year. The MLO must also investigate all incidents and accidents where train handling issues are suspected. They are assigned to various locations throughout the TPIRR, as shown in our workpapers.[11]

(b) Managers–Yard Operations

The TPIRR has 79 Managers–Yard Operations assigned to yards throughout the system. There are also 41 Assistant Managers–Yard Operations throughout the system, where traffic volumes warrant. These positions direct the movement of trains and other equipment within the yards' limits. All Managers and Assistant Managers–Yard Operations report to the Directors–Field Operations. At small yards where there is no Assistant Manager–Yard Operations, a designated crew member, acting as a footboard Yardmaster, will receive instructions directly from Customer Service.[12] Each major yard has an Administrative Assistant (12 in total) to support the Managers-Yard Operations.

c. Mechanical Department

The Vice President–Equipment Management supervises the TPIRR's mechanical function, which largely involves overseeing the acquisition and maintenance of the TPIRR's equipment (including rolling stock) as well as administration of the AAR Interchange Rules with respect to the TPIRR's use of other railroads' locomotives and equipment on trains that operate in interline service. This position is also responsible for interfacing with the TPIRR's locomotive and car maintenance contractors. Reporting to the VP–Equipment Management are an AVP–Motive Power, an AVP–Equipment Maintenance, and 2 Managers that are responsible for administration of inventories, billings, and special records.

---

[11] *Id.*

[12] *Id.* (identifying the assignment locations for Managers and Assistant Managers–Yard Operations).

(1) Assistant Vice President–Motive Power

The AVP–Motive Power is responsible for maintenance of the locomotive fleet and ensuring the correct complement of power and locomotive consists are available as requested by Operations Control.

(a) Director–Engineering & Technical Services

The Director–Engineering & Technical Services reports to the AVP–Motive Power and is responsible for investigation of technical issues regarding operation of motive power on the TPIRR system. This Director represents the TPIRR at the AAR and other organizations to keep TPIRR informed of developments and advances in the industry.

(b) Director–Operating Research & Industrial Engineering

The Director–Operating Research & Industrial Engineering reports to the AVP–Motive Power and is responsible for researching the latest developments in motive power and equipment and advancing them for the benefit of the TPIRR. This Director also represents the TPIRR at the AAR and other organizations to keep the TPIRR informed of developments and advances in the industry. Reporting to the Director–Operating Research & Industrial Engineering is 1 Manager–Testing & Environmental who is responsible for testing of materials and environmental compliance, including investigation of any problems involving cars containing hazardous commodities while on the TPIRR (and related federal reporting requirements).

(c) Superintendents–Motive Power, Field Operations

There are 7 Superintendents–Motive Power, Field Operations that report to the AVP–Motive Power. Each is responsible for inspection, maintenance, and repair of locomotives in his/her respective territory, including those at contractor shops located on the TPIRR. One Manager–Budget, Motive Power assists the Superintendents with planning and budgeting.

(d) Superintendent–Water and Fuel Service

The Superintendent–Water and Fuel Service reports to the AVP–Motive Power and is responsible for administering the supply of fuel, lubricants, water, and sand for locomotives over the TPIRR system.

(2) Assistant Vice President–Equipment Maintenance

The AVP–Equipment Maintenance is responsible for equipment repairs and overseeing management of car inspectors. Reporting to this AVP is a Chief Mechanical Engineer and 7 Superintendents–Equipment Management, Field Operations, who are responsible for all matters concerning repair of equipment and their disposition, in addition to direct management of Car Inspectors. Also reporting to the AVP–Equipment Management is a Manager–Budgets, Equipment Maintenance, who is responsible for preparing budgets for the department. Reporting to the Manager–Budgets, Equipment Maintenance are 2 Clerks–Car Repair Accounts.

As mentioned above, Car Inspectors report to one of 7 Superintendents–Equipment Management, Field Operations. The TPIRR's Car Inspectors have duties similar to those of carmen on a Class I railroad. They are located at the TPIRR's yards where the railroad performs FRA-certified car inspections. The number of Equipment Inspector positions is based on the number of daily trains requiring inspection that move through the inspection points during the peak week. Equipment inspectors are also assigned at all yard locations where more than three trains per day originate. In yards where less than three trains per day originate, the train crews perform the necessary equipment inspections on trains prior to departure. Line-on-road carmen have been assigned to inspect and repair equipment that fails en route over the TPIRR system. Car inspection procedures are described in Part III-C.

The Inspectors are located at each of the TPIRR's 26 locations where high volumes of trains are inspected. Inspection teams comprise between 1 and 4 inspectors depending on the daily number of trains to be inspected. Each team is assigned small ATV-type vehicles which can travel on the roadways between the inspection tracks during the inspection process. This enhances the productivity of the crews, and the TPIRR has invested capital for roadways between the inspection tracks to achieve these savings. The inspection vehicles are equipped with tools and parts (such as brake shoes) needed for performing light car repairs.

A total of 281 employees are required to man the inspection crews on a 24/7 basis. The number of crews at each location is based on the maximum number of trains per day requiring inspection that operate through that location during the TPIRR's peak period included in the RTC simulation. In addition, "line of road" car inspectors are assigned in two-man teams at each of 13 major yard locations. The line-of-road inspectors are car repairmen and inspectors who provide minor car repairs in the field and also inspect cars on an as needed basis.[13]

B. Compensation

1. T&E Compensation

As stated previously, T&E personnel are assumed to work 270 shifts per year. Based on information provided by CSXT in discovery, T&E wages are determined using wages paid to T&E personnel who work 270 or more shifts per year in 2010. The wages for the 3,108 T&E personnel are based on the average amount paid by CSXT to its T&E personnel including all constructive allowances paid by CSXT to its train and enginemen. In 2010, CSXT paid its engineers and conductors working 270 or more shifts per year an average of {{[redacted]}} and

[13] *See* e-workpaper "Trains to be Inspected.xlsx" for the location and number of car inspectors.

{{[redacted]}}, excluding fringes, respectively. Based on these amounts the TPIRR pays its T&E personnel a total of {{[redacted]}} million in the First Year.

2. Non-Train Personnel Compensation

Compensation for other non-train operating personnel is derived from CSXT's 2010 Wage Forms A&B and is established at the same levels as those paid by CSXT for comparable positions. Salaries and total compensation for the TPIRR's non-train operating personnel are shown in Table 3 below.

Exhibit III-D-1
Table 3
TPIRR Non-train Compensation

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
a. Executive Office			
Vice President–Operations	1	$628,045	$628,045
Administrative Assistant	1	{{[redacted]}}	{{[redacted]}}
Administrative pool (secretaries)	4	{{[redacted]}}	{{[redacted]}}
(1) Assistant Vice President–Stations & Customer Service	1	{{[redacted]}}	{{[redacted]}}
Director–Customer Service	3	{{[redacted]}}	{{[redacted]}}
Manager–Customer Service	3	{{[redacted]}}	{{[redacted]}}
Customer Service Agent	15	{{[redacted]}}	{{[redacted]}}
(2) Director–Operations Planning and Joint Facilities	1	{{[redacted]}}	{{[redacted]}}
Manager–Joint Facilities	2	{{[redacted]}}	{{[redacted]}}
Analyst–Operations Planning	2	{{[redacted]}}	{{[redacted]}}
(3) Director–Budgets	1	{{[redacted]}}	{{[redacted]}}
Analyst–Budgets	2	{{[redacted]}}	{{[redacted]}}
b. Transportation Department			
Vice President–Transportation	1	$628,045	$628,045
(1) Assistant Vice President–Transportation Center	1	{{[redacted]}}	{{[redacted]}}
(a) Director–Operations Control	1	{{[redacted]}}	{{[redacted]}}
Managers–Operations Control	9	{{[redacted]}}	{{[redacted]}}
(b) Chief Dispatcher	2	{{[redacted]}}	{{[redacted]}}
Assistant Chief Dispatcher (9 positions manned 24/7)	40	{{[redacted]}}	{{[redacted]}}
Dispatchers (32 desks manned 24/7)	140	{{[redacted]}}	{{[redacted]}}
(c) Director–Crew Management	1	{{[redacted]}}	{{[redacted]}}
Crew Callers	35	{{[redacted]}}	{{[redacted]}}
(d) Director–Coal Operations	1	{{[redacted]}}	{{[redacted]}}
Manager–Coal Operations	4	{{[redacted]}}	{{[redacted]}}
(e) Director–Intermodal Operations	1	{{[redacted]}}	{{[redacted]}}
Manager–Intermodal Operations	4	{{[redacted]}}	{{[redacted]}}
(2) Assistant Vice President–Safety & Materials	1	{{[redacted]}}	{{[redacted]}}
(a) Director–Rules, Safety & Training	3	{{[redacted]}}	{{[redacted]}}
Managers–Rules, Safety & Training	14	{{[redacted]}}	{{[redacted]}}
(b) Director–Environmental Control	2	{{[redacted]}}	{{[redacted]}}
(c) Director–Purchasing & Material Management	1	{{[redacted]}}	{{[redacted]}}
Manager–Purchasing & Inventory Control	4	{{[redacted]}}	{{[redacted]}}

Manager–Material Management	4	{{[redacted]}}	{{[redacted]}}
(3) General Manager	2	{{[redacted]}}	{{[redacted]}}
(a) Directors–Field Operations	14	{{[redacted]}}	{{[redacted]}}
(i) Managers–Field Operations	73	{{[redacted]}}	{{[redacted]}}
b. Transportation Department (continued)			
Assistant Manager–Field Operations	24	{{[redacted]}}	{{[redacted]}}
(ii) Managers–Locomotive Operations	15	{{[redacted]}}	{{[redacted]}}
(b) Yardmaster	79	{{[redacted]}}	{{[redacted]}}
Assistant Yardmaster	41	{{[redacted]}}	{{[redacted]}}
Administrative Assistants - Major Yards	12	{{[redacted]}}	{{[redacted]}}
c. Mechanical Department			
Vice President–Equipment Management	1	$628,045	$628,045
Manager–Administration	2	{{[redacted]}}	{{[redacted]}}
(1) Assistant Vice President–Motive Power	1	{{[redacted]}}	{{[redacted]}}
(a) Director–Engineering & Tech Service	1	{{[redacted]}}	{{[redacted]}}
(b) Director–Operating Research & IE	1	{{[redacted]}}	{{[redacted]}}
Manager–Testing & Environmental	1	{{[redacted]}}	{{[redacted]}}
(c) Superintendent–Motive Power, Field Operations	7	{{[redacted]}}	{{[redacted]}}
Manager–Budget, Motive Power	1	{{[redacted]}}	{{[redacted]}}
(d) Superintendent–Water & Fuel Services	1	{{[redacted]}}	{{[redacted]}}
(2) Assistant Vice President–Equipment Maintenance	1	{{[redacted]}}	{{[redacted]}}
Chief Mechanical Engineer	1	{{[redacted]}}	{{[redacted]}}
Superintendent–Equipment Maintenance, Field Operations	7	{{[redacted]}}	{{[redacted]}}
Car Inspectors	281	{{[redacted]}}	{{[redacted]}}
Manager–Budgets, Car Maintenance	1	{{[redacted]}}	{{[redacted]}}
Clerk–Car Repair Accounts	2	{{[redacted]}}	{{[redacted]}}
Total Non-Train Operating Personnel	**874**		**$66,913,454**

Source: e-workpaper "TPIRR Operating Expense_Open.xlsx."

3. Fringe Benefits

Fringe benefits for all TPIRR employees are based on 43.5 percent of wages. This number is based on the average ratio of fringe benefits to total wages paid in 2010 for all operating employees, as reported by each of the Class I carriers in their respective R-1 Annual Reports.

The TPIRR also incurs taxi and overnight expenses for train crews. The number of taxi trips required, the cost per trip, the number of overnight stays and the cost per stay were identified for each crew.[14]

Consistent with Board precedent, taxi trips and overnight stays were developed using the actual train counts (and the crews' related taxi and hotel requirements) over an entire year.[15] The TPIRR's unit cost for taxi trips is estimated based on current rates for taxi service at each location where available. In other locations, the taxi rate is based on the average rate by state. The cost per overnight stay ranges from $59.98 to $190.36 and is based on hotel room rates throughout the TPIRR system.[16]

The cost of hotels is based on "rack rates" identified through a review of available hotel rates at specific locations near the TPIRR on the internet. As with any Class I railroad or other company which utilizes a high volume of overnight accommodations, the TPIRR would be able to negotiate hotel rates lower than rack rates based on the high volume of overnight stays its T&E employees would require. The discount from the hotel rack rate for large volume customers is up to 25%, as reported by grouptravel.org.[17]

It is assumed that the difference between the rack rate included in TPI's analysis and the hotel rates the TPIRR would be able to negotiate would be more than sufficient to pay for meals for T&E employees in overnight service.

---

[14] *See* e-workpaper "Hotels Taxis_Open.xlsx."
[15] *See WFA/Basin I* at 48; *PSCo/Xcel I* at 652.
[16] *See* e-workpaper "Hotels Taxis_Open.xlsx."
[17] *See* e-workpaper "What is the Average Discount When You Get Group Hotel Rates.pdf."

C. Materials, Supplies, and Equipment

Materials, supplies and equipment for operating personnel (other than MOW personnel) include office furniture and equipment, office supplies, safety equipment, EOTDs, motor vehicles (including railcar inspection vehicles), and tools and supplies. The total annual operating expense for these items equals $4.8 million in the First Year.[18] The transportation materials, supplies, and equipment expense includes the cost of 8 Ford Taurus sedans, 98 Ford Explorers, 26 4WD pick-up trucks for car-inspection teams, 12 Ford F-350 trucks and 23 ATV vehicles for car-inspection teams.

Information-Technology requirements, including computers and software, are described in Exhibit III-D-2. MOW-equipment requirements are described in Exhibit III-D-3.

[18] *See* e-workpaper "TPIRR Operating Expense_Open.xlsx."

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Table of Contents

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

The general and administrative ("G&A") expenses for the TPIRR include its headquarters (corporate) management and administrative staff, buildings and equipment, and other expenses, including information technology ("IT") requirements, training and recruiting expense, and outsourced expenses. These expenses have been developed on the basis of the experience of TPI's Witnesses Hunter, McDonald, Kruzich, and Burris and reflect a ground up approach to identifying the required staff of the TPIRR. Mr. Hunter and Mr. McDonald in particular have held a number of senior management positions at Class I railroads. Mr. Hunter has 37 years of experience in senior management positions at the Southern Pacific and Western Pacific Railroads and with several regional railroads. Mr. Hunter has been involved in several railroad mergers, including UP/MKT and SP/DRGW, and also KCS's acquisition of its Mexican franchise. In all three transactions, his work involved operations, marketing, and organization/personnel. More recently, Mr. Hunter has worked extensively with BNSF in the areas of operations, equipment, marketing, and organization/personnel, and his projects have included analysis of large regional railroads and short-line holding companies in these same areas. Mr. McDonald has 35 years of experience in railroad operations, engineering, and management, serving in senior management positions at Class I railroads. Mr. McDonald spent a large portion of his career with C&NW where he served in numerous positions, including Vice President Western Railroad Properties, Inc., Vice President–Operating Administration, Vice President–Engineering, and Vice President–Operations.

TPI's third G&A witness is Joseph Kruzich, who has 38 years of experience in railroad accounting, executive administration, and information technology, including serving as Vice President Telecommunications and Chief Information Officer of the Kansas City Southern

Railway. Mr. Kruzich developed the TPIRR's IT requirements and costs including computer hardware, systems, software, and support personnel as well as out-sourcing needs. Finally, TPI also relies on Philip Burris, a Senior Vice President of L.E. Peabody & Associates, Inc., who has more than 30 years of consulting experience with regard to railroad economics. Mr. Burris developed G&A personnel salaries based on salaries paid to comparable personnel of CSXT or, where appropriate, other railroads.

The TPIRR's engineering staff was developed by TPI's engineering witness, Harvey Crouch, in consultation with Mr. McDonald. As the engineering function principally involves maintenance-of-way, the TPIRR's engineering personnel are discussed in Exhibit III-D-3.

In this Exhibit III-D-2, staffing requirements are discussed in sub-part A, compensation is addressed in sub-part B, equipment needs (and costs) are described in sub-part C, and other issues, including IT systems, are discussed in sub-part D.

A. STAFFING REQUIREMENTS

All TPIRR personnel have been designated as either operating personnel or non-operating personnel. TPIRR operating personnel are discussed in Exhibit III-D-1 and the maintenance-of-way employees, while considered operating personnel, are discussed separately in Exhibit III-D-3. Employees considered non-operating personnel on a Class I railroad are included in the TPIRR G&A staff. This staff performs all commercial, administrative, and legal functions necessary to serve the TPIRR traffic group. TPIRR is a unique railroad, unlike any existing railroad today. It is smaller than the largest Class I railroads (UP, BNSF, NS, CSXT) but larger than KCS and regional railroads. Because of changes in technologies and operations, it also cannot be compared well with past railroads. This makes it very difficult to benchmark

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

TPIRR with other railroads past and present. TPIRR is a 7,000 plus mile system with revenues of approximately $6.6 billion in the First Year of operations. TPIRR, as a system, has fewer branch lines than other major railroads, both past and present. TPIRR traffic is 44 percent intermodal and 13 percent coal, which is primarily transported in unit train movements. There is no railroad today with this type of traffic mix of this size. Without a good comparable railroad to use as a benchmark, TPIRR first evaluated the needs of the railroad and its traffic group for efficient and effective service, and then developed the G&A personnel and functions from the ground up. This process avoids extra unnecessary and redundant positions that are prevalent in long existing railroads. As a startup railroad, there are no past mergers or consolidations carrying over extra personnel from previous organizational structures. TPIRR is in a unique position to put together a modern-day rail system of its own unique size and complexity, efficiently sized and developed for the TPIRR traffic base. Indeed, many G&A activities do not vary with the number of route-miles or the traffic volume. The nature of most G&A activities means that a railroad the size of the TPIRR can achieve greater staffing economies of scale than a smaller railroad.

The G&A staff consists of 304 personnel and is based at Atlanta, GA, where the TPIRR's corporate headquarters building is located. This staff covers all executive and administrative activities including marketing, legal services, accounting and bookkeeping, budgeting, financial reporting, payroll, information systems, human resources, secretarial and clerical services, and supervising contractors in the performance of some out-sourced activities.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

The TPIRR's G&A staff is summarized in Table 1 below. This table does not include the operating and MOW employees located at the Atlanta, GA headquarters, who are discussed in Exhibit III-D-1 and Exhibit III-D-3, respectively.

Exhibit III-D-2
Table 1
TPIRR G&A Personnel Requirement

Position (1)	No. of Employees (2)
1. Executive	
Outside Directors	5
President/CEO	1
Corporate Secretary	1
Manager–Administration	1
Manager–Planning	1
a. AVP–Administration	1
(1) Director of Corporate Relations	2
Manager–Corporate Communications	1
(2) Director–Government Relations	2
(3) Director–Corporate Quality Improv./Assurance	1
Manager–Corporate Quality Improv./Assurance	1
b. AVP–Human Resources	1
(1) Director–Human Resources	2
Manager–Human Resources	4
(2) Director–Labor Relations	1
Manager–Labor Relations	2
Claims Administrator–Labor Relations	1
Claims Analyst–Labor Relations	2
Total Executive	**30**
2. Sales & Marketing	
Vice President–Sales & Marketing	1
Manager Administration–Sales & Marketing	1
a. AVP–Consumer, Forest & Paper Products	1
Manager–Consumer Products	1
Manager–Forest & Paper Products	1
b. AVP–Aggregates, Minerals, Metals & Scrap	1
Manager Aggregates & Minerals	1
Manager–Metals	1
Manager–Scrap	1
c. AVP–Chemicals & Petroleum	1

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 1
TPIRR G&A Personnel Requirement

Position (1)	No. of Employees (2)
Manager–Chemicals & Petroleum	2
d. AVP–Energy & Coal	1
Manager–Energy	1
Manager–Coal	1
e. AVP–Intermodal & Autos	1
Director Marketing–Intermodal & Autos	1
Manager Autos	1
Manager–Intermodal	1
f. AVP–Food & Grain	1
Manager–Food	1
Manager–Grain	1
g. AVP–Sales & Marketing Planning	1
Director–Market Planning	1
Manager–Business Development	1
Manager–Industrial Development	1
h. AVP Sales & Marketing Services	1
(1) Director–Field Sales	1
Manager–National Field Sales	2
Field Sales Representatives	6
(2) Director–Pricing Services & Contracts	1
Manager–Pricing Services	1
Manager–Contracts	1
(3) Director–Damage Prevention & Freight Claims	1
Manager–Damage Prevention & Freight Claims	1
Freight Claims Representative	4
(4) Director–Equipment Distribution	1
Manager–Open Top Hoppers, Gondolas	1
Manager–Covered Hoppers	1
Manager–Box, Tanks, Refrigerator	1
Manager–Flat, Auto, TOFC/COFC	1
Manager–Clearance Desk	1
Chief Car Distributor	1
(5) Manager–Information Services	1
(6) Manager–Support Services and Interline	1
(7) Manager–Customer Service	2
Total Sales & Marketing	**56**

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 1
TPIRR G&A Personnel Requirement

Position (1)	No. of Employees (2)
3. Finance & Accounting	
Vice President–Finance & Accounting	1
Manager–Administration	1
a. Treasurer	1
Assistant Treasurer	1
Cash Manager	1
Manager–Risk Management & Insurance	1
b. AVP–Controller	1
(1) Assistant Controller–Revenue	1
(a) Director–Revenue & Distribution Accounting	1
Manager–Administration, Revenue Accounting	1
Manager–Freight & Customer Accounting	2
Analyst–Freight & Customer Accounting	2
Manager–Divisions & Interline Accounting	2
Analyst–Divisions & Interline Accounting	4
Manager–Central Freight Rate & Bill	2
Analyst–Central Freight Rate & Bill	7
(b) Director–Credit & Receivables	1
Manager–Collections	1
Supervisor–Collections	2
Analyst–Collections	6
Manager–Overcharge Claims	1
(c) Director–Ancillary Revenue Accounting	1
Manager–Ancillary Revenue Accounting	1
Analyst–Ancillary Revenue Accounting	4
(2) Assistant Controller–Accounts Payable	1
Manager–Accounts Payable	1
Analyst–Accounts Payable	4
Manager–Disbursements	1
Manager–Material Accounting	1
Manager–Vendor Control & Budgets	1
Payroll Manager	1
Payroll Supervisor	1
Payroll Accountant	2
Analyst–Payroll	8
(3) Director–Accounting Systems	1
Manager–Accounting Systems	3
LAN Application Programmer	2

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 1
TPIRR G&A Personnel Requirement

Position (1)	No. of Employees (2)
(4) Director–Financial Reporting	1
Manager–Financial Reporting	1
Staff Accountants	2
c. AVP–Taxes	1
Director–Property, Sales & Use Tax	1
Manager–Tax	2
Tax Accountant	2
Director Property Accounting	1
Manager Property Accounting	2
Accountant–Property Accountant	2
d. Director Internal Auditing	1
Manager Internal Audit	2
Senior Auditor	1
Auditor	3
e. Director–Cost & Economic Analysis	1
Manager–Cost & Economic Analysis	2
Sr. Analyst–Cost & Economic Analysis	1
Analyst–Cost & Economic Analysis	1
Total Finance & Accounting	**100**
4. Law	
Vice President Law	1
Administrative Assistant–Law	1
Associate General Counsel	3
General Solicitor	1
General Attorney	2
Paralegal	1
a. Director–Real Estate	1
Real Estate Counsel	1
Manager–Real Estate	1
b. Director–Claims & Asset Protection	1
Manager–Claims	1
District Claims Agent	4
Administrative Assistant–Claims	1
Manager–Environmental Services	1
c. Director-Police	1
Assistant Director-Police	2

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 1
TPIRR G&A Personnel Requirement

Position (1)	No. of Employees (2)
Sergeant of Police	2
Special Agent	20
Total Law	**45**
5. Information Technology	
Vice President–Information Technology ("IT")	1
Administrative Assistant–IT	1
a. Director–Technology Support	1
Technician–Help Desk	15
Technician–PC (24/7)	8
Technician–Telecommunications	2
b. Director–Network & Security	1
Engineers–Network	3
Technician–Security	4
Engineer–Exchange 2007	4
Manager–Server	4
Manager–Database	5
c. Director–IT Applications	1
Lead Technician–RMI Applications	8
Programmer–Applications Development	8
Analyst–Systems	3
Manager–Interface Support	1
Technician–Interface Support	3
Total Information Technology	**73**
Total G&A	**304**

Source: e-workpaper "TPIRR Operating Expense_Open.xls".

The staffing of non-operational personnel on the TPIRR has been developed, to a large extent, based on the experience of TPIRR's witnesses Hunter and McDonald. As mentioned above, Mr. McDonald spent a significant portion of his career with C&NW, which was similar in route mileage to the TPIRR. Despite the differences between TPIRR and past and present Class I railroads mentioned above, TPI has provided a comparison to the CN&W for illustrative purposes. For this comparison we used the C&NW as it existed in 1994 due to its similar route mileage to TPIRR and because TPI's witness McDonald has intimate insights on the C&NW's staffing, having served as its VP of Operations in 1994.

Table 2 below compares non-train operations staffing levels of C&NW to those of TPIRR as a demonstration of the reasonableness of the TPIRR staffing developed by Mr. McDonald.

Exhibit III-D-2
Table 2
Comparison of C&NW
G&A Staffing With TPIRR

Department	**1994 C&NW**	**TPI Opening**
(1)	**(2)**	**(3)**
1. Executive	38	30
2. Sales & Marketing	97	56
3. Finance & Accounting	196	100
4. Law	84	45
5. Information Technology	118	73
6. Total	533	304

Source: e-workpaper "TPIRR Staffing Comparisons_Open.xlsx", Tab "Table Ex III-D-2".

Several significant factors drive the difference between TPIRR staffing and staffing for C&NW in 1994. First, TPIRR's traffic and revenue make-up are different than C&NW's. TPIRR's carload traffic is 44 percent intermodal and 13 percent coal as compared to C&NW's 33 percent intermodal and 18 percent coal in 1994. Also, compared to C&NW, a smaller percentage of TPIRR's business originates on the system with only 35.7 percent of traffic either being local to the system or interchange forwarded traffic compared with C&NW's 41.8 percent of carloads local or interchange forwarded.[1] In addition, 38 percent of TPIRR's traffic is overhead to its system compared with C&NW's 27.6 percent. These differences in traffic mix result in the need for fewer Sales and Marketing staff than the C&NW. Typically, the originating railroad is responsible for customer transactions on shipments, including processing of waybills, equipment supply, freight billing, price quoting, and collections. Where a freight collect shipment is used, the destination railroad is responsible for such functions. Significant originating and terminating traffic, as the C&NW had, required significant personnel to handle all of these functions (especially given the lesser degree of computerization in 1994). However, overhead traffic does not originate or terminate on the line, so the overhead railroad is not responsible for any of this customer billing and collections nor for the associated marketing and sales. Therefore, the TPIRR, with more overhead traffic and a smaller percentage of originating/terminating traffic, should require greatly reduced personnel in these areas as compared with the C&NW.

In addition, C&NW had an extensive network of branch lines making most of its traffic manifest carload traffic, with a significant amount of carload grain traffic. This type of traffic has a separate waybill, freight bill, movement record, etc. for every individual carload. Much of TPIRR's traffic is unit train traffic such as coal and intermodal, which means an entire train set, 80 to 120 cars at a time, moves as a single movement with one paperwork set. This obviously reduces not only the billing involved with each train, but also the sales/marketing and accounting efforts because a unit train is all one commodity and all for a single customer.

---

1 *See* e-workpaper "TPIRR C&NW Traffic Comparison.xlsx."

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

A third factor driving the difference between TPIRR staffing and staffing for C&NW in 1994 is that, as a private company, the TPIRR does not require Finance and Accounting staff to support the public filings required of public companies, which C&NW was in 1994.

A fourth factor driving staffing differences is that technology advancements and productivity improvements realized since 1994 allow for fewer staff needed to support certain administrative tasks, Information Technology, and recordkeeping in general across all departments. As discussed elsewhere in this Exhibit, TPIRR does not rely on a mainframe system and as a result does not need the amount of IT resources used by Class I Railroads, including C&NW in 1994.

Fifth, the configuration of C&NW was exceptionally different than that of the TPIRR in that C&NW had many more branch lines than the TPIRR. C&NW did not have the density of traffic like TPIRR's. C&NW was the result of several consolidations and mergers including the Chicago Great Western Railroad. In the 1990's the C&NW was made up of several main lines, but was also burdened with many branch lines. Many of these branch lines were marginal and in need of rationalization to justify the costs of the operations on the branches versus the traffic and revenue they were generating. C&NW's efforts at attempting to develop more traffic on these branch lines and addressing complaints when service was reduced to mitigate costs for these lines required significant sales, marketing, finance, and legal attention at the time. Unlike TPI, the C&NW was not able to select its preferred traffic group, nor could it avoid having to serve these low density branch lines. Consequently, C&NW needed to invest more resources in an attempt to generate additional traffic on those lines. Significant personnel resources also were utilized within C&NW simply to manage the added complexity of the excessive and aged branch

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

line network it inherited through the mergers. TPIRR will not require the same personnel resources for the same traffic, not only because it is new and has few marginal traffic concerns, but also because it has few branch lines causing the complexity that requires these additional personnel.

In addition, in 1994, there were still a significant number of railroads competing for rail traffic. C&NW had to compete with Santa Fe, BN, CN, CCP, CP, Soo, GW, NS, SP, and UP. It was a significantly different landscape than today, requiring railroads in 1994 to expend more efforts in marketing and sales to continuously compete, develop more business, and capture market share. Since 1994, the majority of railroads in the U.S. have been consolidated into only seven (7) Class I railroads and a handful of Class II railroads competing today. Most rail customers today have only one serving rail carrier, so the serving railroad does not have to compete with other railroads for the rail business. The C&NW in 1994 still had numerous competing railroads with joint access to the customers, which means that the C&NW had additional personnel in sales and marketing to help them compete in the market of the time.

Even for shippers that remained captive, the bottleneck segments were much shorter in 1994 than today, which created more opportunities for downstream competition. Due to the fact that the Class I railroads were smaller in 1994, any long-haul rail transportation had a wide variety of potential routes available to it, using (or avoiding) numerous railroads during the transportation. Thus, any one railroad generally had a much shorter haul than today's large Class I railroads would have had for the same transportation. In other words, more routing options were available and, hence, more competition was possible for the same long-haul movement.

The personnel included as G&A are described in more detail below.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

1. Executive Office

The TPIRR's Executive Office consists of the President's office as well as the TPIRR's Board of Directors. The Executive office consists of 30 people including the President, Administrative staff, the Board of Directors, a Corporate Secretary, Corporate Communications and Government Affairs staff, Human Resources staff, Corporate Quality Improvement/ Assurance staff, and a Manager–Planning.

The TPIRR's Board of Directors includes seven (7) people: the President, the Vice President–Operations, and five (5) outside directors. The outside directors would likely include two (2) representatives of the TPIRR's customer group, two (2) representatives of its investors, and an independent director with no other connection to the TPIRR.

The President serves as the railroad's CEO with the Vice President ("VP") of each major department reporting to him. These major departments include Operations, Sales and Marketing, Finance and Accounting, Administration, Human Resources, Law, and Information Technology. The President's staff also includes a Manager–Administration and a Manager–Planning.

a. Assistant Vice President–Administration

The Assistant Vice President ("AVP") – Administration reports to the President within the Executive Office and is responsible for Corporate Communication, Government Affairs, and Corporate Quality Improvement/Assurance. The AVP–Administration is also responsible for company interaction with public and government representatives and for consistent messaging across the company. Reporting to the AVP–Administration are two (2) Directors–Corporate Relations, two (2) Directors–Government Relations, and a Director–Corporate Quality Improvement/Assurance.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

i. Directors–Corporate Relations

While each organization's VP has responsibility for their own departmental relations with outside parties, the Directors–Corporate Relations are responsible for consistent messaging across the departments. These Directors also manage all interaction with the media and provide company-wide assistance with messaging strategy (including advertising), public appearances, and print media. A Manager–Corporate Communications assists the Directors–Corporate Relations with their responsibilities.

ii. Directors–Government Relations

The Directors–Government Relations are responsible for the coordination of TPIRR's interaction with government agencies and Federal, State, and Local representatives. These Directors will monitor activity at the legislative level and coordinate with department heads as needed to ensure adequate coverage of major governmental issues affecting TPIRR.

iii. Director–Corporate Quality Improvement/Assurance

The Director–Corporate Quality Improvement/Assurance is responsible for developing and maintaining corporate metrics for performance measurement and industry benchmarking. This Director must have a solid understanding of all aspects of the company and work closely with each member of the executive management team on performance improvement. A Manager–Corporate Quality Improvement/Assurance reports to the Director to assist with responsibilities.

iv. Assistant Vice President–Human Resources

The AVP–Human Resources ("HR") reports to the President. The HR department is responsible for staffing, recruiting, compensation, benefits, compliance, labor relations, employee relations, employee development, and training coordination. Members of the department coordinate activities with managers throughout the company because managers play a significant role with their own organizational development, including managing personnel numbers, ensuring employee needs are met, and ensuring their employees are properly trained. The HR department is led by the AVP–Human Resources, who oversees two (2) Directors–Human Resources and a Director–Labor Relations.

v. Directors–Human Resources

Two (2) Directors–Human Resources are responsible for staffing and recruiting, compensation and benefits, and compliance and training. A pool of four (4) Managers assists the Directors with their responsibilities.

vi. Director–Labor Relations

Reporting to the AVP–Human Resources is the Labor Relations group which is led by a Director–Labor Relations. The group's responsibilities include ensuring compliance with labor regulations and coordinating legal activities related to labor. Since the TPIRR is a non-union railroad, activities for this group will be less than for existing Class I Railroads. Reporting to the Director–Labor Relations are two (2) Managers–Labor Relations, two (2) Analysts–Labor Relations, and a Claims Administrator.

2. Sales and Marketing

The TPIRR Sales and Marketing organization consists of 56 people and is headed by the VP–Sales and Marketing who is assisted by an Administrative Assistant. The Sales and Marketing organization is responsible for managing sales to TPIRR's existing customers as well as marketing to, and developing transportation services for, potential customers. The sales and marketing effort is organized by six (6) commodity groupings and includes departments for Sales and Marketing Planning and also Sales and Marketing Services. The six (6) commodity groupings include: 1) Consumer, Forest and Paper Products, 2) Aggregates, Minerals, Metals and Scrap, 3) Chemicals and Petroleum, 4) Energy and Coal, 5) Intermodal and Autos, and 6) Food and Grain.

One factor affecting staffing for the Sales and Marketing organization is that a large percentage of TPIRR's traffic does not originate on the TPIRR, rather it is interchange received from other carriers in interchange operations. In fact, only 35.7 percent of TPIRR's carload traffic is originated and terminated or originated and forwarded. Of the remaining carload traffic, 38.0 percent is overhead and 26.3 percent is received and terminated. As a result, the sales and marketing staffing required to manage TPIRR business is expected to be less than that of existing Class I railroads that have significantly higher amounts of originating and terminating traffic.

Within each of the commodity groups are Commodity Managers who are responsible for knowing the specific parameters of their commodity, including shipping regulations, equipment types and tenders, STCC codes, billing practices, transportation costs and modeling, special and unique services needed, major lanes and customers involved, etc. They are also expected to know their own respective markets, such as competition and emerging opportunities. These Managers are responsible for developing their annual revenue numbers each year and ensuring that the traffic handled is profitable.

a. Assistant Vice President–Consumer, Forest and Paper Products

The AVP–Consumer, Forest and Paper Products is responsible for the sales, marketing, pricing, and contracts for consumer products, including paper and paper products, wood products, and other consumer products. Reporting to the AVP are two (2) Managers. One Manager will handle forest and paper products, while the other Manager will handle consumer products.

b. Assistant Vice President–Aggregate, Minerals, Metal and Scrap

The AVP–Aggregate, Minerals, Metals and Scrap is responsible for sales, marketing, pricing, and contracts for mining products such as minerals, aggregates, cement, and raw ores. The position also handles processed and finished metals (both ferrous and non-ferrous), as well as scrap metal movements. Included in this department are three (3) Managers. One Manager will handle aggregates and minerals, another Manager will handle metals, and the third Manager will handle scrap.

c. Assistant Vice President–Chemicals and Petroleum

The AVP–Chemicals and Petroleum is responsible for sales, marketing, pricing, contracts, hazardous material risk costs, and customer requirements for chemical and petroleum commodities. Included in this department are two (2) Managers. One Manager handles the wide array of Chemicals while the other Manager handles Petroleum products including crude oil, shale, diesel, petroleum coke, gasoline, LPG, etc.

d. Assistant Vice President–Energy and Coal

The AVP–Energy and Coal is responsible for managing sales, marketing, pricing, and contracts for transportation services related to energy commodities, including coal. Reporting to the AVP–Energy and Coal is a Manager–Energy and a Manager–Coal. One Manager will handle all coal traffic and the other Manager handles all other energy related products such as LNG, ethanol, etc.

e. Assistant Vice President–Intermodal and Autos

The AVP–Intermodal and Autos is responsible for sales, marketing, pricing, contracts, and service requirements for all intermodal traffic and customers, finished automobiles, and automotive parts and products. Reporting to the AVP is a Director - Intermodal and Autos. The Director is needed due to the large percentage of intermodal and auto traffic, and would focus on the sales and marketing aspects. Reporting to the Director is a Manager - Intermodal and a Manager - Autos.

f. Assistant Vice President–Food and Grain

The AVP–Food and Grain is responsible for sales, marketing, pricing, and contracts for food and grain commodities. Included in this department are two (2) Managers. One Manager is to handle grain traffic including wheat, barley, corn, etc. in manifest, blocked, and unit train movements, while the other Manager will handle all other food and food grade products, both dry and liquid. The AVP and the two Managers work directly with customers in order to meet their service requirements.

g. Assistant Vice President–Sales and Marketing Planning

The AVP–Sales and Marketing Planning is responsible for supporting the sales and marketing teams with market research, traffic research, and other studies. The Sales and Marketing Planning group includes a Director–Market Planning, a Manager–Business Development, and a Manager–Industrial Development. The Business Development efforts will focus on identifying new markets and new service needs. The Manager–Business Development develops traffic projections and identifies market trends that may affect new business. This Manager also handles special business development projects with Marketing, Operations, Finance, Real Estate, and Equipment departments, providing research and financial modeling support. The Manager–Industrial Development is responsible for new business development related to economic development projects and new industrial facilities. This Manager has a strong understanding of economic development goals, industrial development and synergistic services, infrastructure requirements for new facilities and projects, and the economics of traffic projections and rail freight revenue. This position will be the liaison for new industrial projects that will require rail service and will maintain strong relationships with the stakeholders for these projects, including state and local governments, regulatory agencies, economic development agencies, and shippers. This position will develop initial business plans for transportation services to new industrial facilities and will coordinate with relevant departments on initial price quoting, infrastructure costs, equipment plans, real estate options, and other economic drivers. The position will visit sites, assist with site location, and communicate TPIRR's requirements from other departments to the project stakeholders.

h. Assistant Vice President–Sales and Marketing Services

The AVP–Sales and Marketing Services is responsible for supporting the Sales and Marketing teams in the areas of field sales, pricing, contract support, customer service, damage prevention, freight claims support, equipment distribution, and other services. Reporting to the AVP–Sales and Marketing are a Director–Field Sales, a Director–Pricing Services and Contracts, a Director–Damage Prevention and Freight Claims, a Director–Equipment Distribution, a Manager–Information Services, a Manager–Support Services and Interline, and a Manager–Customer Service.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

i. Director–Field Sales

The Director–Field Sales is responsible for TPIRR's ongoing sales activity. The Director of Field Sales manages two (2) Managers–National Field Sales, one who is assigned to the Northern portion of the system and the other who is assigned to the Southern portion of the system. Each Manager oversees a team of three (3) Field Sales Representatives. The Sales teams will develop and maintain strong relationships with TPIRR customers in their areas, including understanding each customer's business and transportation needs, developing business plans and economics for freight movements, and developing new business and traffic to rail service from these customers. These positions, along with the Customer Service group in Marketing and Operations, will serve as the customers' direct interface for all sales and customer service concerns. Although most customer requests will be handled self-sufficiently by utilizing the online shipment, tracking and billing interfaces, these positions will serve as the customer service contact for their customers for special requests and exceptions, such as tracing problem shipments, expedited shipments, rate negotiating, special service agreements, etc., and these positions will coordinate with other TPIRR departments, like Marketing and Operations, on service issues, equipment needs and rates. The Sales Representatives will also make periodic sales calls and visits as necessary to their customers to discuss service, be familiar with operations at customer facilities, and develop additional traffic opportunities. The focus of representatives' time will be larger customers and new opportunities.

ii. Director–Pricing Services and Contracts

The Director–Pricing Services and Contracts oversees a Manager–Pricing Services and a Manager–Contracts. The Manager–Pricing Services position works closely with all marketing

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

groups for correct rates and manages expiration dates and renewals with these groups. This position sets up the relationships between new quotes, contract and package quotes, tariff, Rule 11, and interline pricing. The Manager–Pricing Services works closely with the Information Services position to ensure the online system provides correct rates and that other carriers provide proper interline rates. The Manager–Contracts handles all tariffs and contracts for ancillary services, demurrage, storage, etc., as well as the special pricing contracts, renewals, cancellations, amendments, and escalations. Special contracts are generally created for the larger clients with multiple services, and this position manages the contract language with the Law Department.

iii. Director–Damage Prevention and Freight Claims

The Director–Damage Prevention and Freight Claims is responsible for the TPIRR system freight claims and working on ways to reduce or prevent customer claims, including interfacing with connecting railroads on claims and liabilities. The Director is supported by a Manager and four (4) Freight Claims Representatives. Together, the members of the Damage Prevention and Claims group will handle all damage and shortage claims from customers, working closely with the Claims personnel in Accounting and Law as needed. Claims Representatives will be cross trained to handle all types of claims and process them, with specific representatives focusing on particular types of claims, but able to handle and cover each other's work as needed. Claims staff will be responsible for knowing common carrier claims procedures and standard practices, and processing claims according to these rules. The staff will record each claim, trace the chain of custody for the claim from start quote or movement by tracking down the relevant paperwork and tracing the movement through the system, establishing or confirming liability for each claim and proper amount, and making the correct recommendation for disposition of the claim. Most research and tracking will be performed digitally due to computerized shipment, paperwork, tracing, and billing systems. These representatives will document all steps, record results, and coordinate with the credit department on claim results for proper crediting and with field sales representatives as necessary to communicate to customers. These representatives will be familiar with the claims processes and digital tracing systems of other carriers as well, and will carry through claims against other carriers as necessary.

iv. Director–Equipment Distribution

One Director–Equipment Distribution is responsible for communicating with customers and coordinating with field personnel to ensure the equipment needs of customers are met on a real-time basis. Reporting to the Director–Equipment Distribution are a Chief Car Distributor and five (5) Managers–Car Distribution, each of which are assigned specific car groupings including tank cars, covered hoppers, open hoppers, box cars, and flat cars; however, each of these positions is cross trained with personnel able to handle any type of car and cover each other as necessary. These positions have a strong understanding of each customer's equipment needs to ensure that equipment is supplied in a timely manner. This requires having accurate knowledge of where all cars are within the system on a given day, tracing cars and car sets through the digital systems, making calls to verify equipment locations and schedules, coordinating with the Mechanical department on bad order cars, and communicating with customers on schedules, issues, and special needs. These Managers produce reports on car management accuracy, discrepancies, surplus and shortages, issues, and possible solutions.

v. Manager–Information Services

The Manager–Information Services reports to the AVP–Sales and Marketing Services and is responsible for the data systems, user interfaces, and programs involved with maintaining price quotes, tariffs, and contracts. This would be largely an IT position, but would be focused on optimal operation of this system. User interface responsibility would include ensuring internet integrity of the system for customer inquiries and data entry integrity for Marketing personnel. This Manager tracks system issues and projects exceptions for direct reporting to the AVP - Sales and Marketing Services. The position would coordinate closely with the Managers - Customer Service to ensure accurate data and communication with customers.

vi. Manager–Support Services and Interline

The Manager–Support Services and Interline reports to the AVP–Sales and Marketing Services. This Manager is the liaison with interchange carriers, short lines, and intermediary transportation services, such as transloads and industry switchers. This Manager will maintain strong relationships with these carriers, including developing new business with them, applying joint marketing strategies, and addressing issues. The position is responsible for interline movements, issues, and joint facilities and works with the Transportation Department as needed. The position handles joint line agreements with other carriers and coordinates between transportation for storage and switching as needed. The position works with other carriers on problems areas to support the Marketing department efforts.

vii. Managers–Customer Service

Two (2) Managers–Customer Service report directly to the AVP–Sales and Marketing Services and will coordinate customer inquiries of a commercial nature, working closely with the

Customer Service staff in Operations, Sales, and Pricing to ensure customer issues are resolved. These Managers will survey customers on customer service impressions and coordinate with other TPIRR departments to improve overall customer service and problem resolution. This position develops customer service performance reports for the AVP and develops strategies to improve service.

3. Finance and Accounting Department

The Finance and Accounting Department is responsible for the TPIRR's basic financial and accounting activities, including treasury, taxation, revenue collection, disbursements for accounts payable, financial reporting, and budgeting and analysis. This organization consists of 100 employees and is headed by the VP - Finance and Accounting, who acts as the TPIRR's Chief Financial Officer ("CFO").

Many of the TPIRR's accounting and finance activities are performed using computer applications now common in the railroad industry, rather than being performed manually by in-house staff employees. As a startup railroad, TPIRR does not have to maintain archives of information, unlike Class I railroads today. Accounting and finance activities and the related programs are described in more detail in the Information Technology discussion. Compared to Finance and Accounting personnel accepted by the Board in recent SAC cases such as *WFA/Basin I* and *AEP Texas II*, the staffing devised by TPI reflects certain additions due to the TPIRR's more varied traffic base and larger number of carload transactions.

Six (6) staff positions directly report to the VP–Finance and Accounting: a Treasurer, an AVP–Controller, an AVP–Taxes, a Director–Internal Auditing (also reports to Board of Directors), a Director–Cost and Economic Analysis, and a Manager–Administration.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

a. Treasurer

TPIRR's Treasurer oversees the TPIRR's cash management, risk management, and insurance and is responsible for managing the company's cash, investments, debt instruments, 401K retirement plan, credit, and insurance policies. The Treasurer and his department are the primary interface with customer and supplier credit departments, banks and investment managers. The Treasurer also manages executive level investor and lender relationships.

Reporting to the Treasurer are an Assistant Treasurer and a Manager–Risk Management and Insurance. The Assistant Treasurer advises the Controller's Office on the receipt of funds from customers and the TPIRR's connecting carriers, monitors and supervises debt payment requirements, and assists the Treasurer in the performance of his duties. Reporting to the Assistant Treasurer is a Cash Manager who is responsible for day-to-day management of the company's cash including working capital. Also reporting to the Treasurer is a Manager - Risk Management and Insurance. This Manager is responsible for managing customer credit postings as well as credit postings to suppliers; this Manager also works closely with the Collections department under the Controller. The Manager–Risk Management and Insurance is responsible for managing insurance policies held by the company.

b. Controller

The TPIRR's Controller is responsible for all accounting activities, including direction of all billing, vendor payment processing, and financial reporting. As the railroad's chief accounting officer, he advises the VP Finance and Accounting on all accounting issues. Reporting to the Controller are an Assistant Controller–Revenue, an Assistant Controller–Accounts Payable, a Director–Accounting Systems, and a Director–Financial Reporting.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

i. Assistant Controller–Revenue

The Assistant Controller–Revenue oversees all customer and interline freight billing and collection. This position is also responsible for supervising billing for demurrage, storage, easements, and utility crossings, as well as inputting contract, tariff rate, and payment terms into the TPIRR's billing system. Three staff positions report to the Assistant Controller–Revenue: a Director–Revenue and Distribution Accounting, a Director–Credit and Receivables, and a Director–Ancillary Revenue Accounting.

(a) Director–Revenue and Distribution Accounting

The Director–Revenue and Distribution Accounting manages a staff of 20 accounting professionals and is responsible for accounts receivable from shipping customers, other railroads, and transportation service providers, including the development of invoices. Two (2) Managers–Freight and Customer Accounting report to this Director and are supported by two (2) Analysts–Freight and Customer Accounting. Two (2) Managers–Divisions and Interline Accounting also report to the Director–Revenue and Distribution Accounting and are supported by four (4) Analysts–Divisions and Interline Accounting. The Revenue and Distribution group also includes two (2) Managers–Central Freight Rate and Bill who are supported by seven (7) Analysts. Lastly, a Manager–Administration supports the Revenue and Distribution Accounting group.

(b) Director–Credit and Receivables

The Director–Credit and Receivables manages a staff of 10 and is responsible for the timely receipt of receivables and for working with customers on billing and credit issues. The group includes a Manager–Collections, two (2) Supervisor–Collections, six (6) Analysts–Collections, and a Manager–Overcharge Claims.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

(c) Director–Ancillary Revenue Accounting

The Director–Ancillary Revenue Accounting is responsible for the invoicing of ancillary services of the TPIRR, including storage, demurrage, special switching, weighing, easements, leases, licenses, etc. These special services are outside the core line haul freight services of the TPIRR, but they produce substantial additional streams of revenue and require regular invoicing. The Director–Ancillary Revenue Accounting is supported by a Manager–Ancillary Revenue Accounting and four (4) Analysts–Ancillary Revenue Accounting.

ii. Assistant Controller–Accounts Payable

The Assistant Controller–Accounts Payable is responsible for overseeing all accounts payable and payroll processing, issuing vendor payments, advising the VP and Treasurer on cash requirements, and reviewing all contracts with outside suppliers. The Assistant Controller–Accounts Payable is supported by a Manager–Accounts Payable, a Manager–Disbursements, a Manager–Material Accounting, and a Manager–Vendor Control and Budgets. The Manager–Accounts Payable is supported by four (4) Analysts–Accounts Payable. Also reporting to the Assistant Controller–Accounts Payable is a Payroll Manager who is supported by a Payroll Supervisor, two (2) Payroll Accountants, and eight (8) Analysts–Payroll.

iii. Director–Accounting Systems

The Director–Accounting Systems reports to the Controller and is responsible for all computer and technology systems that enable TPIRR to efficiently function on a daily and long term basis. This Director and his team integrate the accounting data from multiple departments and are responsible for data integrity in accounting (including auditing data), training personnel, and solving issues related specifically to accounting systems. Reporting to this Director are three (3) Managers and two (2) Programmers.

iv. Director–Financial Reporting

Reporting to the Controller is a Director–Financial Reporting who is responsible for overseeing and coordinating monthly, quarterly, and annual reporting packages for review by the CFO, Controller, and senior management. This group also develops financial information for inclusion in R-1 reports as well as supports the Treasury department with financial reports needed for external purposes, such as to provide to investors and retirement planners. Because the TPIRR is not a publicly-held company, it does not need to prepare reports to the Securities Exchange Commission ("SEC") or the equity-investment community. Responsibility for closing of the monthly books falls to the Assistant Controllers. The Director–Financial Reporting is mainly tasked with the organization of financial information into reports. Reporting to the Director–Financial Reporting is a Manager–Financial Reporting and two (2) Staff Accountants.

c. Assistant Vice President–Taxes

The AVP–Taxes reports to the CFO and manages the preparation of the TPIRR's federal and state income tax returns, state sales and use tax returns, and ad valorem property tax returns. The AVP - Taxes is the advisor to the VP–Finance and Accounting on all tax matters. A computerized financial accounting system is used to track all of the TPIRR's physical assets and asset replacements. The AVP–Taxes is supported by a Director–Property, Sales and Use Tax, two (2) Managers–Tax, and two (2) Tax Accountants. Also reporting to the AVP–Taxes is a Director–Property Accounting who is responsible for the accounting of TPIRR assets, including real estate, cars, locomotives, machinery, buildings, and other capital items. Reporting to the

Director - Property Accounting are two (2) Managers–Property Accounting and two (2) Property Accountants.

d. Director–Internal Auditing

The Director–Internal Auditing reports first to the Board of Directors, then administratively to the CFO. Although the TPIRR employs an outside auditing firm, TPI's experts have added a Director–Internal Auditing to ensure adequate oversight of the company's various financial and accounting activities.[2] The Director–Internal Auditing is supported by two (2) Managers–Internal Audit, a Senior Auditor, and three (3) Auditors.

e. Director–Cost and Economic Analysis

The Director–Cost and Economic Analysis reports to the CFO and is responsible for developing and maintaining corporate budgets, determining the TPIRR's cost of providing service to its customers, and performing economic analyses of various operations and opportunities for the TPIRR. This group includes two (2) Managers–Cost and Economic Analysis, a Senior Analyst, and an Analyst.

4. Law Department

The Legal and Administrative Department consists of 45 employees and includes TPIRR's legal resources, labor relations, real estate, claims, and security. The Law department is led by the VP–Law. Much of the railroad's legal work is handled by outside counsel, who are supervised by the VP with the assistance of three (3) Associate General Counsels, a General Solicitor, and two (2) in-house General Attorneys. The legal department works with Labor Relations, Human Resources, and outside counsel to resolve FELA claims which become lawsuits. The legal department is also responsible for keeping current with FRA and PHMSA

---

[2] *See AEP Texas II* at 56-57.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

regulations and works with outside counsel to handle any proceedings at the Surface Transportation Board.

TPI has based the TPIRR's outside legal budget on a percent of revenue calculation. TPI found several benchmarks which show that companies with revenues greater than $5 billion typically spend between 0.14 percent and 0.20 percent of revenues on legal expenses.[3] Given that it is TPIRR's goal to be the most efficient, cost effective Class I carrier, TPI has elected to rely on the 2010 ALM Legal Intelligence benchmark of 0.1482 percent of revenues for legal spending.[4] Applying this benchmark to TPIRR's revenues of $6,567.9 million yields total legal related spending of $9.7 million. In house legal costs are subtracted from this amount to yield outsource legal spending.[5]

The legal department includes a Paralegal and an Administrative Assistant. Also reporting to the VP–Law are a Director–Real Estate, a Director–Claims, and a Director–Police.

a. Director–Real Estate

The Director–Real Estate is responsible for sales, acquisitions and easements, letters and licenses of real estate on the TPIRR. This Director is assisted by one Real Estate Counsel and a Manager–Real Estate.

b. Director–Claims and Asset Protection

The Director–Claims and Asset Protection is responsible for the administration of claims on a system-wide basis. This Director is assisted by a Manager–Claims and four (4) District Claims Agents who provide assistance in investigating claims, and are also responsible for government safety reporting and representing the TPIRR in industry associations and safety

---

3 *See* e-workpaper "TPIRR Legal Benchmarks.pdf."
4 *Id.*
5 *See* e-workpaper "TPIRR G&A Outsourcing_Opening.xlsx."

forums. Also reporting to the Director–Claims is a Manager–Environmental Services who is responsible for working with all Federal Agencies for compliance of regulations and reporting, response to spills, non-accident reporting, and other incidents. This Manager works with all areas of the railroad to keep the railroad compliant with water treatment and hazardous materials regulations. The Claims group also has an Administrative Assistant.

c. Director–Police

The TPIRR's Security Services department is responsible for investigating potential crimes committed on or against TPIRR property, coordinating with TPIRR facilities managers to ensure proper security is in place at each facility, performing employee and contractor security checks, and protection of the freight moving on TIPRR. Due to the geography of the TPIRR system, staff is placed throughout the system with the Director - Police located in the Atlanta headquarters, two (2) Assistant Directors–Police, two (2) Sergeants of Police, and 20 Special Agents located throughout the system.

5. Information Technology Department

The TPIRR's IT systems and associated personnel were developed by TPI Witness Kruzich, who has considerable experience with the IT function at Class I and other railroads. The IT system is administered by a staff consisting of a VP–Information Technology, three (3) Directors–Information Technology, and 68 IT Specialists. The TPIRR does not have a main-frame environment, but rather a NT/PC-based system. This means far less IT effort is required as compared to a typical Class I railroad due to the relative simplicity of a NT/PC-based system and the fact that many of the IT requirements are outsourced to RMI (i.e., Transportation,

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Revenue, Intermodal and Car Hire activities).[6] As most of the TPIRR's application software is available off-the-shelf, little development and maintenance effort is required. Because the TPIRR is built new with current technology, it does not need to devote resources to incorporating legacy or pre-existing computer systems in its start-up costs.

The primary IT staff function is to trouble-shoot various problems with vendors, coordinate transportation software applications with outside vendors (RMI, Oracle, Scat, Alstom) and the business users, and monitor the network infrastructure and critical security systems. There will also be occasions when enhancements will be required to the crew-calling, accounting, human resources, and dispatching systems. The TPIRR's staff of management and IT specialists will be active participants in this effort.

The VP–IT oversees the IT department's daily activities, provides senior management with updates on new technology, and advises as to the future strategic direction of the department. This includes formulation of the logical and physical computer architecture plans and assessment of the cost and feasibility of all user requests. The VP–IT is accountable for information and data integrity for all systems on the TPIRR. This includes responsibility for a data center, technical service centers, communication networks, computer program development, and a help desk. The VP - IT will review all computerized and manual systems related to RMI and in-house operations. He will be extensively involved in the procurement of software and storage and retrieval equipment for the TPIRR. The VP - IT will also interface with RMI executives and is responsible for ensuring the RMI practices are compliant with TPIRR security policies.

---

6 *See* e-workpaper "TPIRR - Operating Budget.xls".

Three (3) Directors report to the VP–Information Technology, including the Director–Technology Support, the Director–Network and Security, and the Director–IT Applications. An Administrative Assistant also reports to the VP–Information Technology and supports the IT group.

a. Director–Technology Support

The Director–Technology Support will be responsible for coordinating daily activities for the staff, processing equipment orders, managing staff travel, and assisting with infrastructure needs. The Director–Technology Support is responsible for ensuring that all technical needs of TPIRR's user community and RMI technical personnel are being met. As described below, twenty-five (25) specialists report to the Director–Technology Support.

i. Help Desk PC Technicians

15 Help Desk PC Technicians (three (3) 24/7 positions) take incoming calls and emails from users reporting technical issues. These Technicians will investigate the issues with the users by phone and prescribe solutions if they are able. If issues are not able to be resolved over the phone by a Help Desk Technician, that Technician will reroute the calls to a Programmer Technician for immediate handling. These positions follow-up with the users to make sure the problem has been resolved.

ii. Programmer/PC and Telecommunications Technicians

Eight (8) Programmer/PC Technicians (including a 24/7 position) and two (2) Telecommunications Technicians provide user support in the day-to-day operation of the TPIRR's operating system, software applications, computers, and phone systems. These employees provide technical support including resolving issues, configuring desktops, maintaining network connectivity and printing capability, and configuring and maintaining phone systems.

b. Director–Network and Security

The Director–Network and Security is responsible for overseeing local-area-network ("LAN") and wide-area-network ("WAN") functionality, for defining the security model to protect against cyber security vulnerabilities, and for protecting internal and external railroad data from malicious attack. The Director–Network and Security manages a staff of 16 network specialists and four (4) security technicians.

i. Network Engineer and Security Technicians

Three (3) Network Engineers and four (4) Security Technicians are responsible for overseeing network security matters and LAN and WAN functionality. These positions will monitor and implement solutions to protect against cyber-attacks, homeland security threats, and system lock down. They will also provide terrorist intrusion protection, support new user access, terminate employee access, and provide support and direction for activities associated with the ISO 17799 standard for IT security best practices. These positions are also responsible for the planning, designing, and managing of transmission facilities, cabling, and communications devices. They will also handle any telecommunications issues that occur.

ii. Exchange 2007 Engineers and Server Managers

Four (4) Exchange 2007 Engineers and four (4) Server Managers are responsible for messaging design and implementation of the Windows 2007 Exchange (server) environment. These positions are also responsible for email server support, Windows operating system support, operating system patching for servers, building and configuring new servers, refreshing existing hardware and software on servers, capacity management, performance tuning of the server base, and coordinating the scheduling, ordering, and installation of all server equipment and ancillaries.

iii. Database Managers

Five (5) Database Managers are responsible for the design, configuration, and implementation of database system performance, and configuration of the databases for optimal performance. They are also responsible for improving the effectiveness of database tools and services, ensuring data complies with legal regulations, ensuring the information is protected and backed-up, and monitoring database performance.

c. Director - IT Applications

The Director IT–Applications interfaces with the TPIRR's business teams to analyze strategic business requirements and works with software vendors as necessary to resolve issues with TPIRR applications. The Director–IT Applications is responsible for leading internal software development projects to improve efficiency and user interfaces. This position is also responsible for staying informed on new industry software offerings, introducing new software possibilities to TPIRR management, and procuring new and updated software from vendors. As described below, there are twenty-three (23) applications specialists included under the Director–IT Applications.

i. RMI Technicians

Eight (8) Lead RMI Technicians are responsible for all RMI applications (RMI is the TPIRR's principal software vendor/contractor) and serve as liaisons to RMI and the user Departments. These positions ensure all users' needs are met in an efficient and timely manner.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

ii. Programmers/Development

Eight (8) Programmers/Development (including a 24/7 position) and three (3) Systems Analysts are responsible for maintaining and upgrading the crew calling and dispatching systems. These employees help manage the crew calling, accounting, and human resources dispatching systems, and they also are responsible for developing a corporate information web site. The TPIRR's web site will be designed to enable TPIRR's customers to do business online efficiently.

iii. Interface Support Manager

One (1) Manager–Interface Support and three (3) Interface Support Technicians manage TPIRR's various programs and software systems that will need to share information. These employees ensure that in-house systems can communicate with other in-house and external systems.

B. COMPENSATION

The salaries and benefits for the TPIRR's G&A personnel described above are based on comparable and competitive compensation packages presently available in the railroad industry (and in other service industries).

Specifically, annual salaries for the G&A personnel are based on data contained in CSXT's Wage Forms A and B, with several exceptions. Salaries for the President and VPs included in the G&A staff are based on the salaries, including bonuses, paid for similar positions by the Kansas City Southern Lines ("KCS"), a holding company which owns and operates the Kansas City Southern Railway and the Kansas City Southern de Mexico.[7] According to KCS's

[7] It should be noted that the compensation for all TPIRR vice president positions are based on the average compensation paid to KCS's *Executive* vice presidents rather than vice presidents as the compensation for vice

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

website, the two (2) major lines comprising the KCS operate 7,075 route miles of railroad, which is similar to the 7,357 route miles[8] operated by the TPIRR. This is far smaller than CSXT which operates over 20,740 miles and is also substantially smaller than the other Class I railroads. Executive compensation for the TPIRR includes salary and short-term incentives in the form of cash bonuses, but excludes long-term incentives in the form of stock and option awards. Stock and options awards are excluded in part because the TPIRR will be a private company but also because the actual cash values and the timing of cash impacts are uncertain, especially depending on how stock options are valued. Compensation for the Board of Directors is another exception. The Board will meet once per quarter and will be compensated $10,000 per meeting attended.

As shown previously,[9] fringe benefits for all employees are 43.5 percent of wages based on the average ratio of fringe benefits to total wages paid in 2010 to employees of all Class I carriers as reported by in the carriers' R-1 Annual Reports to the STB. The fringe benefit ratio includes expenses related to health and welfare benefits, railroad retirement, supplemental annuities, unemployment insurance, and other programs. The G&A staff salaries are summarized by Department in Table 3 below.

president positions are not reported in SEC filings. As a result, the compensation for TPIRR's vice presidents is greater than what is currently paid in the market place for this position.

[8] This figure includes 491 route miles operated by TPIRR over rail lines owned by other railroads.

[9] See the narrative discussion of compensation for the Train & Engine Crew.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 3
TPIRR G&A Compensation Requirement

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
1. Executive			
Outside Directors	5	$40,000	$200,000
President/CEO	1	$1,181,284	$1,181,284
Corporate Secretary	1	{{[redacted]}}	{{[redacted]}}
Manager–Administration	1	{{[redacted]}}	{{[redacted]}}
Manager–Planning	1	{{[redacted]}}	{{[redacted]}}
a. AVP–Administration	1	{{[redacted]}}	{{[redacted]}}
(1) Director of Corporate Relations	2	{{[redacted]}}	{{[redacted]}}
Manager–Corporate Communications	1	{{[redacted]}}	{{[redacted]}}
(2) Director–Government Affairs	2	{{[redacted]}}	{{[redacted]}}
(3) Director–Corporate Quality Improv./Assurance	1	{{[redacted]}}	{{[redacted]}}
Manager–Corporate Quality Improv./Assurance	1	{{[redacted]}}	{{[redacted]}}
b. AVP–Human Resources	1	{{[redacted]}}	{{[redacted]}}
(1) Director–Human Resources	2	{{[redacted]}}	{{[redacted]}}
Manager–Human Resources	4	{{[redacted]}}	{{[redacted]}}
(2) Director–Labor Relations	1	{{[redacted]}}	{{[redacted]}}
Manager–Labor Relations	2	{{[redacted]}}	{{[redacted]}}
Claims Administrator–Labor Relations	1	{{[redacted]}}	{{[redacted]}}
Claims Analyst–Labor Relations	2	{{[redacted]}}	{{[redacted]}}
Total Executive	**30**		**$3,627,112**
2. Sales & Marketing			
Vice President–Sales & Marketing	1	$628,045	$628,045
Manager Administration–Sales & Marketing	1	{{[redacted]}}	{{[redacted]}}
a. AVP–Consumer, Forest & Paper Products	1	{{[redacted]}}	{{[redacted]}}
Manager–Consumer Products	1	{{[redacted]}}	{{[redacted]}}
Manager–Forest & Paper Products	1	{{[redacted]}}	{{[redacted]}}
b. AVP–Aggregates, Minerals, Metals & Scrap	1	{{[redacted]}}	{{[redacted]}}
Manager Aggregates & Minerals	1	{{[redacted]}}	{{[redacted]}}
Manager–Metals	1	{{[redacted]}}	{{[redacted]}}
Manager–Scrap	1	{{[redacted]}}	{{[redacted]}}
c. AVP–Chemicals & Petroleum	1	{{[redacted]}}	{{[redacted]}}
Manager–Chemicals & Petroleum	2	{{[redacted]}}	{{[redacted]}}
d. AVP–Energy & Coal	1	{{[redacted]}}	{{[redacted]}}
Manager–Energy	1	{{[redacted]}}	{{[redacted]}}
Manager–Coal	1	{{[redacted]}}	{{[redacted]}}
e. AVP–Intermodal & Autos	1	{{[redacted]}}	{{[redacted]}}
Director Marketing–Intermodal & Autos	1	{{[redacted]}}	{{[redacted]}}
Manager Autos	1	{{[redacted]}}	{{[redacted]}}
Manager–Intermodal	1	{{[redacted]}}	{{[redacted]}}
f. AVP–Food & Grain	1	{{[redacted]}}	{{[redacted]}}
Manager–Food	1	{{[redacted]}}	{{[redacted]}}
Manager–Grain	1	{{[redacted]}}	{{[redacted]}}

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 3
TPIRR G&A Compensation Requirement

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
g. AVP–Sales & Marketing Planning	1	{{[redacted]}}	{{[redacted]}}
Director–Market Planning	1	{{[redacted]}}	{{[redacted]}}
Manager–Business Development	1	{{[redacted]}}	{{[redacted]}}
Manager–Industrial Development	1	{{[redacted]}}	{{[redacted]}}
h. AVP Sales & Marketing Services	1	{{[redacted]}}	{{[redacted]}}
(1) Director–Field Sales	1	{{[redacted]}}	{{[redacted]}}
Manager–National Field Sales	2	{{[redacted]}}	{{[redacted]}}
Field Sales Representatives	6	{{[redacted]}}	{{[redacted]}}
(2) Director–Pricing Services & Contracts	1	{{[redacted]}}	{{[redacted]}}
Manager–Pricing Services	1	{{[redacted]}}	{{[redacted]}}
Manager–Contracts	1	{{[redacted]}}	{{[redacted]}}
(3) Director–Damage Prevention & Freight Claims	1	{{[redacted]}}	{{[redacted]}}
Manager–Damage Prevention & Freight Claims	1	{{[redacted]}}	{{[redacted]}}
Freight Claims Representative	4	{{[redacted]}}	{{[redacted]}}
(4) Director–Equipment Distribution	1	{{[redacted]}}	{{[redacted]}}
Manager–Open Top Hoppers, Gondolas	1	{{[redacted]}}	{{[redacted]}}
Manager–Covered Hoppers	1	{{[redacted]}}	{{[redacted]}}
Manager–Box, Tanks, Refrigerator	1	{{[redacted]}}	{{[redacted]}}
Manager–Flat, Auto, TOFC/COFC	1	{{[redacted]}}	{{[redacted]}}
Manager–Clearance Desk	1	{{[redacted]}}	{{[redacted]}}
Chief Car Distributor	1	{{[redacted]}}	{{[redacted]}}
(5) Manager–Information Services	1	{{[redacted]}}	{{[redacted]}}
(6) Manager–Support Services and Interline	1	{{[redacted]}}	{{[redacted]}}
(7) Manager–Customer Service	2	{{[redacted]}}	{{[redacted]}}
Total Sales & Marketing	**56**		**$5,912,326**
3. Finance & Accounting			
Vice President–Finance & Accounting	1	$628,045	$628,045
Manager–Administration	1	{{[redacted]}}	{{[redacted]}}
a. Treasurer	1	{{[redacted]}}	{{[redacted]}}
Assistant Treasurer	1	{{[redacted]}}	{{[redacted]}}
Cash Manager	1	{{[redacted]}}	{{[redacted]}}
Manager–Risk Management & Insurance	1	{{[redacted]}}	{{[redacted]}}
b. AVP–Controller	1	{{[redacted]}}	{{[redacted]}}
(1) Assistant Controller–Revenue	1	{{[redacted]}}	{{[redacted]}}
(a) Director–Revenue & Distribution Accounting	1	{{[redacted]}}	{{[redacted]}}
Manager–Administration, Revenue Accounting	1	{{[redacted]}}	{{[redacted]}}
Manager–Freight & Customer Accounting	2	{{[redacted]}}	{{[redacted]}}
Analyst–Freight & Customer Accounting	2	{{[redacted]}}	{{[redacted]}}
Manager–Divisions & Interline Accounting	2	{{[redacted]}}	{{[redacted]}}
Analyst–Divisions & Interline Accounting	4	{{[redacted]}}	{{[redacted]}}

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 3
TPIRR G&A Compensation Requirement

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
Manager–Central Freight Rate & Bill	2	{{[redacted]}}	{{[redacted]}}
Analyst–Central Freight Rate & Bill	7	{{[redacted]}}	{{[redacted]}}
(b) Director–Credit & Receivables	1	{{[redacted]}}	{{[redacted]}}
Manager–Collections	1	{{[redacted]}}	{{[redacted]}}
Supervisor–Collections	2	{{[redacted]}}	{{[redacted]}}
Analyst–Collections	6	{{[redacted]}}	{{[redacted]}}
Manager–Overcharge Claims	1	{{[redacted]}}	{{[redacted]}}
(c) Director–Ancillary Revenue Accounting	1	{{[redacted]}}	{{[redacted]}}
Manager–Ancillary Revenue Accounting	1	{{[redacted]}}	{{[redacted]}}
Analyst–Ancillary Revenue Accounting	4	{{[redacted]}}	{{[redacted]}}
(2) Assistant Controller–Accounts Payable	1	{{[redacted]}}	{{[redacted]}}
Manager–Accounts Payable	1	{{[redacted]}}	{{[redacted]}}
Analyst–Accounts Payable	4	{{[redacted]}}	{{[redacted]}}
Manager–Disbursements	1	{{[redacted]}}	{{[redacted]}}
Manager–Material Accounting	1	{{[redacted]}}	{{[redacted]}}
Manager–Vendor Control & Budgets	1	{{[redacted]}}	{{[redacted]}}
Payroll Manager	1	{{[redacted]}}	{{[redacted]}}
Payroll Supervisor	1	{{[redacted]}}	{{[redacted]}}
Payroll Accountant	2	{{[redacted]}}	{{[redacted]}}
Analyst–Payroll	8	{{[redacted]}}	{{[redacted]}}
(3) Director–Accounting Systems	1	{{[redacted]}}	{{[redacted]}}
Manager–Accounting Systems	3	{{[redacted]}}	{{[redacted]}}
LAN Application Programmer	2	{{[redacted]}}	{{[redacted]}}
(4) Director–Financial Reporting	1	{{[redacted]}}	{{[redacted]}}
Manager–Financial Reporting	1	{{[redacted]}}	{{[redacted]}}
Staff Accountants	2	{{[redacted]}}	{{[redacted]}}
c. AVP–Taxes	1	{{[redacted]}}	{{[redacted]}}
Director–Property, Sales & Use Tax	1	{{[redacted]}}	{{[redacted]}}
Manager–Tax	2	{{[redacted]}}	{{[redacted]}}
Tax Accountant	2	{{[redacted]}}	{{[redacted]}}
Director Property Accounting	1	{{[redacted]}}	{{[redacted]}}
Manager Property Accounting	2	{{[redacted]}}	{{[redacted]}}
Accountant–Property Accountant	2	{{[redacted]}}	{{[redacted]}}
d. Director Internal Auditing	1	{{[redacted]}}	{{[redacted]}}
Manager Internal Audit	2	{{[redacted]}}	{{[redacted]}}
Senior Auditor	1	{{[redacted]}}	{{[redacted]}}
Auditor	3	{{[redacted]}}	{{[redacted]}}
e. Director–Cost & Economic Analysis	1	{{[redacted]}}	{{[redacted]}}
Manager–Cost & Economic Analysis	2	{{[redacted]}}	{{[redacted]}}
Sr. Analyst–Cost & Economic Analysis	1	{{[redacted]}}	{{[redacted]}}
Analyst–Cost & Economic Analysis	1	{{[redacted]}}	{{[redacted]}}

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 3
TPIRR G&A Compensation Requirement

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
Total Finance & Accounting	**100**		**$8,122,750**
4. Law			
Vice President Law	1	$628,045	$628,045
Administrative Assistant–Law	1	{{[redacted]}}	{{[redacted]}}
Associate General Counsel	3	{{[redacted]}}	{{[redacted]}}
General Solicitor	1	{{[redacted]}}	{{[redacted]}}
General Attorney	2	{{[redacted]}}	{{[redacted]}}
Paralegal	1	{{[redacted]}}	{{[redacted]}}
a. Director–Real Estate	1	{{[redacted]}}	{{[redacted]}}
Real Estate Counsel	1	{{[redacted]}}	{{[redacted]}}
Manager–Real Estate	1	{{[redacted]}}	{{[redacted]}}
b. Director–Claims & Asset Protection	1	{{[redacted]}}	{{[redacted]}}
Manager–Claims	1	{{[redacted]}}	{{[redacted]}}
District Claims Agent	4	{{[redacted]}}	{{[redacted]}}
Administrative Assistant–Claims	1	{{[redacted]}}	{{[redacted]}}
Manager–Environmental Services	1	{{[redacted]}}	{{[redacted]}}
c. Director–Police	1	{{[redacted]}}	{{[redacted]}}
Assistant Director–Police	2	{{[redacted]}}	{{[redacted]}}
Sergeant of Police	2	{{[redacted]}}	{{[redacted]}}
Special Agent	20	{{[redacted]}}	{{[redacted]}}
Total Law	**45**		**$3,854,589**
5. Information Technology			
Vice President–Information Tech	1	$628,045	$628,045
Administrative Assistant–IT	1	{{[redacted]}}	{{[redacted]}}
a. Director–Technology Support	1	{{[redacted]}}	{{[redacted]}}
Technician–Help Desk	15	{{[redacted]}}	{{[redacted]}}
Technician–PC (24/7)	8	{{[redacted]}}	{{[redacted]}}
Technician–Telecommunications	2	{{[redacted]}}	{{[redacted]}}
b. Director–Network & Security	1	{{[redacted]}}	{{[redacted]}}
Engineers–Network	3	{{[redacted]}}	{{[redacted]}}
Technician–Security	4	{{[redacted]}}	{{[redacted]}}
Engineer–Exchange 2007	4	{{[redacted]}}	{{[redacted]}}
Manager–Server	4	{{[redacted]}}	{{[redacted]}}
Manager–Database	5	{{[redacted]}}	{{[redacted]}}
c. Director–IT Applications	1	{{[redacted]}}	{{[redacted]}}
Lead Technician–RMI Applications	8	{{[redacted]}}	{{[redacted]}}
Programmer–Applications Development	8	{{[redacted]}}	{{[redacted]}}
Analyst–Systems	3	{{[redacted]}}	{{[redacted]}}

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Exhibit III-D-2
Table 3
TPIRR G&A Compensation Requirement

Position (1)	No. of Employees (2)	Annual Salary (3)	Total Salary (4)
Manager–Interface Support	1	{{[redacted]}}	{{[redacted]}}
Technician–Interface Support	3	{{[redacted]}}	{{[redacted]}}
Total Information Technology	**73**		**$5,515,505**
Total G&A	**304**		**$27,032,283**

Source: e-workpaper "TPIRR Operating Expense_Open.xls".

C. MATERIAL, SUPPLIES AND EQUIPMENT

Consistent with the stand-alone principles of unlimited resources and barrier-free entry, the ready availability of materials and equipment is assumed.

The TPIRR owns or leases various types of vehicles and equipment used by its Operating and G&A staffs. Costs for this equipment have been included in the calculation of the TPIRR's annual operating expenses.[10] Company vehicles are needed at the TPIRR's Atlanta, GA headquarters and by field operating personnel. A pool of Ford Explorers (an SUV with all-wheel drive) is maintained at headquarters for use primarily by the headquarters G&A, Operating and Engineering staffs, and Security personnel while traveling to the field on TPIRR business. Five (5) Ford Explorers and thirty-one (31) Ford Tauruses are included as G&A vehicles. These are in addition to the eight (8) Ford Tauruses, 98 Ford Explorers, 26 Pick-up trucks, 12 F350 trucks, and 23 ATV vehicles included in the materials, supplies, and equipment expense in the Operations Department.

[10] *See* e-workpaper "TPIRR Materials and Supplies.xlsx."

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

The TPIRR also needs miscellaneous office equipment and supplies including desks, telephones, and janitorial supplies.[11]

D. OTHER

1. IT Systems

The TPIRR's information technology systems have been developed by TPI Witness Joseph Kruzich, an experienced railroad IT expert. Mr. Kruzich has worked for Class I railroads reviewing various work procedures and providing recommendations on how the work processes could be improved to achieve a high degree of efficiency. This experience enabled him to become very familiar with the wide variety of work processes involved in running a railroad. Mr. Kruzich also served as IT VP of the Kansas City Southern Railroad and was instrumental in directing the development of the new KCS computer systems in the late 1990's. A more detailed description of Mr. Kruzich's qualifications is contained in Part IV of this opening evidence. Mr. Kruzich reviewed the TPIRR's operating plan and G&A requirements to determine the railroad's basic computer and communications needs and the level of support appropriate for its staff. The IT systems described below enable the TPIRR to operate safely and efficiently and to perform all administrative activities.

The TPIRR has an average of 555 train movements per day in the peak week, as well as a limited number of local customers and interchange points. It also handles primarily trainload movements, with multiple-car billing (using the RMI Revenue System to allocate revenues), rather than billing for individual railcars. This reduces the complexity of the computer and communications system required to support operations and renders unnecessary the expensive

[11] *Id.*

mainframe systems that large carriers use. Thus, the TPIRR does not require a large data facility to house a mainframe computer system and associated peripheral equipment. As described below, the TPIRR IT system design is NT/PC based and can be housed in a room approximately 20' X 30', with normal office environment heating and air conditioning accommodations. This room would be located in the TPIRR headquarters at Atlanta, GA. As stated previously, most of TPIRR's computer requirements will be outsourced to RMI in Atlanta.[12]

Based on the TPIRR operating plan and G&A staff departments, the capital requirements for IT and communications systems total $29.2 million and the annual annuitized capital costs are $4.9 million.[13] The annual operating cost for IT and related communications is $33.8 million at 3Q10 price levels.[14] Table 4 below shows the capital and annual operating expenses separately for information technology and related communications systems.

Exhibit III-D-2
Table 4
Capital And Operating Costs For
TPIRR IT And Communications Systems

Item	Capital Cost	Operating Expense
(1)	(2)	(3)
1. Information Technology	$28,736,110	$32,628,553
2. Communications	$280,111	$1,189,927
3. Total	$29,016,221	$33,818,480

Source: e-workpapers "TPIRR - Capital Budget.xls" and "TPIRR - Operating Budget.xls".

The TPIRR's computer and IT communications systems are described below. They have been designed to meet the company's mission-critical technology needs; they enable the TPIRR

[12] *See* e-workpaper "TPIRR-Operating Budget.xls".
[13] *See* e-workpaper "TPIRR-Capital Budget.xls."
[14] *See* e-workpaper "TPIRR-Operating Budget.xls."

to achieve operating efficiencies, customer satisfaction, optimum staffing,[15] maximum productivity, and safe train operations. The costs summarized above are based on the TPIRR's highest daily train counts and number of annual carload transactions.

a. Transportation System

The key item in the TPIRR information technology architecture is RMI's Transportation Management Services ("TMS") package. TMS is an integrated system for managing day-to-day rail operations that is currently used by several regional railroads, such as Genesee & Wyoming, Inc., the largest operator of short line and regional railroads in North America. TMS includes modules for yard and inventory control, waybilling, train operations, switching settlements, demurrage, EDI consists, waybills, bills of lading, blocking instructions, work orders, switch instructions, and many other features. This system is outsourced to RMI using frame relay communications from TPIRR's Atlanta headquarters (where the major transaction reporting occurs) to Atlanta, GA, where RMI is also located.

TPIRR will use the mobile crew reporting system because it will provide an efficient means of inputting field activity. This system allows operating personnel in the field to enter information on train and crew events into the RMI system in real-time. This system is used by other Class I railroads to improve clerical and trainman efficiencies and minimize reporting errors by eliminating the need for clerical staff to input reports from the field. Mr. Kruzich has included the Mobil Crew Devices and their monthly service fees in the Capital and Operating Budgets. Field personnel access the RMI system via the Internet using mobile crew reporting

[15] The TPIRR's IT personnel requirements are described above in the discussion of G&A personnel. The IT staff size is largely a function of the systems described in this section.

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

devices as well as workstations. Mr. Kruzich estimates implementation costs for the RMI system will be $4.0 million and annual operating expense will be $18.8 million.[16]

b. Crew Management System

A crew management system is needed to efficiently manage the TPIRR train crews and equipment. The TPIRR will purchase a license from PS Technology for the SCAT Client Server system, related equipment, and software (Oracle Data Base). This system provides the capacity needed to schedule crew requirements involving approximately 3,108 train/engine/yard employees (First Year) and 111 home terminal crew locations over the TPIRR system. It also minimizes the need for a large staff of crew callers or other crew management personnel. Total costs for the crew management system equal $1.6 million.[17]

c. Dispatching System

A computerized dispatching system, assisted by 32 TPIRR dispatcher positions on a 24/7 basis, monitors the movement of trains and other equipment at all times, and distributes traffic efficiently across the railroad. The TPIRR will purchase and implement a PC-based version of the Alstom Dispatching system. This system is similar to the one that was used by the KCS in 2000 when Mr. Kruzich was CIO. This system has plenty of capacity to meet the TPIRR's needs and includes all necessary equipment, installation, and on-site tests. The IT system requirements of this system are included in the signal and communications investment account in Part III-F.

d. Revenue Accounting

The TPIRR will use a revenue system to handle interline settlements for trainload transactions, multiple-car transactions, and single car transactions. RMI has a revenue system

---

16 *See* e-workpaper "TPIRR - Operating Budget.xls".
17 *See* e-workpaper "TPIRR - Capital Budget.xls".

that meets TPIRR's requirements. In particular, the RMI Revenue Management Services ("RMS") is a full-function revenue management system that has been certified by the AAR for Interline Settlement System ("ISS") processing. This certification allows railroads using ISS/Connect to participate in the ISS. ISS/Connect provides complex rate management, EDI management, freight billing, support for industry reference files, revenue protection, and additional functionality. The RMS costs are based on the estimated total monthly settlements that are processed through the revenue management system at a cost of $5.3 million.[18]

e. Car Accounting

The TPIRR needs a receipt and payable car hire system because the TPIRR owns some railcars and uses some railcars provided by its connecting carriers. RMI has a car hire system for receipts and payables that provides the necessary features required by the TPIRR to keep track of its cars off-line and foreign cars on-line. This system computes charges due TPIRR from foreign railroads and the TPIRR's payables to foreign roads. The system separates car earnings by designated owner groups, issues remittance and settlement summaries, flags non-moving cars and missing junctions, and helps keep track of assets with on-line access to car movement data. The annual operating expense for this system of $0.7 million is based on the number of non-private interchange cars handled per month.[19]

f. General Accounting

The TPIRR uses the Oracle Solutions package for its general accounting system. Oracle "PeopleSoft" offers fully automated solutions to support the complete financial control and reporting process–from establishing and managing controls, creating and interfacing transactions

[18] *See* e-workpaper "TPIRR - Operating Budget.xls".
[19] *See* e-workpaper "TPIRR - Operating Budget.xls".

from operational sources, transforming ledger balances to account for enterprise allocations and re-measurement to consolidating and reporting results. Built-in best practices provide strong internal controls, save time and money, and allow for strategic analysis of the business. The software is designed to run on Windows 7 and Windows NT operating systems. The total operating for the accounting system equals $217,186 and capital costs for this system, including hardware and training equal $2.2 million, which includes a Dell OptiPlex 380 PC, cables, HP LaserJet P4015n printer and Dell PowerEdge T710 Servers.[20] The CSXT is currently using Oracle PeopleSoft for many of their accounting activities.[21]

g. Human Resource Management

The TPIRR also uses Oracle Solutions package "PeopleSoft" for its Human Resources ("HR") System. Oracle's PeopleSoft Enterprise Human Resources delivers comprehensive HR capabilities, from workforce management to compensation and talent management. Extensive business process automation and rich self-service capabilities free HR teams to perform value-added services while reducing operational costs. This system covers the TPIRR's human resource data needs at an affordable cost. The software package includes all basic employee reporting features, employee profile tracking, attendance reports, benefit, insurance and COBRA reports, compensation/job history reports, EEO and citizenship reports, organizational reports, and all OSHA and workers' compensation reports. PeopleSoft is currently being used by CSXT for their Human Resource activities.[22] The system uses a Dell OptiPlex GX280 PC, cables, an HP Laser Jet 4250tn printer, and a Dell PowerEdge 1800 Server. The annual operating cost for

---

[20] *See* e-workpaper "TPIRR- Computer Configuration.doc".
[21] *See* e-workpaper "CSX - Oracle.pdf."
[22] *Id.*

this system equals $772,088 and capital cost for this system, including hardware and training, is $7.7 million.[23]

h. Network and Router Equipment

The TPIRR needs networking capability and routers because it has a number of computers in multiple locations. Networking and router equipment permit these computers to communicate with one another. One router will be placed at each field reporting location and two at TPIRR headquarters. In addition to networking, the TPIRR will need several servers to accommodate various other activities such as: Identity & Access Server, Internet IDS/IPS Server, FTP/EDI Interface Support, File Server, MailServer, Corporate Web Site Server, Anti-Virus and Anti-Spyware, Security Network Server, Vulnerability Patch Management, and Auxiliary Mail Server. There is also a test and development system for system software fixes/upgrades and application software fixes/upgrades. Microsoft Cloud will be used to provide e-mail capability for most TPIRR employees to communicate among themselves on various issues. A Generac Commercial Series Standby Generator will be used as an Uninterruptible Power Supply ("UPS") system to provide a backup in case of a major power outage. The total number of servers, UPS, and software costs are shown in detail in the capital and operating budget statements.[24] The TPIRR's communications network consists of a microwave and commercial telephone system. The costs for these items are included in the network infrastructure costs discussed in Part III-F. The IT operating expense budget includes a network computer system for LAN and WAN, routers at various locations, and internet access for headquarters and field locations.[25]

---

[23] *See* e-workpapers "TPIRR - Operating Budget.xls" and "TPIRR - Capital Budget.xls".
[24] *See* e-workpapers "TPIRR - Operating Budget.xls" and "TPIRR - Capital Budget.xls".
[25] *See* e-workpaper "TPIRR - Operating Budget.xls".

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

i. Workstations and Printers

Both desktop and laptop PC's are provided and included in the TPIRR's IT cost, with a high-end configuration to run a state-of-the-art operating system while avoiding the need to purchase other applications. One PC is provided for each G&A employee as well as for operating personnel located at headquarters. Additionally, one PC is provided at each crew change point and the major yard locations where employees are assigned. Laptops are provided for use by employees who are required to travel a considerable amount of their time. The total capital cost for desktop and laptop computers is $1.1 million.[26]

The TPIRR will use a variety of printers for work orders, safety bulletins, and normal office work such as printing contracts, correspondence, and reports. A color printer will be used for various maps, charts, and diagrams. Printers are also needed in the field and at major interchange locations to print information relating to the work performed there. TPIRR equipment will include a desktop laser printer for each desktop PC, a printer for laptop PCs where needed, one color and two line printers at headquarters, and one line printer at each of the TPIRR's yards. The total capital cost for printers for the TPIRR is $267,315.[27]

j. Voice and Data Communications

TPIRR will utilize NexPath Telephony Sever-NTS Server Rack Mounted Systems for telephone systems and telephone services to handle external and internal telephone activity. This system includes traditional telephones for each administrative employee, the NTS telephone system, a voicemail system, and a calling card system. NexPath Telephony Sever-NTS Server Rack Mounted Systems is capable of handling 51 outside lines and up to 85 extensions. There

---

[26] *See* e-workpaper "TPIRR - Capital Budget.xls".
[27] *Id.*

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

are six of these systems provided in the Capital Budget. This system is capable of handling internal calls over the microwave system and external calls from various parties. The external calls would consist of local and long-distance telephone service, 800 services, paging, and faxing.

Data telecommunications between the RMI transportation system in Atlanta, GA and TPIRR's headquarters (also in Atlanta) are provided by AT&T. This is a frame relay system that is based on estimated transactions. The Internet is used for data communications for all the field offices. The field offices also have Internet access to the RMI transportation system in Atlanta. Cellular phones and pagers are provided for employees who need them to perform their work efficiently. The capital cost for this system is $4,425[28] and the annual operating expenses equal $318,068.[29]

k. Automatic Equipment Identification

Automatic equipment identification ("AEI") includes a track-side scanner that reads information from each car (car number and initial) in a manner similar to reading a bar code. That information is accumulated on a PC while the train passes a specific site where the scanner is installed. These readings are then compared to the train consist residing on a computer to determine if there are any discrepancies. If discrepancies exist, the consist record is adjusted to agree with the reading from the scanner.

The TPIRR's AEI scanner locations are discussed in Part III-F-6. The capital costs for AEI scanners are included in the TPIRR's road property investment costs in Part III-F.

---

[28] *Id.*

[29] *See* e-workpaper "TPIRR - Operating Budget.xls".

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

l. Software Maintenance

Software products such as PC accounting packages that run on a server, and tools such as security software and monitoring software, require payment of annual maintenance fees for support and upgrades. Some of these fees are included in the licensing agreement, such as that for the Oracle Products, which has an annual fee payable for the use of its product. Other providers have a flat charge for the package with no annual fees, but they will have enhancement upgrade announcements from time to time with a specified charge for the upgrade. The annual fees to be paid by the TPIRR for these various charges will be $1.8 million.[30]

m. Railinc Services

The TPIRR requires some Railinc services to pass and receive car location information to/from CSXT and its other interchange partners for the various interchange locations. The annual cost for these Railinc services is $141,072.[31]

n. Network Security

The TPIRR also needs security software to protect its network from exterior intrusion due to the large amount of data that is transmitted to Atlanta and other parts of the railroad. The system to be used is the Watchguard Firebox X6500e UTM Software Suite. The Watchguard suite offers comprehensive Unified Threat Management and is an easily managed firewall and AV/IPS security appliance for mid-size businesses requiring a secure, private network. The annual cost for the network security software is $43,665.[32]

---

30 *Id.*
31 *Id.*
32 *Id.*

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

2. Other Out-Sourced Activities

As described earlier, several activities customarily provided in-house by large Class I railroads can be efficiently out-sourced by the TPIRR. Consistent with the stand-alone concept of an efficient, least-cost railroad, out-sourcing is used wherever the economics so justify without sacrificing the SARR's feasibility or service quality.

Out-sourced activities, in addition to those described in the preceding section, include finance and accounting activities (including financial/account auditing and payroll processing) and certain legal services.[33]

A number of independent accounting, payroll service, and other firms have the experience and systems to perform these activities. For example, the payroll service firm Paychex has experience in complying with Railroad Retirement and other railroad-specific tax and regulatory reporting requirements.

Internal and External Audit are very important functions that will ensure TPIRR is conducting business in a professional manner. TPI has used a benchmark of 0.03 percent of revenue, approximately $1.97 million, for internal auditing costs. This benchmark was published in the Journal of Accountancy, and will ensure TPIRR receives adequate internal audit support.[34]

TPI has used CSXT's actual audit fees and revenue for the past three years to calculate a reasonable and reliable external audit cost for the TPIRR. TPI did so by calculating the percent of CSXT revenue that was spent on audit fees for the years 2009 through 2011.[35] After averaging the results, TPI came to the conclusion that 0.0252 percent of CSXT's revenue goes towards

---

[33] *See* e-workpaper "TPIRR G&A Outsourcing_Opening.xlsx."
[34] *See* e-workpaper "TPI Internal Audit.pdf."
[35] Audit fees were found in CSXT's annual proxy statement; Revenue was found in CSXT's annual report.

external audits.[36] Applying this percent to the $6,567.9 million First Year revenues of the TPIRR produces external audit costs of $11.66 million.

The calculation of outsourced legal expense is addressed in a previous section. Estimated annual costs of $1.71 million have been developed for outsourcing all of the activities described above.[37]

3. Start-Up and Training Costs

Training costs for TPIRR employees are based on information provided by CSXT in discovery and include both training costs (based on CSXT's Railroad Education & Development Institute) and also employee compensation when in training. These costs are developed on a per employee basis by department, including transportation, mechanical, and engineering/MOW employees.

Table 5 below displays the cost per employee, number of employees trained, and total training cost by department.

Exhibit III-D-2
Table 5
Training Costs for the TPIRR

Department	**Training Cost per Employee**	**Employees Trained**	**Total Training Cost**
(1)	(2)	(3)	(4)
1. Transportation	{{[redacted]}}	3,248	{{[redacted]}}
2. Engineering/MOW	{{[redacted]}}	894	{{[redacted]}}
3. Mechanical	{{[redacted]}}	285	{{[redacted]}}
4. Total		4,427	$71,120,036

Source: e-workpaper "TPIRR Operating Expense_Open.xlsx".

36 *See* e-workpaper "External Audit.xlsx."
37 *See* e-workpaper "TPIRR G&A Outsourcing_Opening.xlsx."

TPIRR GENERAL & ADMINISTRATIVE EXPENSE

Training of transportation department employees includes T&E personnel and dispatchers, mechanical department employees, car inspectors, engineering/MOW employees, and all MOW track department personnel.

Recruiting costs are included for Executives (Director positions and above) at a level of (10) percent of salaries, based on fees charged by Summit Search Solutions, Inc.[38] In addition, a $1,000 cost per employee is included for rank and file employee based on the amount accepted by the Board in *PSCo/Xcel I*.[39]

Subsequent annual recruitment and training expenses are based on a three percent average annual attrition rate, which was CSXT's attrition rate as cited in a 1998 article.[40]

A total amount of $77.72 million has been provided for initial TPIRR training and recruiting costs.[41] Consistent with *WFA/Basin I*, start-up training and recruitment costs are treated as operating expense in the TPIRR's first year of operations.[42]

4. Travel

Travel expenses have been included for all TPIRR employees at the Director level and higher (except for the Assistant Controllers, as these positions do not require travel) and for the six (6) outside members of the board of directors. Annual travel expenses of $10,475 per employee are included. This amount is based on the most recent available annual survey of

---

[38] *See* e-workpaper "III-D-3 Recruiting cost.pdf."
[39] *See PSCo/Xcel I* at 657-658.
[40] "*With the UP Still Snarled Shippers Look Nervously to Next Mergers*", published in the April 1998 edition of *Global Logistics & Supply Strategies*. *See* e-workpaper "Attrition Rate.pdf".
[41] *See* e-workpaper "TPIRR Operating Expense_Open.xlsx".
[42] *See WFA/Basin I* at 53.

corporate travel managers performed by Runzheimer International, which estimates the annual cost of corporate business travel.[43]

5. Bad Debt

TPI assumes the TPIRR will not have expense for bad debt resulting from the write down of doubtful accounts. This assumption is based on CSXT's actual experience which, according to its R-1 Annual Reports, shows a range of uncollectable amounts as a percent of revenue from a negative (0.15) percent to 0.09 percent with a three year average write down of uncollectable equal to a negative (0.01) percent.[44]

---

43 *See* e-workpaper "III-D-3 Travel.pdf".
44 *See* e-workpaper "Bad Debt.xlsx".

Table of Contents

TPIRR MAINTENANCE OF WAY

The maintenance-of-way ("MOW") plan for the TPIRR was developed by TPI's expert railroad engineering witness, Harvey Crouch.[1] It was also reviewed and approved by Richard McDonald, TPI's rail operations expert, who has engineering and operating experience with CSXT's predecessors.

Mr. Crouch served in the Southern Railway's and then NS's Engineering Department from 1977 to 1987, including service as a Project Engineer and Track Supervisor in the Maintenance of Way & Structures Department. He has worked on many railroad design and construction projects in the eastern U.S., and has been involved with track and bridge inspection and maintenance programs for many railroads over the past 22 years. His duties in these positions are detailed in his Statement of Qualifications in Part IV.

To develop TPIRR's MOW plan, Mr. Crouch used a detailed, multi-step approach.[2] First, he identified the characteristics of the TPIRR that affect its MOW needs. These characteristics included the railroad's annual gross tonnage and relative traffic density, track geometry, train frequency, geographic scope, terrain, and weather. During this process, Mr. Crouch reviewed: CSXT system maps and track charts, which include track geometry and terrain information; AREMA and CSXT typical sections; regulatory standards for track and bridge safety; AREMA standards for bridge design, track design, roadbed design, and other items; topography (from Google Earth) and climate where the various portions of the TPIRR are located; CSXT data on curves, crossings, bridges, overpasses, etc.; density information; trade resources; and CSXT

1 Mr. Crouch is also sponsoring TPI's evidence on the TPIRR's construction costs in Part III-F. The staffing for the TPIRR's MOW Communications & Signals Department is sponsored by TPI's communications and signals expert, Victor Grappone, PE.

2 A detailed explanation of this approach and plan development is found in TPI Opening workpaper "TPI MOW Plan Methodology.doc."

facilities that he observed in field trips made for prior SAC cases. He incorporated the significant aspects of these items into the MOW plan and staffing.

Second, based on the characteristics that drive the TPIRR's MOW needs and the items he reviewed in the previous step, Mr. Crouch identified the maintenance functions that the TPIRR needs to perform for each section of the system. These functions reflect that annual gross tonnage and relative traffic density are the two most important factors that affect maintenance and testing needs, testing and rail grinding schedules, and the probability that rail defects will develop. They also reflect real-world maintenance-of-way department functions and needs.

Third, Mr. Crouch allocated staffing to these functions, starting with the front-line maintenance staff and adding additional layers of supervision where appropriate. When allocating staffing, Mr. Crouch considered the equipment needs for each maintenance function and the maintenance work (other than capital program maintenance) that appropriately could be contracted. Since the TPIRR is designed and built with the necessary capacity for its projected 10-year peak traffic, many MOW positions used on the existing CSXT system are simply not needed on the TPIRR.[3]

Consistent with *WFA/Basin I*, Mr. Crouch's MOW plan has a substantial field staff to perform day-to-day inspection and maintenance activities, supported by a managerial/office engineering and support staff that reports to the TPIRR's Vice President ("VP") Engineering & Mechanical. Capital maintenance programs are also required during the 10-year DCF period to renew/replace the fixed facilities and in particular the principal elements of the track structure.

---

3 *See* e-workpaper "TPI MOW Plan Methodology.doc" for a detailed explanation of the MOW plan development.

The TPIRR's MOW staff has been structured to include planning, budgeting and contracting related to annual capital programs.

Also consistent with *WFA/Basin I*, all of the TPIRR's program work (including rail grinding and crossing paving) is performed by contractors. It is more efficient to contract out program work than to hire large seasonal gangs to perform most of this work, which most Class I railroads have done until recently.[4] Using contractors is more efficient, in part, because contractors are not subject to internal railroad-union craft work rules (which can be exacerbated for large railroads like CSXT that are the product of numerous mergers and consolidations among predecessor railroads) or the Railroad Retirement program, which makes internal railroad labor very expensive. In addition, it is not cost effective to hire and equip large mechanized gangs consisting of TPIRR employees, because most program work is performed on an as-needed basis and not focused in a specific geographic region to enable a gang to be used throughout the entire year. Also, on portions of the TPIRR where winter work is not feasible due to roadbed freezing and the potential for ballast cars to freeze en route to construction areas, using contractors would be consistent with the Class I railroads' recent shift to contractors for seasonal work.

Fourth, to ensure that the proposed staffing for the TPIRR is consistent with "real world" railroad operations, Mr. Crouch compared the TPIRR's staffing plan to CSXT's staffing. Using

---

4 Consistent with the treatment of program renewal work in other rate cases such as *AEP Texas II* and *WFA/Basin I*, the cost of capital programs is accounted for in the DCF model. In addition, CSXT uses Hulcher for ballast train supply and unloading; all the Class 1's use contractors for vegetation control, rail defect testing, geometry car testing, and to some extent, inspection using hi-rail truck mounted equipment. Regional and Short Line Railroads routinely use contract services for all capital work. For example, the Central Florida Rail Corridor uses contractors for all inspection, maintenance and capital program work.

data that CSXT provided in discovery,[5] Mr. Crouch compared, by MOW position, the TPIRR and CSXT route miles per employee. To ensure an apples-to-apples comparison of TPI and CSXT MOW employees, Mr. Crouch removed from the CSXT data employees required for program maintenance, new construction, floating crews, system crews, and other positions not needed on the TPIRR. The comparisons, by MOW departments and positions, can be found in Table 2 through Table 8 below.

The staffing comparison revealed that most TPI MOW staff employees cover fewer miles than their CSXT counterparts. Specifically, there are {{[redacted]}} route miles or {{[redacted]}} track miles per CSXT MOW employee, but 5.99 route miles or 9.04 track miles per TPIRR employee. Table 2, below, contains these figures.

Many factors support a reduced MOW staff for the TPIRR compared to a "real-world" operation. Since the TPIRR is newly designed and constructed for 286,000 lb. gross freight-car weights using modern materials and methods, all track, turnout, bridge, crossing, signal, tunnel, culvert, roadbeds, drainage structures, and other railroad infrastructure components are new. It follows that maintenance needs on the newly constructed TPIRR will be much less than on the aging CSXT infrastructure. The components used to construct the TPIRR all have useful lives extending beyond the ten (10) year planning horizon of the TPIRR, so the maintenance needs of the system are much less than the existing, aging CSXT railway infrastructure. Also, all bridges on the TPIRR are new, concrete and/or steel structures, which will have no significant maintenance needs for many decades. In contrast, CSXT has many timber bridges, which

---

[5] *See* e-workpapers "CSXT Employee Data from 2010 Sorted.xls", taken from Discovery, "2007 Engineering Department Employees.xls", from Discovery, and TPI e-workpapers "TPIRR CSX 2007 Engineering Dept Employees for TPI.xls", and "TPI MOW Employee Positions and Descriptions.xls."

require significantly more maintenance than concrete and steel bridges. Also, because the new TPIRR track roadbed is newly constructed with well-compacted roadbeds and sub-ballast roadbed caps, seeded and mulched side slopes, and a fully cleared right-of-way, there is no immediate need for significant ditch maintenance. In contrast, CSXT's existing roadbeds, which are built with mules and drag pans, have soft spots, do not have a crusher-run sub-ballast cap, and exhibit heavy vegetation, require far more maintenance than TPIRR roadbeds. These are just a few examples—further detail concerning the differences between the TPIRR and CSXT infrastructure that make the TPIRR less burdensome to maintain can be found in Table 1 below.

Exhibit III-D-3
Table 1
Comparison of the TPIRR and CSXT Infrastructure

New TPIRR Infrastructure (1)	Existing CSXT System Infrastructure (2)
• New, sound, well compacted roadbed, built with modern equipment, no damage from past operations	• Old, weaker roadbed built with mules and drag pans, poorer compaction, soft spots from prior jointed rail pumping
• New compacted crusher run sub-ballast cap, shaped to drain, less track surfacing required	• No crusher run sub-ballast cap in original construction, poor drainage & track surface
• New, clean working ditches, less need for cleaning	• Old ditch lines, sedimentation over time, requiring more maintenance
• Right-of-way completely cleared and grubbed, no trees, new grass, less maintenance required	• Trees outside 20-25' from centerline, heavy vegetation, more maintenance effort
• New track, new rail (CWR), new crossties, new clean ballast, new fasteners all requiring little to no maintenance	• Old track, components vary in age, older rail with more defects, older crossties, fouled ballast, and more maintenance required
• Less rail movement and fewer track gage problems	• More rail/plate movement and more track gage problems due to age
• Premium head hardened rail in curves 3 degrees and over	• Limited use of head hardened rail or premium rail in curves
• New turnouts and switch ties, new frogs and switch points, brace plates, switch plates, switch stands, etc. requiring less welding	• Older turnouts and switch ties, worn frogs, switch points, switch plates, and switch stands, requiring more welding maintenance
• New insulated joints	• Older insulated joints
• Fewer joints in track	• More joints in track
• New grade crossings	• Older grade crossings
• New culverts, all aluminized steel materials, excellent condition	• Older culverts, corroded steel, clay or older stone masonry material
• New retaining walls	• Older retaining walls
• New bridges built with concrete and steel, all 286k compliant, requiring very, very little maintenance	• Older bridges, many timber, older steel, some not 286k compliant, requiring ongoing maintenance

TPI is not claiming that there are no maintenance needs on the TPIRR, nor is TPI suggesting that it should defer maintenance beyond the ten-year planning horizon. In fact, TPI includes the future cost of program maintenance, such as grade crossing paving, rail replacement, and crosstie replacement in the DCF model. If additional MOW staff were added to cover future rail and crosstie replacement programs, a duplication of costs would occur.

An existing railroad system, such as the CSXT system, which is being partially replicated by the TPIRR, comprises a mix of new and aging components, including antiquated timber and masonry bridges, problem roadbeds constructed without sub-ballast to provide proper drainage, more heavily vegetated right-of-way, aging crossties, worn turnout components, a mix of rail sections with varying ages, conditions, and defects, older ditches and culverts, etc. Thus, CSXT's aging lines being replicated by the TPIRR's new construction require more spot maintenance, because of the age of the existing materials and cumulative tonnage over the track.

The real world CSXT system is maintained and renewed using many large system crews for program rail replacement, program timber and surfacing, new track construction, timber bridge repair and replacement, new signal construction, and other system crew functions. Many existing CSXT track foremen are used to provide flagging for third parties involved in the construction of public projects. The CSXT crews are governed by labor unions and require very large management, administrative, and support staffs as well as material-acquisition and handling capabilities and vast equipment inventories. While the local CSXT MOW crews are responsible for routine and spot maintenance, they are used in large part to provide support for system crews. This is a common practice on Class 1 railroads such as CSXT and Norfolk Southern Railway. The TPIRR does not have the same staffing needs because it considers future program work in the DCF model, and contracts its program work to contractors. On the TPIRR, there is no need to support program work or system crews on the local track crew level. Nor is there a need for large system crews because contractors perform this work.

A. TPIRR OPERATING STAFF

The TPIRR MOW personnel are consistent with the needs of the TPIRR and comparable to the MOW workforce of the CSXT as shown in Table 2 below.

Exhibit III-D-3
Table 2
Comparison of MOW Personnel on a Route Mile and Track Mile Basis

	Item	TPIRR	CSXT
	(1)	(2)	(3)
1.	MOW Staff	1,146	{{[redacted]}}
2.	Total Route Miles	6,866	21,000
3.	Total Track Miles	10,356	31,674
4.	Route Miles per MOW Employee 1/	5.99	{{[redacted]}}
5.	Track Miles per MOW Employee 2/	9.04	{{[redacted]}}

1/ Line 2 ÷ Line 1.
2/ Line 3 ÷ Line 1.
Sources:
Column(2): "Exhibit III-D-3 CSX TPI MOW.xls".
Column(3): "TPIRR CSX 2007 Engineering Dept Employees.xls".

This staff is organized into the Track, Communications & Signals, Building & Bridges, and Miscellaneous Administrative Support Departments. Each department has General Office staff that oversee and support the Field Staff. The staffing for each of these departments is summarized in Table 3 below, followed by a discussion of the personnel requirements by department.[6]

In addition, the TPIRR has been divided into 4 maintenance-of-way divisions (MOW Divisions) of approximately 1,716 route miles per division. There are 2 MOW Divisions in the Northern Region and 2 MOW Divisions in the Southern Region. The MOW regions do not directly correlate to any existing CSXT Operating Divisions.

---

6 Salaries and compensation amounts can be found in Table 9.

Exhibit III-D-3
Table 3
TPIRR Base Year MOW Personnel

Department	Employees		Route Miles Per Employee	
	TPIRR	**CSXT**	**TPIRR**	**CSXT**
(1)	(2)	(3)	(4)	(5)
1. Track	734	{{[redacted]}}	9.4	{{[redacted]}}
2. Communications & Signals	336	{{[redacted]}}	20.4	{{[redacted]}}
3. Bridge & Buildings	56	{{[redacted]}}	122.6	{{[redacted]}}
4. Admin/Support (HQ)	20	{{[redacted]}}	343.3	{{[redacted]}}
5. Total	1,146	{{[redacted]}}	5.99	{{[redacted]}}
6. Route Miles	xxx	xxx	6,866	21,000

Column(2): "Exhibit III-D-3 CSX TPI MOW.xls"
Column(3): "TPIRR CSX 2007 Engineering Dept Employees.xls" and "CSXT Employee Data from 2010 Sorted.xls"
Column(4): Line 6 divided by respective department
Column(5): Line 6 divided by respective department

1. Track Department

The TPIRR's Track Department consists of 734 employees, organized into the positions shown in Table 4 below.

Exhibit III-D-3
Table 4
TPIRR Base Year MOW Personnel: Track Department

Position	Employees TPIRR	Employees CSXT	Route Miles Per Employee TPIRR	Route Miles Per Employee CSXT
(1)	(2)	(3)	(4)	(5)
1. General Staff				
a. Track Engineer	4	{{[redacted]}}	1,716	{{[redacted]}}
b. Administrative Assistant/Clerk	8	{{[redacted]}}	858	{{[redacted]}}
2. Field Staff				
a. Assistant Track Engineer	4	{{[redacted]}}	1,716	{{[redacted]}}
b. Roadmaster	51	{{[redacted]}}	135	{{[redacted]}}
c. Asst. Roadmaster	51	{{[redacted]}}	135	{{[redacted]}}
d. Track Crew Foremen	102	{{[redacted]}}	67	{{[redacted]}}
e. Track Crew / Rail Lubricator Repairmen	320	{{[redacted]}}	21	{{[redacted]}}
f. Roadway Machine Operators 1/	105	{{[redacted]}}	65	{{[redacted]}}
g. Welder/Helper/Grinder	52	{{[redacted]}}	132	{{[redacted]}}
h. Roadway Equipment Mechanic	4	{{[redacted]}}	1,716	{{[redacted]}}
i. Ditching & Smoothing Crew Foremen	33	{{[redacted]}}	208	xxx
3. Total Track Department	734	{{[redacted]}}	9.4	{{[redacted]}}
4. Route Miles	xxx	xxx	6,866	21,000

1/ Includes Ditching crew members and smoothing crew members/machine operators.
Sources:
Column(2): e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".
Column(3): e-workpapers "TPIRR CSX 2007 Engineering Dept Employees.xls" and "CSXT Employee Data from 2010 Sorted.xls".
Columns(4) and (5): Line 4 divided by respective position.

a. General Office Staff

The head of the Track Department is the Chief Engineer–Track, who is counted in the Headquarters staff (*see* Table 7). This position is responsible for all track-related maintenance on the TPIRR, and reports to the VP of Engineering. The Chief Engineer – Track: 1) reviews and approves the combined annual budgets of each MOW Division, provides technical expertise support, coordination, planning, and resource allocation, and manages the maintenance and replacement of infrastructure assets; 2) maintains road property asset inventories; 3) maintains records for tax purposes; 4) manages infrastructure-related relationships with government entities and other third parties; 5) analyzes infrastructure asset performance; 6) establishes standards and testing for materials and processes; and 7) develops plans for infrastructure maintenance. The position's direct reports are the four Track Engineers, the Director of Environmental Operations, the Manager of Welding and Grinding, and the Manager of Work Equipment. The Director of Environmental Operations, the Manager of Welding and Grinding, and the Manager of Work Equipment are all included in the HQ staff (*see* Table 7).

The General Office Staff includes four Track Engineers. Each Track Engineer heads one of the four MOW Divisions and is responsible for the following division functions: maintaining all track, preparing the annual track budget, arranging for contractor performance of track maintenance (capital) programs, managing the labor, equipment, and materials resources allocated to the division to maintain the operation at peak performance levels, meeting timetable speeds, and restoring track service as soon as possible after incidents that halt railroad operation. An Assistant Track Engineer MOW assists each Track Engineer.

Each Assistant Track Engineer MOW (Field Production) assists its Track Engineer by overseeing routine contract work (such as weed spraying, use of rail detector and track geometry cars and rail grinding), maintenance programs, and track maintenance by the TPIRR's field track staff. They also work with the Roadmasters in their assigned territory in defining annual programs and overseeing contractor performance. Each Assistant Track Engineer MOW (Field Production) is based at its division's Headquarters to enable them to efficiently cover all of the TPIRR's territory.

The Director of Environmental Operations is responsible for Hazmat training and safety, as well as coordination of clean-ups and spills. This position is assisted by the Environmental Engineer.

The Manager of Welding and Grinding manages all electric and Thermite welding, and coordinates rail grinding programs with the Track Engineers. He manages, trains, and supervises welder crews, ensures safety of crews, and prioritizes work assignments and programs, including annual rail grinding programs. Since all track on the TPIRR is constructed new, with new ties, new rail, new turnouts, and new railroad at-grade crossings, the maintenance needs concerning spot welding and grinding will be much less than on the existing CSXT system, where rail age and rail conditions are substantially worse due to age and tonnage over the lines. Because the probability of rail defects is very low with new rail, and because the TPIRR has an aggressive prophylactic rail grinding maintenance program, there is a reduced need for welding and grinding crews on the TPIRR than the CSXT.

The Manager of Work Equipment is responsible for the maintenance and performance of all railroad equipment, on- and off-track. He plans, coordinates, and supervises the maintenance and repairs for all railroad equipment, maintains records for equipment, maintains an inventory of replacement parts for equipment, coordinates equipment leases, warranties, repairs, and renewals, and is responsible for safety training and training for mechanics. Note that the TPIRR does not own and maintain system crews for rail and tie replacement, so the sheer quantity of roadway equipment needed for the TPIRR is much smaller than on the existing CSXT system.

Two Administrative Assistants/Clerks are assigned to each Track Engineer, and an additional five (5) are assigned to the Headquarters MOW Office to perform administrative, clerical, and secretarial duties: one to support the VP–Engineering, one for each Chief Engineer (Track, Bridges, and Communication & Signal), and one to support the office as a whole.

b. Field Staff

i. Roadmasters and Assistant Roadmasters

Roadmasters (equivalent to the Field Maintenance Supervisors described in *WFA/Basin I*) are responsible for the day-to-day track maintenance in assigned geographic districts. The Roadmaster prioritizes work, schedules work, and supervises the quality of the work performed by its crews. There are fifty-one (51) Roadmaster districts, each headed by a Roadmaster, with territories assigned between 109 route miles and 150 route miles in length, depending upon traffic density and geographic location of the territory. Territories were developed based on the labor functions required to maintain the railroad, the supervisory requirements for managing crews and repairing defects, and the need for regular and special track inspections, all within the same geographical location. The specific territories each Roadmaster is responsible for, by Subdivision and milepost, are included in the workpapers accompanying this opening evidence.[7] This staffing level of roughly 135 route miles per Roadmaster compares favorably to the real-world CSXT, whose Roadmaster staffing levels equate to roughly {{[redacted]}} route miles per Roadmaster.[8]

Each Roadmaster is assisted by one Assistant Roadmaster. Each Assistant Roadmaster has an assigned territory between 109 route miles and 150 route miles, and is responsible for track inspections, including regular FRA-mandated inspections and special inspections due to weather and other events, and track-crew safety, supervision, and training. A Track Crew

---

7 *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls", Roadmaster Territories worksheet, "TPI MOW Plan Methodology.doc", "TPI MOW Employee Positions and Descriptions.xls", "TPI Roadmaster Territories Map.pdf".

8 *See* e-workpaper "TPI MOW Plan Methodology.doc", describing the formation of Roadmaster labor staff and territories, and "Exhibit III-D-3 CSX TPI MOW.xls", worksheet "Roadmaster Territories" for route mile segment assignments.

Member from the Roadmaster territory, who is also a Track Inspector, assists the Assistant Roadmaster with track inspection duties. Both the Track Inspector and Assistant Roadmaster are trained and certified by the TPIRR to conduct track inspections in accordance with all applicable FRA regulations. Each Assistant Roadmaster/Track Inspector team inspects between 50 and 75 miles of track per day, twice per week.[9] On other days, Assistant Roadmasters perform activities such as routine switch inspections, vehicle maintenance, inspection of industry tracks, work with the local track crews, quality checks behind the track crews, other light maintenance, and additional track inspections, as dictated by temperature, weather conditions, or emergency situations. Also, the Assistant fills in for the Roadmaster in the absence of the Roadmaster.

The TPIRR's Roadmaster and Assistant Roadmaster staffing is consistent with staffing in the railroad industry. It is common in the railroad industry for both Assistant Roadmasters and qualified Track Crew Members to perform track inspections. Moreover, the assignment of an Assistant Roadmaster to each Roadmaster is more conservative than the staffing model of the CSXT system, where not all Roadmasters are assigned an Assistant Roadmaster. When a TPIRR Assistant Roadmaster is on vacation or is otherwise unavailable, the Roadmaster and Track Inspector, who are cross-trained for this purpose, perform the routine and special track inspections.

ii. Track Crews

The TPIRR has a total of 102 field track crews, each consisting of a Foreman and three Track Crew Members (track laborers). Each crew is responsible for day-to-day maintenance of

---

[9] The frequency of track inspections is dictated by the FRA track class involved. The TPIRR has mostly FRA Class IV track, which requires inspection twice per week.

the track in a defined territory, with lengths between 50 and 75 route miles.[10] A local track crew on the TPIRR could, however, easily maintain 80 to 100 miles of territory because they do not need to support system crews and the TPIRR's maintenance tasks and frequency are low. TPI local track crews do not perform work tasks related to program maintenance or system crews because that work is performed by contractors on the TPIRR. Also, the frequency of rail defects, crossing problems, turnout wear, etc. are reduced on the TPIRR relative to the CSXT since all TPIRR track components are new.

Track crews perform various tasks in connection with routine track maintenance, which also includes "spot" maintenance. These tasks include: correcting track geometry defects (surface, line and gauge); repairing detected rail defects; adjusting continuous welded rail ("CWR") as necessary; repairing road crossings; replacing failed tie plates/insulators/clips; replacing occasional defective ties at critical locations such as joints, switch points, and frogs; removing snow/ice from switches; restoring track following incidents; and replacing/repairing damaged signs.

The territory assigned to each field track maintenance crew, the four-person crew size, and the tasks they are expected to perform are all consistent with the modern practice of Class I railroads (including NS and CSXT), regional railroads, and the approach approved by the Board in *WFA/Basin I.* These parameters also reflect the concept that work traditionally handled by large in-house track gangs at a Class I railroad is contracted out (as explained below).

Also, because each Roadmaster has a backhoe and dump truck available for his territory, the need for additional track and other field personnel is lower. A backhoe takes the place of

---

[10] The local track crews' duties and responsibilities in e-workpaper "TPI MOW Employee Positions and Descriptions.xls" and "TPI MOW Plan Methodology.doc".

many men and is highly mobile and versatile. Indeed, railroads have used backhoes for decades to change out defective rails, install rail, remove and replace defective crossties, remove and rebuild grade crossings, perform ditching, load ballast into dump trucks, distribute ballast, perform work site cleanup, pick up and distribute material, and perform a host of other functions. Also, the dump trucks and trailers, which are assigned with backhoes, are used for many purposes, including hauling ballast, track materials, debris, and scrap.

iii. Roadway Machine Operators

Mr. Crouch has provided for a total of 55 Roadway Machine Operators. One Operator assigned to each of the 51 rubber-tired backhoes (one backhoe is assigned to each Roadmaster district), and 4 additional Operators are assigned to four dozers, which are available for use system-wide. Dozers are used for miscellaneous tasks such as clearing, creating firebreaks, restoring site conditions behind work crews, etc. Other Machine Operators are assigned under other classifications, such as Smoothing Crew Tamper and Regulator Operators and Ditching Crew Members and Foremen, but Track Crew Members, who operate the Hi-Rail Boom Trucks assigned to each Track Crew are not considered Machine Operators. Smoothing crews are each equipped with a production tamper and ballast regulator. Twelve Gradall hi-rail excavators and 4 track excavators provide all of the remaining on-track equipment needs for the TPIRR.

Any equipment, and the related cost of that equipment, required for system crews performing program work are unnecessary since that work is contracted and the cost of that work is included in the DCF model costs. Any equipment, and the cost of that equipment, required for clearing wrecks or repairing damage caused by derailments is included in the cost of Clearing Wrecks or cost of Derailments.[11]

iv. Welder/Helper/Grinders

The TPIRR has 26 Welder/Helper/Grinder crews, each comprising a welder and welder helper. Because the entire TPIRR was constructed new, with all new rail, turnouts, and other track components, and because all program maintenance work is contracted, one crew can easily maintain 250 to 270 route miles, or 2 Roadmaster Districts. This staffing, which averages 264 route miles per crew, is more conservative than the real-world CSXT's, where each crew averages approximately {{[redacted]}} route miles and encounters much worse track conditions.

There are very few turnouts in each district compared to the present CSXT, and very few joints to maintain, so there will not be a need for as much welding repair on the new TPIRR. However, welding/grinding crews are needed to Thermite-weld joints where replacement rail is installed to replace defects detected by testing or by visual inspection.

Starting with all new rail, the TPIRR has a rail-defect probability that is very low, near zero. In fact, for the TPIRR's low tonnage track, there is a very low probability of having rail defects during its first ten years of operation. "As rail accumulates tonnage, it tends to develop more internal fatigue defects, based on various factors such as metallurgy of the rail, axle loading, support conditions, etc."[12] As shown in Figure 3 of the Palese report, which used the Weibull Defect Probability Equation, the probability for rail defects is near zero between 0 and 100 MGT, and only increases to 0.10 defects per mile at 1,000 MGT. Most of the rail on the TPIRR has less than 60 MGT (23% of track miles between 0 and 30 MGT; 60% between 30 and

---

[11] *See* "Exhibit III-D-3 CSX TPI MOW.xls".

[12] *See* "*Risk Based Ultrasonic Rail Test Scheduling on Burlington Northern Santa Fe*", by Joseph W. Palese, MCE, PE, Zeta-Tech Associates, Inc. and "TPI Rail Test Frequency Study BNSF Palese.pdf."

60 MGT; and 17% over 60 MGT). Most of the track miles will not reach a cumulative 600 MGT in the 10-year life of the TPIRR. And, with the TPIRR's significant prophylactic rail grinding program in place, the instances of surface generated rail defects is reduced.[13]

The welding crews will also be used to repair engine wheel burns, chipped rail ends, or localized rail flow problems and maintain turnout and rail crossing frogs and switch points without removing them from the track.[14] In addition, the welding crews can provide backup support on larger jobs such as rail grinding operations.

Each welding crew is assigned a hi-rail truck equipped with a self-contained, diesel-driven electric welding generator, winches for handling molds, oxygen and acetylene tanks, and the necessary hand tools and other welding equipment.

v. Rail Lubricator Repairmen

The TPIRR needs 14 Rail Lubricator Repairmen, each covering roughly 490 route miles. The Rail Lubricator Repairmen inspect and repair the TPIRR's 1,795 rail lubricators on a regular basis. The number of lubricators is based on the CSXT field Manual.[15]

vi. Roadway Equipment Mechanics

The TPIRR has four (4) Roadway Equipment Mechanics, one per MOW Division These individuals are responsible for maintaining and performing routine, minor repairs to the TPIRR's field equipment, including tampers, regulators, backhoes, and the other specialized equipment assigned to the field MOW forces. The individual Machine Operators also perform daily

---

13 *See* "*Risk Analysis of Derailment Induced by Rail Breaks – a Probabilistic Approach*" by Jiammin Zhao, University of Birmingham, Chan, and Stirling and "TPI Risk Analysis of Derailment Induced by Rail Breaks.pdf."

14 It is much more efficient to do the welding in place rather than remove the defective frog, install a replacement, and transport the defective frog to a shop for repairs.

15 *See* e-workpaper "Lubricator Spacing.pdf".

equipment inspection, lubrication, and maintenance tasks on their own machines. Trucks are maintained at dealerships and local mechanics are used for most auto or truck-related repairs and maintenance. Five percent of the truck purchase price is included in the annual expense to account for maintenance costs. Each Mechanic may work on 20 to 30 machines over the course of a year.

vii. Ditching Crews

The TPIRR has 16 ditching crews, with 4 crews assigned to each MOW Division. Each crew comprises two people: a Foreman and a Crew Member. The primary function of each crew is to keep the TPIRR's ditches free flowing and to clean culvert inlets periodically.

Each crew is assigned a Gradall or excavator, a hi-rail rotary dump truck with one track excavator and a conventional pickup truck. The Foreman serves as the machine operator, and the other crew member serves as the dump truck driver. Each crew also has a normal complement of hand tools.

Where ditching is needed, it is performed by the TPIRR's field Ditching Crews using Gradalls and backhoes (track excavators).[16] Ditching crews can be shifted to other territories as needed to handle work based on field conditions each year. The Track Engineer is responsible for preparing annual ditching programs based on needs reported by each Roadmaster. TPI experts have used a prorated annual contracted ditching cost, based on annual cost data provided by CSXT in discovery to develop a cost per route mile for the TPIRR.[17]

---

16 Each Roadmaster is assigned a small rubber-tired backhoe and a dump truck which can also be used by the ditching crews for work in that Roadmaster's territory, as needed. In addition, one large backhoe is assigned to each division. It should be noted that most of the CSXT roadbed for the lines being replicated by the TPIRR that has been observed over his career by Mr. Crouch's team is perched, with little to no ditch maintenance required, and the actual need for ditch maintenance occurs in areas of cuts (excavation).

17 *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls", "Ditching" worksheet.

This ditching crew plan reflects that the newly constructed TPIRR will have few ditching needs based on new construction, proper seeding and mulching, and proper ditch slopes. The TPIRR roadbeds are constructed based on the typical sections provided, based on AREMA and CSXT typical roadbed sections. They include two-foot wide ditches, which are very common for railroad roadbeds and used as a standard width ditch on new NS roadbed design projects and other railroad projects with which Mr. Crouch is familiar.

viii. Smoothing Crews

The TPIRR has 17 three-person smoothing crews, which perform spot surfacing and lining of the track as needed to correct any significant surface irregularities noted in geometry test car data, or as directed by the Assistant Engineer MOW (Field Production). Each smoothing crew consists of a Foreman and two Smoothing Crew Members (Machine Operators) and is assigned a Tamper and a Ballast Regulator. The Tamper is used to surface and line track. The Ballast Regulator is used to move ballast, restore the roadbed section and shoulder ballast, fill the tie cribs, and sweep the track following surfacing and lining. These crews also assist the field track forces and contractors with derailments or other problems requiring surfacing work. If additional labor is needed to assist a Smoothing Crew in unusual circumstances, it can be taken from the local Track Crew. The Track Engineer allocates the smoothing crew resources within the division, as needed, based on information received from geometry tests, and track inspections.

Based on TPI witness Crouch's experience, each smoothing crew will cover roughly 400 route miles. This is more than adequate staffing. Indeed, it is typical on Class 1 railroads. Also, given the TPIRR's newly-constructed status, the proper construction and compaction of its roadbed, the use of a sub-ballast stone roadbed cap to provide both support for loads and proper drainage, the use of proper, well-maintained ditches, and the absence of roadbed failures at former joint locations common to railroads caused by previous use of jointed rail, it is highly unlikely that there will be many surface or line irregularities within the first ten years of the railroad's existence.[18] Most of the surfacing will take place in the areas with the highest number of curves, for which Mr. Crouch has accounted.

2. Communications & Signals Department

The TPIRR's Communications & Signals ("C&S") Department comprises 336 employees. The specific positions and staffing levels for this department are shown in Table 5 below.[19]

Exhibit III-D-3
Table 5
TPIRR Base Year MOW Personnel: Communications & Signals ("C&S")

	Position	Employees		Route Miles Per Employee	
		TPIRR	**CSXT**	**TPIRR**	**CSXT**
	(1)	(2)	(3)	(4)	(5)
1.	General Staff				
	a. Assistant Signal Engineer	4	{{[redacted]}}	1,716	{{[redacted]}}
	b. Assistant Communications Engineer	1	{{[redacted]}}	6,866	{{[redacted]}}
2.	Field Staff				
	a. C&S Supervisors	26	{{[redacted]}}	264	{{[redacted]}}
	b. Signal Maintainers	264	{[redacted]}}	26	{{[redacted]}}
	c. Communications Technicians	41	{{[redacted]}}	167	{{[redacted]}}
3.	Total C&S	336	{[redacted]}}	20.4	{{[redacted]}}
4.	Route Miles	xxx	xxx	6,866	21,000

Sources:
Column(2): e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".
Column(3): e-workpaper "TPIRR CSX 2007 Engineering Dept Employees.xls".
Columns (4) and (5): Line 4 divided by respective position.

[18] Even where existing railroads have continuous welded rail or CWR, it usually has replaced older, jointed rail. Old roadbed damaged by trains running over jointed rail for many years will not be a factor on the TPIRR.

[19] Salaries and compensation amounts can be found in Table 9.

The C&S staffing levels and positions reflect that the TPIRR is designed and built for the projected peak period traffic of the TPIRR. Thus, the C&S Department does not need positions related to long range planning, signal design, electronics design, computer server design, signal construction, new signal installations, or signal system modifications. It does not need to account for staffing and costs related to new signals for new grade crossing projects, which the related governmental agencies pay for and the Public Projects Engineers coordinate. Also, because TPI uses two percent of the cost of constructing the TPIRR's communication system as the cost of C&S maintenance and this figure includes personnel costs, TPI does not include the communications personnel who the two-percent figure covers. This methodology has been used and accepted in past SARR cases.[20]

a. General Office Staff

The head of the C&S Department is the Chief Engineer - Communications & Signals (C&S), who is included in the Headquarters Office Staff (*see* Table 7). This position is responsible for the communications and signals functions, proper testing, performance of necessary maintenance, developing the necessary capital programs to keep the signal and communication equipment functioning reliably, and supervising the outside contractors who maintain the TPIRR's communications equipment, including microwave towers and associated equipment and radios. The Chief Engineer's direct reports are the Assistant Signal Engineers and Assistant Communications Engineer.

[20] *See WFA/Basin II* at 42-43. In addition, both parties in *DuPont* utilize two percent of the cost of constructing the communications system. *See* DuPont Opening Exhibit III-D-3 at 11 (Public); NS Reply at 25 (Public).

Four (4) Assistant Signal Engineers are in charge of supervising the signals function and the associated field personnel. The Assistant Signal Engineers are responsible for supervising the local Signal Supervisors and work with the Chief Engineer to develop annual budgets.

One Assistant Communications Engineer is in charge of supervising the communications function and associated personnel. The Assistant Communications Engineer is responsible for supervising the four Communications Supervisors and also works with the Chief Engineer to develop annual budgets.

b. Field Staff

The field staff is led by 4 Communications and 22 Signal Supervisors (collectively, "C&S Supervisors"). The Signal Supervisors are responsible for field supervision of the Signal Maintainers and are located at Division offices and various Roadmaster locations, as necessary, to supervise the maintainers in their territories. Communications Supervisors oversee the Communications Technicians and are located in each Division office. As mentioned above, in past SARR cases, the annual expense of communications system maintenance has been accepted at a cost of 2% of the capital cost to construct the communications system. The communications system staff on the TPIRR is very limited in size, since this cost of communications system maintenance has been included, and additional staff would be redundant.

i. Signal Maintainers

The TPIRR has 264 Signal Maintainers. This position is responsible for scheduled inspections and routine testing and maintenance of the TPIRR's signal system. The Signal Maintainers repair defective trackside signals that govern train movements and grade-crossing protection devices, and change out broken signal bulbs. The number of Signal Maintainers required is a function of the number of AAR signal units involved.[21] Based on input from TPI Witness Victor Grappone, TPI's Signals & Communications expert, Mr. Crouch has provided one signal maintainer per 1,750 signal units. This is consistent with Mr. Grappone's experience with signal design and maintenance as an employee of the Long Island Railroad. Since the workforce has been based on the number of signal units that maintainer can maintain, accounting for time off and vacations, there is no need for additional staff to cover vacations. Also, Signal Maintainers on adjacent territories and C&S Supervisors can assist with calls on an as-needed basis. One additional signal maintainer is assigned to each hump yard.

ii. Communications Technicians

The TPIRR has 41 Communications Technicians based at the 15 major and 34 minor crew-change locations. The Technician based at the control center (as well as a Signal Maintainer and a General Office IT specialist) are on call if a problem arises in the control center.

3. Bridge & Building Department

The TPIRR's Bridge & Building ("B&B") Department comprises 56 employees. The specific positions for this department are shown in Table 6 below.[22] There are two Managers of bridges (B&B Supervisors) assigned to each of the four MOW Divisions. The Managers of Bridges report to the Chief Engineer – Bridges, who is located at the TPIRR Headquarters. Each Manager has a Bridge Inspector, responsible for annual inspections and special inspections; a B&B Foreman and three B&B Repairmen. Each Division has a bridge crane and Machine Operator for the crane. The Chief Engineer – Bridges can allocate resources as needed to

[21] An AAR signal unit is a measure of the difficulty of maintaining a particular signal device therefore there are more AAR signal units than there are individual signals.
[22] Salaries and Compensation amounts can be found in Table 9.

combine work crews and respond to incidents as necessary. Each Division also has a Public Projects Engineer who manages the consultants performing work on public projects that impact the TPIRR.

Exhibit III-D-3
Table 6
TPIRR Base Year MOW Personnel: Bridge & Building ("B&B")

	Position	Employees TPIRR	Employees CSXT	Route Miles Per Employee TPIRR	Route Miles Per Employee CSXT
	(1)	(2)	(3)	(4)	(5)
1.	General Staff				
	a. Public Projects Engineer	4	{{[redacted]}}	1,716	{{[redacted]}}
2.	Field Staff				
	a. Manager of Bridges (B&B Supervisor)	8	{{[redacted]}}	858	{{[redacted]}}
	b. B&B Inspector	8	{{[redacted]}}	858	{{[redacted]}}
	c. B&B Foremen/Repairmen/Machine Operators	36	{{[redacted]}}	191	{{[redacted]}}
3.	Total B&B	56	{{[redacted]}}	122.6	{{[redacted]}}
4.	Route Miles	xxx	xxx	6,866	21,000

Sources:
Column(2): e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".
Column(3): e-workpaper "TPIRR CSX 2007 Engineering Dept Employees.xls".
Column(4): Line 4 divided by respective position.
Column(5): Line 4 divided by respective position.

The B&B staffing levels and positions reflect that TPI has included a cost of 2% of the capital cost to construct the TPIRR's buildings as the annual expense of building maintenance, which has been done in past SAC cases.[23] It also reflects that all buildings and facilities are new, and should require little to no maintenance in the 10-year life of the TPIRR.

The staffing levels also reflect that the annual maintenance needs of the TPIRR bridges will be all but non-existent for multiple reasons. The bridges are new, have been designed to meet modern 286k loads, and are constructed using only concrete and steel components. The

[23] *See* DuPont Opening Exhibit III-D-3 at 26 (Public) and NS Reply at 259 (Public) in *DuPont*.

bridges will have service lives extending many decades beyond the 10-year life of the TPIRR. Because the TPIRR bridges are designed with long, efficient spans, the hydraulic openings of bridges are improved (fewer bridge bents within the same length of bridge) and accumulation of drift is reduced, lowering maintenance costs.

The TPIRR does not have bridge maintenance staffing similar to CSXT's for good reason. On existing Class 1 operations, there are many types of bridges, many of which were not originally designed for 286k loads. Many existing bridges are masonry, or timber, or are very old structures, requiring more frequent maintenance, member replacement, and many more field personnel than are needed for the TPIRR. Comparing the staff needed for an aging bridge system on the CSXT to the TPIRR's B&B staff, which has been designed specifically for the TPIRR's all-new bridge construction, would not be a reasonable comparison.

The B&B Department staff on the TPIRR is smaller in size also because the use of carpenters is not necessary for building repair or timber bridge component repair. Because all bridges constructed for the TPIRR are new concrete and/or steel structures, with no timber components, there is no need for the personnel, equipment, or management structure normally required for timber bridge maintenance. The Carpenter position and Sheet Metal Worker position are not included for these reasons.

The bridges will have service lives extending many decades beyond the 10-year life of the TPIRR. Because bridges are designed with longer, more efficient spans, the hydraulic openings of bridges are improved (fewer bridge bents within the same length of bridge), accumulation of drift is reduced, and the related maintenance costs are reduced. On existing Class 1 operations, there are many types of bridges, many of which were not originally designed for 286k loads. Many existing bridges are masonry, or timber, or are very old structures, requiring more frequent maintenance, member replacement, and many more field personnel than are needed for the TPIRR. The TPIRR B&B staff has been designed specifically for the new bridge conditions on the TPIRR. Comparing the staff needed for an aging bridge system on the CSXT would not be a reasonable or real world comparison.

a. General Office Staff

The TPIRR's B&B Department is headed by the Chief Engineer – Bridges, who is located at the TPIRR Headquarters (*see* Table 7). The Chief Engineer – Bridges is responsible for inspections and maintenance of the TPIRR's bridges, and for annual building inspections and repairs. Additional overall responsibilities include the preparation of the annual bridge repair budget and the supervision of contractors who perform periodic bridge maintenance and major structural repairs, as well as periodic building maintenance. The local Managers of Bridges assist in the preparation of annual budgets and building maintenance.

There are four Public Project Engineers (one for each of the TPIRR's four (4) MOW Divisions) who are responsible for interfacing with governmental agencies and other entities in handling requests for various types of public projects including rail/highway grade separations, new grade crossings, utility projects, and right-of-way encroachments. They report to the Chief Engineer – Bridges. Since many of the public projects involve grade separation structures as a common practice in the Railroad Industry, the Public Project Engineers work in the Bridge Department and report to the Chief Engineer–Bridges. They also provide engineering expertise and support to the Track Engineers for issues related to such projects in their territory. It is common on Class 1 railroads for Public Project Engineers to have 300 to 350 active projects at any given time. They engage outside engineering consultants to manage individual projects that conform to the railroad's public project policy manual. CSXT and NS both have such manuals. The TPIRR Public Project Engineers will operate in the same manner.

b. Field Staff

The B&B field staff is not large, reflecting the fact that all of the TPIRR's bridges will be constructed using concrete and steel components, resulting in virtually no annual maintenance to the structures—unlike older bridges, many of which were not designed for modern car loads, and bridges with timber components, which are common on existing Class I railroads, including CSXT.

Local TPIRR staff Bridge Inspectors will be responsible for the annual inspection of all TPIRR bridges, and special inspections due to weather, fire, earthquake, or other significant events, including the inspection of moveable bridges, conforming to FRA Bridge Safety Rules (49 CFR Part 214). TPIRR Bridge Inspectors are trained to inspect steel and concrete bridges, as well as the electrical and mechanical operations of moveable bridges. On a five-year cycle, special inspections will be made for designated bridges. The cost of five-year special inspections is addressed below. Maintenance for moveable bridges, such as replacing light bulbs, lubricating moving components, etc. will be performed by B&B personnel.

Since tunnels will be new, there will be little to no maintenance required within the first ten years of the TPIRR operations. Tunnels will be inspected regularly during track inspections, and on an annual basis by the local TPIRR staff Bridge Inspectors.

i. B&B Supervisors

The TPIRR has eight (8) Managers of Bridges (B&B Supervisors), two per division, who report to the Chief Engineer - Bridges. These individuals are located at the headquarters building at each MOW Division office. They are responsible for regular bridge, culvert, and tunnel inspections on their division and for conducting periodic inspections of the TPIRR's other buildings. They assist with and direct inspections and repairs as needed. They also assign minor bridge repairs/maintenance to the B&B Crews or, on occasion, the appropriate Roadmaster to the extent the repairs (such as tightening or restoring missing bolts, clearing drift from bridge piers and cleaning debris from culvert inlets, etc.) are within the capability of the local Track Crews. Major bridge, tunnel, and culvert repairs are contracted out, as are special five-year inspections of special bridges.

ii. Bridge Inspectors and Other Field B&B Employees

The B&B Department's field employees include 8 Bridge Inspectors, who perform annual bridge, culvert, and tunnel inspections as a part of their daily routine, 4 B&B Machine Operators who operate the bridge crane assigned to each Division (one for each Division), and 8 B&B Crews, 2 per Division, that perform routine bridge, tunnel, and culvert maintenance in assigned territories averaging about 858 route miles each, as compared to bridge inspector territories of roughly {{[redacted]}} miles on the existing CSXT system. The B&B Bridge Inspectors are often assisted by the Manager of Bridges, and local crews as needed for special inspections. Each B&B Crew consists of a Foreman, and three crew members (a Welder, a Helper, and a Repairman). These crews perform minor bridge and tunnel repairs to the extent they do not involve major pier or superstructure repairs, which are contracted out.

4. Misc. Administrative/Support Personnel

The TPIRR has 19 engineering administrative and support personnel at the Atlanta Headquarters, in addition to the VP–Engineering (20 total staff), who are dedicated to the various MOW functions. These office personnel, who report to the VP–Engineering, develop and administer the annual MOW budget (including the capital or program budget), interface with contractors performing both program and day-to-day work, and deal with other MOW administrative matters including environmental, safety, and training. These positions are summarized in Table 7 below.[24]

Exhibit III-D-3
Table 7
TPIRR Base Year MOW Personnel: Admin/Support (HQ)

	Position	Employees TPIRR	Employees CSXT	Route Miles Per Employee TPIRR	Route Miles Per Employee CSXT
	(1)	(2)	(3)	(4)	(5)
1.	Admin/Support (HQ)				
a.	Vice President – Engineering	1	{{[redacted]}}	6,866	{{[redacted]}}
b.	Chief Engineer, Track	1	{{[redacted]}}	6,866	{{[redacted]}}
c.	Chief Engineer, Bridges	1	{{[redacted]}}	6,866	{{[redacted]}}
d.	Director of Environmental Operations	1	{{[redacted]}}	6,866	{{[redacted]}}
e.	Environmental Engineer	1	{{[redacted]}}	6,866	{{[redacted]}}
f.	Chief Engineer – C&S	1	{{[redacted]}}	6,866	{{[redacted]}}
g.	Engineer of Programs and Contracts	1	{{[redacted]}}	6,866	{{[redacted]}}
h.	Manager Administration & Budgets	1	{{[redacted]}}	6,866	{{[redacted]}}
i.	Manager Safety /Training	1	{{[redacted]}}	6,866	{{[redacted]}}
j.	Manager of Welding & Grinding	1	{{[redacted]}}	6,866	{{[redacted]}}
k.	Manager of Work Equipment	1	{{[redacted]}}	6,866	{{[redacted]}}
l.	Call Desk C&S MOW Coordinator Dispatch	4	{{[redacted]}}	1,716	{{[redacted]}}
m.	Administrative Assistants/Clerks	5	{{[redacted]}}	1,373	{{[redacted]}}
n.	Total Admin/Support (HQ)	20	{{[redacted]}}	343	{{[redacted]}}
2.	Route Miles	xxx	xxx	6,866	21,000

Sources:
Column(2): e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".
Column(3): e-workpaper "TPIRR CSX 2007 Engineering Dept Employees.xls".
Columns (4) and (5): Line 4 divided by respective position.

Between the HQ workforce, and the Division management and support staff, there is no need for additional employees that might be required for a larger railroad and larger workforce. Because the TPIRR was designed and constructed to handle the proposed traffic and the annual maintenance is contracted, there is no need for system rail laying crews, timber and surfacing

[24] Salaries and compensation amounts can be found in Table 9.

crews, unnecessary system crew roadway equipment,[25] industrial development engineers or managers, GIS and mapping, track design, bridge design, signal design, and a host of other functions that might otherwise be required on a Class 1 railroad today. The HQ and Division workforce has sufficient staff to assist in the managerial and cost-accounting duties, operating and capital budgets, and maintenance of information systems.[26]

TPIRR, like many railroads, engages consultants such as Omega Rail Management, to manage their real estate leases, licenses, and sales, reducing the need for railroad employees, while creating additional revenue for the railroad, which more than offsets the fees paid to the consultants.

a. Chief Engineers

As discussed in the related sections for Track, Bridges and C&S Departments, a Chief Engineer is responsible for the maintenance, safety, budgets, resource management, and other functions of their respective departments (Chief Engineer – Track, Chief Engineer – Bridges, and Chief Engineer – C&S). They submit annual budgets for approval by the VP–Engineering and other senior management, and directly supervise their division level managers. The Chief Engineers report to the VP–Engineering.

b. Engineer Programs and Contracts

The Engineer Programs and Contracts is responsible for implementation and monitoring of the TPIRR's contracts for program and other maintenance, as well as preparing the Engineering Department's overall budget for approval by the VP–Engineering and other senior management. This position reports to the VP–Engineering and works with the Chief Engineers

---

[25] Including, for example, spike pulling machines, tie inserters, rail anchor applicators, and ballast regulators.
[26] *See* e-workpapers "TPI MOW Plan Methodology.doc", "TPIRR CSX 2007 Engineering Department Employees for TPI.xls", and "CSXT Employee Data from 2010 Sorted.xls."

and division managers as necessary to ensure that contract requirements and specifications meet the maintenance, safety, planning, schedule, and budget needs of each group within the MOW department. He also works with the Manager Administration and Budgets to engage suppliers and vendors.

c. Manager Administration & Budgets

The Manager Administration & Budgets interfaces with the Human Resources Department with respect to hiring MOW employees. He also assists the Engineer Programs and Contracts in preparing the annual Engineering/MOW budget and compiling budget requests from each Chief Engineer and is responsible for the MOW payroll and monitoring/payment of contractor invoices.[27] The budget process starts at the Field Supervisor level, with budget requests submitted by managers such as the Track Engineers, Managers of Bridges, and C&S Engineers to their respective Chief Engineers. This position reports to the VP–Engineering.

d. Director of Environmental Operations

The Director of Environmental Operations interfaces with federal and state environmental authorities on compliance, and monitors environmental compliance with respect to the TPIRR's MOW activities. He also manages the vegetation control program for the Track Department and is responsible for MOW employee training and compliance with Hazmat practices and procedures. Since there are no past fueling facilities, there is not the same need on the TPIRR for environmental monitoring that existing Class 1 railroads are required to perform. This position reports to the Chief Engineer – Track. The Director of Environmental Operations

---

27 The TPIRR's purchasing function has been centralized in a four-person Budgets & Purchasing section within the Finance & Accounting Department, discussed in Exhibit III-D-2. However, the purchasing for the MOW function is coordinated by the Manager Administration & Budgets.

supervises one employee, an Environmental Engineer, who assists the Director in the execution of his duties.

e. Manager of Safety and Training

The Manager of Safety and Training is responsible for coordinating safety training and rules training for MOW personnel, monitoring record keeping on the division level, ensuring compliance with both TPIRR safety rules and FRA regulations regarding Roadway Worker Protection, Bridge Worker Safety Rules, etc. This individual works closely with each Track Engineer, C&S Supervisor, and Manager of Bridges to ensure that all employee training is performed within the required timeframe, and that records are properly kept. This position reports to the VP–Engineering.

f. Administrative Assistants/Clerks

There are five (5) Administrative Assistant/Clerks assigned to the HQ staff, to assist the VP–Engineering, and the three Chief Engineers. Additional responsibilities include providing support as needed to the Engineer Programs and Contracts, Manager of Administration and Budgets, the Director of Environmental Operations, the Manager of Welding and Grinding, and the Manager of Work Equipment, and to assist with secretarial and other routine administrative duties.

g. Manager of Welding and Grinding

The Manager of Welding and Grinding is responsible for the management of the TPIRR's rail grinding program, and for the management of the Welder / Helper crews that are assigned to cover roughly two Roadmaster territories, each, and manages all electric and Thermite welding, and coordinates rail grinding programs with the Track Engineer. Since all track on the TPIRR is constructed new, with new ties, new rail, new turnouts, and new railroad at-grade crossings, the maintenance needs with respect to spot welding and grinding will be much less than on the existing CSXT system, where rail age and rail conditions are substantially worse due to age and tonnage over the lines. This position reports to the Chief Engineer – Track.

h. Manager of Work Equipment

The Manager of Work Equipment is responsible for managing the equipment leases for MOW vehicles, as well as managing the four Roadway Equipment Mechanics (listed within the Track Department herein), and coordinates new vehicle acquisition. This position reports to the Chief Engineer–Track. It plans, coordinates, and supervises the maintenance and repairs for all railroad equipment, maintains records for equipment, maintains an inventory of replacement parts for equipment, and coordinates equipment leases, warranties, repairs, and renewals. This position is responsible for safety training and training for mechanics. Note that the TPIRR does not own and maintain system crews for rail and tie replacement, so the sheer quantity of roadway equipment is much smaller than on the existing CSXT system.

i. Call Desk Operator

The Call Desk Operators are located at the Control Center, and are responsible for recording and reporting incidents and calling field supervisors and personnel to react to incidents on the TPIRR system. There are four employees who rotate shifts to man the Control Center full time. This position reports to the Chief Engineer - Signals.

5. TPIRR Total Maintenance of Way Operating Staff and Compensation

As previously stated and shown above, Mr. Crouch compared the number the TPIRR MOW staffing levels to the equivalent CSXT positions enumerated in discovery materials as a last check to ensure that the proposed staffing for the TPIRR was consistent with the incumbent CSXT railroad and that of "real world" railroad operations.

a. Comparison of Existing CSXT and Proposed TPIRR MOW Staff Levels

Table 8 below summarizes the present TPIRR MOW and CSXT MOW staffing levels by employee positions, the number of employees per position, and how they compare on a route mile basis.

Exhibit III-D-3
Table 8
Comparison of Existing CSXT MOW Staff to the Proposed TPIRR MOW Staff

No. of Employees in Current CSXT Positions (1)	CSXT Route Miles per Employee 1/ (2)	CSXT Employee Positions (Combined 2007 and 2010 Data) (3)	TPIRR Position Name (Corresponding Positions) (4)	No. of Employees in the TPIRR (5)	TPIRR Route Miles per Employee 1/ (6)
{{[redacted]}}	{{[redacted]}}	Roadmasters, Total (Including Roadmaster I and II)	Roadmaster	51	135
{{[redacted]}}	{{[redacted]}}	Assistant Roadmaster	Assistant Roadmaster	51	135
{{[redacted]}}	{{[redacted]}}	Manager Work Equipment (Office and Field - Includes system gangs	Manager Work Equipment	1	6,866
{{[redacted]}}	{{[redacted]}}	Manager Welding	Manager of Welding & Grinding	1	6,866
{{[redacted]}}	{{[redacted]}}	Public Projects Managers & Supervisors	Public Projects Engineers	4	1,716
{{[redacted]}}	{{[redacted]}}	Manager Contract Services	Engineer of Programs and Contracts	1	6,866
{{[redacted]}}	{{[redacted]}}	Mgr Engineering Programs	Manager Administration & Budgets	1	6,866
{{[redacted]}}	{{[redacted]}}	Manager Practices and Training	Manager Safety/Training	1	6,866
{{[redacted]}}	{{[redacted]}}	Director Environmental Services	Director Environmental Services	1	6,866
{{[redacted]}}	{{[redacted]}}	Environmental Engineer	Environmental Engineer	1	6,866
{{[redacted]}}	{{[redacted]}}	Mgr. Signal - Current System	C&S Supervisor	22	312
{{[redacted]}}	{{[redacted]}}	Mgr. Bridges - Current CSX System	Manager Bridges (B&B Supv.)	8	858
{{[redacted]}}	{{[redacted]}}	Engineer Track	Position not needed for the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Division Engineer	Track Engineer	4	1,716
{{[redacted]}}	{{[redacted]}}	Assistant Division Engineer	Assistant Track Engineer	4	1,716
{{[redacted]}}	{{[redacted]}}	Division Signal Engineer	Assistant Signal Engineer	4	1,716

Exhibit III-D-3
Table 8
Comparison of Existing CSXT MOW Staff to the Proposed TPIRR MOW Staff

No. of Employees in Current CSXT Positions (1)	CSXT Route Miles per Employee 1/ (2)	CSXT Employee Positions (Combined 2007 and 2010 Data) (3)	TPIRR Position Name (Corresponding Positions) (4)	No. of Employees in the TPIRR (5)	TPIRR Route Miles per Employee 1/ (6)
{{[redacted]}}	{{[redacted]}}	Dir. Communications	Assistant Communications Engineer	1	6,866
{{[redacted]}}	{{[redacted]}}	Communications Managers	C&S Supervisor, Communications	4	1,716
{{[redacted]}}	{{[redacted]}}	Call Desk Operators	Call Desk C&S MOW Coordinator Dispatch	4	1,716
{{[redacted]}}	{{[redacted]}}	Signal Maintainers	Signal Maintainers	264	26
{{[redacted]}}	{{[redacted]}}	Welder Helper	Welders & Helpers & Grinders	52	132
{{[redacted]}}	{{[redacted]}}	Contract MOW Foremen	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Smoothing Crew and Ditching Crew Foremen not listed separately on CSXT	Smoothing Crew and Ditching Crew Foremen	33	208
{{[redacted]}}	{{[redacted]}}	Track Foremen	Track Crew Foreman	102	67
{{[redacted]}}	{{[redacted]}}	Track Inspectors	Track Crew Member + Assistant Roadmaster	51	67
{{[redacted]}}	{{[redacted]}}	Motor Vehicle Operators	Track Crew Member (Laborer)	269	26
{{[redacted]}}	{{[redacted]}}	Mgr Electronics Engineering	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Mgr Facilities	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Machine Operators - existing - some are on system gangs	Roadway Machine Operators, including Smoothing Crews and Ditching Crews	105	65
{{[redacted]}}	{{[redacted]}}	General Clerks	Administrative Assistant Clerks	5	1373
{{[redacted]}}	{{[redacted]}}	Field Clerks	Administrative Assistant Clerks	8	858
{{[redacted]}}	{{[redacted]}}	C&S Gang Foremen	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Diesel mechanics	Roadway Equipment Mechanics	4	1716
{{[redacted]}}	{{[redacted]}}	C&S Foremen	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Bridge Tenders	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Assistant Signal Worker	Not a necessary position on the TPIRR	0	N/A

Exhibit III-D-3
Table 8
Comparison of Existing CSXT MOW Staff to the Proposed TPIRR MOW Staff

No. of Employees in Current CSXT Positions (1)	**CSXT Route Miles per Employee 1/** (2)	**CSXT Employee Positions (Combined 2007 and 2010 Data)** (3)	**TPIRR Position Name (Corresponding Positions)** (4)	**No. of Employees in the TPIRR** (5)	**TPIRR Route Miles per Employee 1/** (6)
{{[redacted]}}	{{[redacted]}}	Brg/Bldg Repair	B&B Foremen, Machine Operators, and Repairmen	36	191
{{[redacted]}}	{{[redacted]}}	Carpenters	Not a necessary position on the TPIRR	0	N/A
{{[redacted]}}	{{[redacted]}}	Communications Maintainer / Tech	Communications Technicians	41	167
{{[redacted]}}	{{[redacted]}}	Sheet metal workers	This responsibility is under B&B staff	0	N/A
{{[redacted]}}	{{[redacted]}}	Secretary	This position is under Admin Clerks	0	N/A
{{[redacted]}}	{{[redacted]}}	Bridge Inspectors from CSX 2010 Data	Bridge Inspectors	8	858
{{[redacted]}}	{{[redacted]}}	VP–Engineering	VP–Engineering	1	6,866
{{[redacted]}}	{{[redacted]}}	Chief Engineer MOW North and South	Chief Engineer - Track	1	6,866
{{[redacted]}}	{{[redacted]}}	Chief Engineer, Signals, Communications	Chief Engineer - C&S	1	6,866
{{[redacted]}}	{{[redacted]}}	Assistant Chief Engineer - Structures	Chief Engineer - Bridges	1	6,866

1/ See e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

b. TPIRR Employee Salaries and Compensation

Table 9 below summarizes the TPIRR MOW staff and the applicable annual salaries. Salaries for the TPIRR's MOW personnel are based on the salaries paid by CSXT to MOW personnel as shown in CSXT's 2010 Wage Forms A and B.[28] The total annual salaries for these MOW personnel in the Base Year (excluding fringe benefits) equals $82,045,244.

[28] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

Exhibit III-D-3
Table 9
TPIRR Employee Salaries & Compensation

Position	No. of Employees	Salary	Total Compensation
(1)	(2)	(3)	(4)
Vice President - Engineering	1	$628,045	$628,045
Chief Engineer, Track	1	{{[redacted]}}	{{[redacted]}}
Track Engineer	4	{{[redacted]}}	{{[redacted]}}
Asst. Track Engineer (Field Prod.)	4	{{[redacted]}}	{{[redacted]}}
Chief Engineer, Bridges	1	{{[redacted]}}	{{[redacted]}}
Public Project Engineer	4	{{[redacted]}}	{{[redacted]}}
Manager Bridges (B&B Supervisor)	8	{{[redacted]}}	{{[redacted]}}
Director of Environmental Operations	1	{{[redacted]}}	{{[redacted]}}
Environmental Engineer	1	{{[redacted]}}	{{[redacted]}}
Chief Engineer - Communications & Signal	1	{{[redacted]}}	{{[redacted]}}
Asst. Communications Engineer	1	{{[redacted]}}	{{[redacted]}}
Asst. Signal Engineer	4	{{[redacted]}}	{{[redacted]}}
Engineer of Programs and Contracts	1	{{[redacted]}}	{{[redacted]}}
Manager Administration & Budgets	1	{{[redacted]}}	{{[redacted]}}
Manager Safety/Training	1	{{[redacted]}}	{{[redacted]}}
Manager of Welding & Grinding	1	{{[redacted]}}	{{[redacted]}}
Manager of Work Equipment	1	{{[redacted]}}	{{[redacted]}}
Call Desk C&S MOW Coordinator Dispatch	4	{{[redacted]}}	{{[redacted]}}
Administrative Assistants/Clerks	13	{{[redacted]}}	{{[redacted]}}
Roadmaster (Field Maint. Supv)	51	{{[redacted]}}	{{[redacted]}}
Assst Roadmasters (Asst. Field Maint. Supv.)	51	{{[redacted]}}	{{[redacted]}}
Track Crew Foremen	102	{{[redacted]}}	{{[redacted]}}
Track Crew Members	306	{{[redacted]}}	{{[redacted]}}
Roadway Machine Operators	55	{{[redacted]}}	{{[redacted]}}
Welders & Helpers & Grinders	52	{{[redacted]}}	{{[redacted]}}
Rail Lubricator Repairman/Maintainer	14	{{[redacted]}}	{{[redacted]}}
Roadway Equipment Mechanic	4	{{[redacted]}}	{{[redacted]}}
Ditching Crew Foreman	16	{{[redacted]}}	{{[redacted]}}
Ditching Crew Member	16	{{[redacted]}}	{{[redacted]}}
Smoothing Crew (Spot) Foreman	17	{{[redacted]}}	{{[redacted]}}
Smoothing Crew Machine Operators	34	{{[redacted]}}	{{[redacted]}}
Signal Maintainers	264	{{[redacted]}}	{{[redacted]}}
Communications Technicians	41	{{[redacted]}}	{{[redacted]}}
Bridge Inspectors	8	{{[redacted]}}	{{[redacted]}}
Bridge - Machine Operators	4	{{[redacted]}}	{{[redacted]}}
Bridge & Building Foreman	8	{{[redacted]}}	{{[redacted]}}
B&B Repairmen / Welders, and Helpers	24	{{[redacted]}}	{{[redacted]}}
C&S Supervisors	26	{{[redacted]}}	{{[redacted]}}
Total TPIRR MOW Personnel	1,146	$3,403,764	$82,045,244

Source: "Exhibit III-D-3 CSX TPI MOW.xlsx"

B. NON-PROGRAM MOW WORK PERFORMED BY CONTRACTORS

While the TPIRR's in-house MOW forces handle most day-to-day routine and spot maintenance of the TPIRR's track and facilities, it is more cost-effective to contract out some maintenance work that is treated as operating expense. The treatment of such contracted work by TPI's MOW experts is consistent with the approach approved by the Board.[29]

This contracted work includes (1) planned (or routine) maintenance that can be scheduled on a regular basis, (2) unplanned maintenance, and (3) large magnitude unplanned maintenance.

The costs associated with the contract work performed in these areas of maintenance are summarized in Table 10 and described below.

[29] *See WFA/Basin I* at 69-73.

Exhibit III-D-3
Table 10
TPIRR Base Year Non-Program Contract Costs

Position (1)	Total Costs (2)
1. Planned Contract Maintenance	
a. Track Geometry Testing	{{[redacted]}}
b. Ultrasonic Rail Testing	{{[redacted]}}
c. Rail Grinding	$7,128,606
d. Yard Cleaning	{{[redacted]}}
e. Vegetation Control	{{[redacted]}}
f. Crossing Repaving	{{[redacted]}}
g. Equipment Maintenance	{{[redacted]}}
h. Comm. Sys. Inspect & Repair	{{[redacted]}}
i. Bridge Inspections	{{[redacted]}}
j. Bldg. Maintenance	$2,945,267
2. Unplanned Contract Maintenance	
a. Snow Removal	$0
b. Storm Debris Removal	$100,000
3. Large Magnitude Unplanned Maint.	
a. Derailments and Clearing Wrecks	$14,429,225
b. Washouts	$100,000
c. Environmental Cleanups	$100,000
4. Total	$76,705,980

Source: e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

1. Planned Contract Maintenance

Routine work is scheduled on a regular basis that is not performed frequently enough to justify the TPIRR's investment in the equipment and personnel required for it (such as track geometry and ultrasonic rail testing and rail grinding).

a. Track Geometry Testing

Track geometry testing is included in routine maintenance. The frequency of such testing is a function of the annual gross tonnage moving over each line segment of the track and determines whether or not the track meets all FRA standards in terms of alignment, gauge and profile. Track geometry test results are used to prioritize work to be performed by the

Smoothing Crews. Geometry testing is required with varying frequency depending on the annual gross tonnage moving over various portions of the TPIRR. Generally, track carrying between five (5) and thirty (30) million gross tons ("MGT") per year is tested once per year, track carrying 30 to 60 MGT is tested twice per year, and track carrying more than 60 MGT is tested three times per year. These frequencies are consistent with FRA standards.[30] The frequencies for testing above 30 MGT are conservative for a newly-constructed railroad that has better roadbed compaction, drainage, ballast and sub-ballast, rail and timber. This means the track structure will hold up better than average. The TPIRR also has no roadbed damage from previous use of jointed rail, where low joints developed.

The cost for track geometry testing is {{[redacted]}} per track mile. This amount is based on data provided by CSXT in discovery. The total annual miles of testing and the related cost calculations are included in the workpapers accompanying this opening evidence.[31]

b. Ultrasonic Rail Testing

Ultrasonic rail testing is important in preventing derailments because it helps reveal internal rail defects that could cause disruptions in the TPIRR's operations. FRA regulations[32] require testing rail in Class 3 track, over which passenger trains do not operate, for internal defects at least once every 30 MGT or once a year, whichever interval is shorter, and similar testing of Class 4 through 5 track at least once every 30 MGT or once a year, whichever interval is shorter. TPI expert Crouch used testing frequencies based on recommendations from an FRA

30 *See* e-workpaper "Testing frequency is based on recommendations from an FRA working group meeting on 03/18/2010; e-workpaper "Track Safety Standards Presentation.pdf", and "Exhibit III-D-3 CSX TPI MOW.xls".

31 *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

32 *See* 49 CFR § 213.237.

working group meeting on March 18, 2010.[33] Consistent with these standards, the TPIRR will conduct ultrasonic rail testing at least once a year on all of its main lines and sidings, twice a year on track carrying between 30 and 60 MGT, and three times a year on track carrying over 60 MGT. This is more than adequate given that the TPIRR starts operations with all new rail on its mainline tracks and sidings. The miles by tonnage category used in the calculation of miles tested and the related costs were taken from output from the final RTC model runs for the TPIRR

Based on data provided by CSXT in discovery, the average cost for ultrasonic rail testing in 2010 was {{[redacted]}} per track mile for each pass over the track with the test car.[34] The total annual miles of ultrasonic testing and the related cost calculations are included in the workpapers accompanying this opening evidence.[35]

c. Rail Grinding

CSXT did not provide historical rail grinding costs in discovery. CSXT did, however, provide the number of track miles of rail grinding in discovery for several calendar years (CSXT discovery files "2007 Blue Book.xls", "2008 Blue Book.xls", "2009 Blue Book.xls", and "2010 Blue Book.xls"). Rail grinding is a part of some Class I railroads' MOW plans because they determine necessity based on traffic, tonnage, rail characteristics, and the potential to extend the service life of the rail. Studies have indicated that premium rail in high-density territory, even with heavy curves, can withstand well in excess of 150 MGT without the need for grinding.[36] Here, 136-pound premium CWR rail is being used on the TPIRR's main tracks, on curves of 3 degrees or more, and where annual gross tonnage is greater than 20 MGT. This rail is extremely

[33] *See* e-workpaper "Track Safety Standards Presentation.pdf".
[34] *See* CSXT Discovery file "Rail Testing.pdf."
[35] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls."
[36] *See* Kevin Sawley, Transportation Technology Test Center Inc., Report 928, "North American Rail Grinding Practices and Effectiveness," August 1999; *Railway Track and Structures*, December 2000, page 15.

durable under heavy loads. To be conservative, however, the TPIRR will rail-grind every 100 MGT in the curve areas with premium rail. Consistent with the approach used in *WFA/Basin I*, rail grinding will be performed every 30 MGT in other curves and every 60 MGT for tangent track. Tangent rail and rail in curves less than three (3) degrees receive one pass, and rail in curves equal to or greater than three degrees receive two passes. Switches, rail crossings (diamonds), and rail located in at-grade road crossings will also be ground at the same time that normal rail grinding is performed.

The cost allotted for rail grinding is $700.00 per mile. Cost of grinding per mile was taken from *The Art and Science of Rail Grinding*, by Allan M. Zarembski (the Founder of Zeta-Tech), August 2005.[37] An average higher bracket cost per mile was used for areas with good track time availability ($400/mile) and for areas with poor track time availability ($1,000/mile), and an average of the two costs was used ($700/mile), based on cost data from information provided by CSXT in discovery. The total miles of grinding and the related cost calculations are included in the workpapers accompanying this opening evidence.[38] Switch grinding has been included in the total rail grinding quantity.

In *WFA/Basin I*, the Board treated the cost of rail grinding as an operating expense.[39] However, because CSXT capitalizes this expense the TPIRR will as well.[40] Therefore annual rail grinding is not included in the annual MOW expense.

---

[37] *See* e-workpaper "Zarembski – railgrinding.pdf."
[38] *See* e-workpaper "Exhibit CSX TPI MOW.xls".
[39] *See WFA/Basin I* at 71.
[40] *See* discussion of treatment of rail grinding in Part III-H.

d. Yard Cleaning

The TPIRR's yards are newly constructed, and will require little yard cleaning within the first ten years of operation. Yards will be cleaned periodically in order to ensure that debris does not affect railroad operations. The cost of yard cleaning required for CSXT's yards is {{[redacted]}} based on data received from CSXT in discovery.[41] TPI's experts conservatively applied a ratio of CSXT annual spending per CSXT route mile to the TPIRR route miles to develop an annual cost for the TPIRR. The total annual cost for yard cleaning is {{[redacted]}}.

e. Vegetation Control

Weed spraying, brush cutting, and mowing are necessary to prevent overgrowth into the rail bed or other structures, which can cause a safety hazard. The most critical vegetation control has to do with the ballast section. If vegetation is allowed to flourish in the ballast section, it will soon foul the ballast and interfere with the most important function of ballast, which is to permit water to drain from the track structure, uninterrupted. If water is allowed to be retained in the track structure it can reduce tie life and destabilize the track structure, thus increasing the risk of track geometry defects and subsequent derailments. Vegetation control also is critical at grade crossings for the safety of both train operations and the traveling public.

The TPIRR's requirements for vegetation control work are based primarily on the climate conditions and annual rainfall in the geographic areas in which it lies. The areas in which the TPIRR is located south of Kentucky and Virginia receive considerably more precipitation per year than the areas in and north of those states, and have a longer growing season. As a result,

---

[41] Annual cost for yard cleaning based on information provided by CSX in discovery in e-workpaper "Rail Testing.pdf"

weed spraying is needed once a year in the northerly areas and twice a year in the southerly areas (Tennessee/ North Carolina and States to their south).

The annual cost for vegetation control is based on a prorated value from CSXT's data provided in discovery,[42] which included costs for vegetation and brush control at grade crossings and line-of-road vegetation control for all tracks on the CSXT system. The total cost per mile for vegetation control is {{[redacted]}}.[43]

Using the CSXT annual cost comparison is a very conservative approach since very little brush-cutting will be required because the TPIRR's right-of-way will be cleared during construction and weed spraying will greatly inhibit the growth of brush. Brush or weeds may tend to accumulate near road grade crossings; the TPIRR's dozers will be used as needed to keep the right-of-way cleared around road crossings where contracted vegetation control work is not sufficient.

f. Crossing Repaving

Highway grade crossings must be repaved periodically. Asphalt pavement is used with treated hardwood crossing timbers in public grade crossings. The life of asphalt pavement is largely a function of road traffic, at least beyond 24 inches outside each rail, although rail traffic is also a factor within the crossing zone proper. A typical pavement application will last ten (10) to twelve (12) years, or longer. Consequently, there should be little need for the TPIRR to begin paving activities immediately. However, to be conservative, and consistent with the approach used in the DCF model, Mr. Crouch has assumed that paving would begin in the TPIRR's first year of operations. Because the paving should last at least ten (10) years, Mr. Crouch assumed

---

[42] *See* e-workpaper Annual cost for vegetation control based on information provided by CSXT in discovery in e-workpaper "Rail Testing.pdf".

[43] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

that ten (10) percent of the total crossing paving quantity would be re-paved each year. The total cost of crossing paving is just over $4 million annually. This amount is capitalized as it is performed in conjunction with the annual capital (renewal) program.[44]

g. Shoulder Ballast Cleaning

Occasional shoulder ballast cleaning is performed on some railroads where airborne fine particles have accumulated over the years, or where dust from certain commodities has settled over time in the roadbed section. Machinery is used to cut away the ballast at the ends of crossties, in the ballast shoulder, and the material is shaken to sift the accumulated dirt from the ballast, and return the cleaned ballast to the shoulder areas. Shoulder ballast cleaning is intended to allow storm water to percolate through the ballast to drain the track area. There is no evidence to suggest that CSXT cleans newly constructed track within the first ten (10) years of operation. Where track has been in operation for some time, ballast cleaning may be desired on a ten-year cycle.

CSXT did not provide cost data for shoulder ballast cleaning in discovery. Based on the discovery information CSXT did provide, the current operation cleans an average of 2,740 miles of shoulders each year. TPI asserts that this function is not necessary on the newly constructed TPIRR.

h. Equipment Maintenance

Daily inspection and simple maintenance tasks for roadway machines is performed by the individual machine operator. This is typical in the railroad industry. Normal maintenance of company leased equipment is contracted out, although the TPIRR has four (4) in-house

---

44 *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

mechanics that perform routine maintenance and repairs to the basic equipment used by the field track forces. The equipment that is maintained by contractors includes rubber-tired backhoes, hi-rail trucks, dozers, Gradalls and trackhoes, ballast regulators, tampers, hydraulic tool sets, air compressors, and certain power hand tools. The TPIRR's mechanics are prepared and equipped to perform preventive maintenance and straightforward repairs to this equipment.

Based on Mr. Crouch's experience, the cost of annual maintenance of the TPIRR's equipment is five (5) percent of its purchase price.[45]

i. Communications System Inspection and Repair

Periodic inspection and planned maintenance of the TPIRR's communications system, which is described in detail in Part III-F-6, is performed by contractors. The TPIRR's communications system includes microwave towers and LMR radio facilities, which are inspected annually.

Communications maintenance and inspection costs are normally a component of maintenance agreements for communications systems entered into at the time of installation. In *WFA/Basin I*, the complainant proposed and the Board accepted a communications system maintenance cost of two (2) percent of original purchase cost. Based on Mr. Crouch's experience, this percentage is reasonable, and it has been applied to the TPIRR's communications-equipment acquisition costs developed by TPI Witness Kruzich. The result is an annual cost of contracted repairs to the TPIRR's communications facilities of {{[redacted]}}.[46]

---

[45] CSXT did not provide any information on its annual equipment maintenance costs in discovery, and Mr. Crouch believes the 5 percent figure is reasonable. *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

[46] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

j. Bridge Inspections

As described earlier, the TPIRR's Bridge and Building ("B&B") Supervisors and B&B Inspectors perform annual bridge, culvert, and tunnel inspections conforming to FRA Bridge Safety Rules as part of their duties, including annual inspections of all bridges. However, the TPIRR's major river bridges require additional, special bridge inspections on a five-year cycle to assess integrity and maintain compliance with FRA rules. These special inspections are performed by professional outside contractors in the company of one of the B&B Inspectors, using specialized equipment. These special inspections involve careful examination of the substructure and superstructure of each bridge. The bridges will be new at start-up, and will be inspected on a five-year schedule by the outside contractors in addition to the annual inspections by the TPIRR's B&B department. Diving inspections are not required since bridge designs incorporate scour design. Mr. Crouch applied an average cost of $4.79 per track foot of bridge length for contractor inspection, which is based on a total of 76,123 track feet of bridges. On a five-year cycle, the annual cost of inspecting major bridges using contracted inspections is $72,923.[47]

k. Building Maintenance

All of the TPIRR's buildings are new at start-up, so only occasional routine maintenance is required. Other than general plumbing and electrical repairs over time, the other sources of maintenance expense are HVAC systems, which generally require semi-annual inspections and maintenance which is performed by contractors (as is occasional outside maintenance). CSXT did not provide any information for building maintenance costs so Mr. Crouch developed an

---

[47] *Id.*

annual cost of $2,945,267 for contract building maintenance, which is based on two (2) percent of the total building cost.[48]

2. Unplanned Contract Maintenance

Experience teaches us that certain maintenance will be needed that does not occur at regular intervals and is more economically handled by contractors who have the requisite expertise and specialized equipment (such as snow and storm debris removal and bridge superstructure repairs).

a. Snow Removal

The TPIRR's northern terminals will require occasional snow removal. Snow removal activity is performed by the TPIRR's field maintenance personnel as a normal winter task since they are not as busy in the winter as in the summer in the areas where snowstorms are likely.

All main track switches in the Northern Region are equipped with switch heaters. The Ballast regulators to be purchased for the Northern Region are all equipped with snow removal attachments. These ballast regulators are run by Smoothing Crew members who are not as busy in the winter in these areas. CSXT did not provide any data on snow removal costs in discovery. Therefore, TPI did not include any snow removal costs.

b. Storm Debris Removal

There will be infrequent occasions where severe winds bring down trees or scatter debris on the right of way and infrequent ice storm damage during winter conditions in the northerly parts of the TPIRR system. Depending on the severity and extent of the damage, outside contractors will be called upon to clean up the debris. In-house MOW forces will be available to assist, but the TPIRR will not staff for this eventuality. CSXT did not provide any information

---

48 *Id.*

in discovery on storm debris removal costs. Based on his experience with weather conditions in the geographic regions where the TPIRR is situated, Mr. Crouch has provided $100,000 annually for this activity.[49]

c. Building Repairs

As described earlier, all of the TPIRR's buildings are new. Nevertheless, the buildings will require the occasional unplanned repair. Typical occurrences include storm damage, water and sewer line repairs, electrical failure, HVAC repairs, etc. In Mr. Crouch's experience, unplanned annual expense for building maintenance generally is subsumed within the general building maintenance costs described above.

3. Large Magnitude Unplanned Maintenance

These are events requiring more people or specialized equipment than the TPIRR has because of the infrequency and unusual nature of the events (such as repairing the track structure after a major derailment or washout).

a. Derailments and Clearing Wrecks

A new railroad constructed to modern standards is less likely to experience a major derailment than the older plant of existing railroads. According to Dr. Allan M. Zarembski in *The Art and Science of Rail Grinding*,[50] using derailment data from the years 1999, 2000, and 2001, track geometry and rail related derailments account for 80% of the total number of derailments. <u>From the data provided, it is clear that track geometry defects are the leading cause of derailments, followed by rail, joint bar, and anchors defects, then by mechanical component defects.</u> Since the TPIRR is newly constructed, having all-new rail and other track components

---

[49] *Id.*

[50] *The Art and Science of Rail Grinding*, Zarembski, p. 232, Table 7-1. This page is included as e-workpaper "Zarembski – derailment cause data.pdf."

and new roadbed will result in a great reduction in the number of derailments annually. The remaining derailments are related to mechanical conditions of rolling stock including wheels, axles, and bearings.

Removing rolling stock/lading and restoring the track structure after a major derailment usually involves considerable work requiring heavy equipment. Today, few railroads use in-house staff to repair the track after such derailments without assistance from a contractor. In fact, most Class I railroads no longer have auxiliary forces dedicated to derailment response. These carriers rely primarily on contractors to respond to such occurrences because it is not cost-effective to have a separate complement of employees and heavy equipment on standby to deal with infrequent major derailments. TPIRR will also rely on contractors for this service.

The TPIRR's average annual cost for clearing wrecks is $4.35 million, and the cost associated with derailments is $10.08 million.[51] Given the TPIRR's brand-new network at start-up (including the fact that it did not replace older, jointed rail with CWR but starts operations with CWR on all of its main tracks) and considering that it moves only complete trains, the TPIRR certainly should not incur a greater expense for derailments than the real-world CSXT does. When the estimated cost of clearing wrecks[52] is added, the TPIRR's total annual cost for derailments and clearing wrecks is $14,429,225.

b. Washouts

Again, a new railroad roadbed/track structure is not as prone to washouts as older, real-world railroad roadbed that may have experienced previous water-related damage, where ditches have not been maintained, culverts have become clogged with sediment or cut brush, or brush is

---

[51] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls" worksheets "Cost – Derailments" and "Cost – Clearing Wrecks".

[52] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls" "Cost – Clearing Wrecks" worksheet.

allowed to accumulate in ditches, causing washouts. Nevertheless, washouts may occur – for example, when a culvert through the sub-grade becomes blocked, preventing the flow of water. This blockage can be caused by melting ice, snow or severe rainstorms that cause heavy runoff to move against the right of way. Floating debris at the upstream ends of some culverts can also prevent them from serving their intended purpose.

Based on Mr. Crouch's experience with railroad maintenance on Southern Railway, Norfolk Southern Railway, and many short line railroads in the eastern United States; the geographic regions served by the TPIRR; and its length in route miles; the average annual cost of washout repairs should not exceed $100,000. This cost includes furnishing and placing up to 1,000 tons of rip-rap. Other related work would be performed by the local field forces (including ditching and smoothing crews) as needed. CSXT did not provide any annual cost data for washout repairs in its discovery materials.

c. Environmental Cleanups

At its major yards, the TPIRR operates locomotive inspection and servicing facilities that might be a source of inadvertent discharge of environmentally sensitive materials. In addition, the TPIRR transports some hazardous commodities over several of its lines. An infrequent environmental cleanup could occur if hazardous commodities are released during a derailment. Derailments are less likely to occur on the TPIRR than on a Class I railroad such as CSXT because the TPIRR begins operations July 1, 2010 with a brand-new track structure that includes CWR on all of its main tracks, as explained above. Its new track structure will result in a significant decrease in the number of derailments. It does not have to deal with situations where CWR replaced jointed rail that caused joint surface, ballast, and subgrade pumping problems due to impact at rail joint locations, which increases the risk of derailments.

The TPIRR is providing protective drip pans at each location where locomotives are fueled at its yards. This ensures that oil emissions from idling locomotives are contained. At each yard, track is protected by drip pans. The quantities and cost to construct drip pans is included in Section III-F. These pads have PVC cross drains to remove spilled fuel from the pans. In addition, TPI is including $100,000 for environmental cleanups.

C. PROGRAM MAINTENANCE

The VP–Engineering and the headquarters MOW administrative/support staff spend part of their time evaluating, planning and helping to execute capital MOW projects, as well as program contractor supervision. The field MOW forces assist in this effort to some extent, but their primary focus is on the day-to-day MOW work that is expensed. Consistent with the practice of most real-world railroads, TPI's operating and engineering experts have concluded that one-third of the salaries of the VP–Engineering and the MOW administrative/support staff should be capitalized and two-thirds should be treated as operating expense. One hundred percent of the salaries and equipment used by the remaining supervisory and field forces should be treated as operating expense.

Program maintenance, such as rail and tie renewal programs, that is performed by contractors is capitalized in the DCF model. Consistent with the Board's SAC precedent and Class I railroad practice, the following more routine MOW work, that is contracted out, is also capitalized rather than being included in operating expense. Equipment costs are also capitalized in the DCF model.

1. Surfacing

The TPIRR has seventeen (17) field smoothing crews which perform day-to-day surfacing of the track to correct surface and alignment defects and rough spots. In addition, heavy-tonnage track subjected to the high axle loadings of unit coal and other trains needs to be surfaced on a regular basis (once every three years) to prevent it from deviating from acceptable standards. Consistent with standard railroad practice, this additional surfacing is performed by a contractor and it is capitalized in the DCF model.

2. Rail Grinding

As noted earlier, CSXT capitalizes rail grinding costs, therefore the TPIRR will do so as well. The rail and switch grinding frequencies developed by Mr. Crouch, as described in the preceding section, were provided for purposes of capitalizing them in the DCF Model.

3. Crossing Repaving

Again, as discussed earlier, {{[redacted]}}

4. Bridge Substructure and Superstructure Repair

Bridge life expectancy under CSXT's depreciation accounting is 60 years. This longevity generally reflects the stability of bridge superstructure and substructure components.[54] Nevertheless, unexpected minor repairs on a bridge substructure and superstructure will be required from time-to-time. The likelihood that steel and concrete repairs will be required is negligible given that the structures are new in year one and have a life expectancy of well over 50 years.

---

[53] *See* CSXT e-workpaper "CSX Capitalization Policy at 15 {{[redacted]}}).

[54] The TPIRR's bridges are being replaced through the DCF process.

In the experience of Mr. Crouch, the annual cost for bridge superstructure and substructure repairs typically does not exceed $4,000 per major bridge every year. This assumes a contractor's crew of five (5) working over a period of two days ($2,000) plus material ($1,000) and equipment ($1,000) and was accepted by the STB in *WFA/Basin I.* Mr. Crouch uses this same approach here. This cost is capitalized.

D. EQUIPMENT

The TPIRR's in-house MOW forces require a variety of equipment to perform their duties, some of which has previously been described. The MOW equipment requirements and costs (other than for small tools, whose cost is included as a materials additive to the base compensation cost for each employee) are described below and listed in the MOW workpapers.[55]

1. Hi-Rail Vehicles

Each of the TPIRR's 102 local track crews, and 8 B&B work crews has a heavy duty, tandem-axle hi-rail truck that provides transportation for the crew and is equipped with the tools necessary for the crew to perform its duties. This crew-cab vehicle comfortably seats the Foreman and three track workers. Its hi-rail gear provides the versatility required for maintenance forces to gain access to the track and carry out their duties, particularly on the portions of the TPIRR network where traffic density is high. For example, if the track crew cannot access the track at its headquarters due to imminent train arrival, the crew travels by road to a point where the dispatcher can provide positive protection for the crew to get on the track. Alternatively, if the crew is on the track, and it cannot remain or proceed due to an oncoming train, the hi-rail vehicle is removed until the train clears the PTC block and then either returns to

---

[55] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls".

the track or moves, by road, to another point where (with authority from the dispatcher) it again gains access to the track.

Each of these hi-rail vehicles is equipped with a boom crane and overhead racks. This allows the crew to load 39 ft. long rails, frogs, switch ties, cross ties, and other materials necessary for track maintenance. The vehicle is also equipped with a hydraulic system providing the capability for operating portable tamping tools, impact wrenches, a rail saw, a rail drill, a hammer, spike pullers, etc., which are included in the complement of tools carried on the vehicle.[56] The cost to equip local crew trucks and B&B trucks was developed from information provided by CSXT in discovery and equals {{[redacted]}} per vehicle.[57]

Other MOW personnel are assigned smaller hi-rail vehicles. This includes the Roadmasters and Assistant Roadmasters, Signal Maintainers, and Lubricator Repairmen. The Assistant Roadmasters' vehicles will also have a hydraulic pump and tool set similar to the system in the track crew vehicles. The headquarters Engineering/MOW staff is also assigned hi-rail vehicles, as described in Part III-D. In addition, the TPIRR has four semi-trailer "lowboy" trucks. There are also 15-ton trailers for the backhoes assigned to each Roadmaster. These vehicles are used to deliver equipment, tools, and materials to the field track and other crews. Welding crew hi-rail trucks are medium duty and are equipped with diesel generator/welders.

The smaller hi-rail vehicles for the supervisory employees are intended for their transportation and that of others who may accompany them, together with some capability for small material transport. Vehicles rated 3/4 to 1 ton are suitable. Hi-rail vehicles for Signal

---

56 The hydraulic systems on the track crew's hi-rail trucks can perform more functions than an air compressor. Air tools have largely been replaced by the hydraulic tools supplied to each crew and each Assistant Roadmaster.

57 The amount for local crew and B&B trucks is interpolated from CSXT discovery e-workpaper "Machinelist.xlsx".

Maintainers, Welders, and Lubricator Technicians not only provide transportation for the employees, but also need to be equipped with service bodies for transporting equipment, tools, and parts. Here, too, vehicles rated 3/4 to 1 ton are appropriate. The rating tolerance accommodates a wide variety of vehicle manufacturers.

TPIRR's total hi-rail vehicle cost is $49.5 million.[58]

2. Equipment for Track and Related Work

The TPIRR's field crews responsible for track maintenance (including the track crews, smoothing crews, ditching crews, and welding/grinding crews) have a variety of other specialized equipment needed to perform their tasks. The complete list of equipment and costs are included in TPI's workpapers.[59]

a. Rail Drills

Rail drills are needed for installing "plug rails" and temporary joints in CWR where defects have been found. Each track crew has one rail drill, and each Assistant Roadmaster also has a hydraulic rail drill as part of the hydraulic tool set on his truck. The total cost for rail drills is included in the cost of the hydraulic tool package included with every hi-rail and every track crew.

b. Impact Wrenches

Each track crew and Assistant Roadmaster also has an impact wrench in the hydraulic tool set on its hi-rail vehicle. The impact feature of these tools is especially effective where a nut and bolt are seized and manual attempts to loosen them might prove unsafe. The impact wrench is also equipped with calibration capability so that applied force can be set in accordance with

---

[58] *See* e-workpaper "Exhibit III-D-3 CSX TPI MOW.xls" worksheet "Master Equipment."
[59] *Id.*

the manufacturer's specifications. The cost of impact wrenches is included in the cost of the hydraulic tool package included with every hi-rail and every track crew.

c. Tamping Tools

The field track crews are equipped with small hand-held tampers. Major surfacing programs are incorporated into major rail- and tie-renewal projects to be performed by outside contractors with large tamping equipment. However, additional spot surfacing may be required for joints, switch and railroad crossing frogs, switch points, bridge approaches, at-grade crossing approaches, local spots on the high sides of curves, and curves as they move out in the Spring. This spot tamping minimizes speed restrictions due to track conditions. Thus, each track crew is equipped with a set of tamping tools driven by the hi-rail vehicle's hydraulic system. These tamping tools are included in the cost of the hydraulic tool package included with every hi-rail and every track crew.

d. Tampers and Ballast Regulators

Each of the seventeen (17) smoothing crews is equipped with a modern high-speed tamper with switch-tamping capability to perform spot tamping work, and a ballast regulator which is required for moving ballast, restoring the roadbed section and shoulder ballast, and sweeping the track. These crews perform virtually all of the spot tamping, lining and surfacing required to maintain proper track line and surface.

e. Grinders

Each of the 52 welding/grinding crews has a complement of rail grinding equipment, including straight and profile grinders. This equipment is used to grind rail to the designed profile at specific locations. The TPIRR's welding crews use the Thermite welding process to eliminate joints created temporarily in CWR where a section of rail is replaced. They also restore, by welding, rail ends which are battered, chipped, or crushed, switch and rail crossing frogs, and switch points. Once the welding is complete, the weld zone needs to be ground to conform with the rail profile adjacent to the zone.

Each of the 102 local track crews also needs a straight grinder in connection with their occasional rail repair work. The cost for 102 straight grinders for the track crews and 52 sets of grinding equipment for the welding/grinding crews is included in the cost of the hydraulic tool sets.

f. 400-Amp Welders

Each of the 52 welding/grinding crews is also provided with a 400-amp welder, which is mounted on the crew's hi-rail truck. This smaller welding tool provides the crews with the needed flexibility to access a work site regardless of the location of the track. The cost for 400-amp welders is included the tool and material additive and in the truck cost for welders.

g. Oxy-Acetylene Welders

Each of the 52 welding/grinding crews also needs welding and cutting torches and fuel cylinders. The total cost for oxy-acetylene equipment for the 26 welding crews is included in the cost of welder trucks and the tool and material additive.

h. Gradalls

The TPIRR has twelve (12) hi-rail Gradall hydraulic excavators which are available to 12 of the 16 ditching crews. These machines, which can be operated either on-track or off-track, are used primarily for cleaning and shaping the parallel and lateral ditches along the right-of-way.

i. Track Hoes

The TPIRR also has four (4) backhoe track excavators (also known as a "track hoe"), that are available for use by the remaining 4 ditching crews. These machines, which are operated off track, are used primarily for clearing slide areas, installing culverts, and other miscellaneous excavation work which is not suited to a Gradall. They are also occasionally needed by the field track and signal forces. This machine is effective for specialized ditching purposes (such as improving drainage in the vicinity of highway grade crossings and placing signal conduit) and for spot excavating. It also can clear debris and beaver dams lodged at culverts and bridges when equipped with the optional grapple attachment.

j. Backhoes and Dump Trucks

Each of the 51 Roadmaster territories is equipped with a small rubber-tired backhoe (Case 580 M), Ford F 750 dump truck, and trailer to transport the backhoe. These additional support vehicles supplement the equipment described in the preceding sections and are available to the track, ditching, and smoothing crews on an as-needed basis.

3. Work Trains

Contractors provide the equipment (except locomotives) for large track programs. As explained in Part III-C, the TPIRR has several SW1500 locomotives available for periodic use in contractor work-train service, as needed.[60] These locomotives can also be used to move the occasional car of ballast, etc. needed by the TPIRR's field MOW track forces.

The TPIRR will temporarily store freight cars carrying materials in local yards, setout tracks, siding or other tracks.

E. OTHER–SCHEDULING OF MAINTENANCE

Spot-maintenance work carried out by the TPIRR's MOW crews is not scheduled in planned maintenance windows. Although much of the work is routine, some occurrences are

[60] For example, CWR is laid in 1,440-foot strings from a rail train of specialized flatcars that requires a locomotive. Other contractor equipment items such as spike pullers, nipper-spikers, tampers, and ballast regulators are self-propelled and do not require motive power.

unplanned, but require immediate attention and do not reflect the normal, routine approach to spot maintenance designed by TPI's MOW experts. Given the flow of traffic on the railroad, spot MOW work must be fluid and flexible, as well as structured where possible.

In general, the field MOW crews (including Signal Maintainers) are responsible for all routine maintenance work that occurs on the TPIRR's right-of-way. However, the in-house crews do not perform all the work that is required. As described earlier, any condition requiring remedial action that cannot be met by the MOW field crews is referred to the proper authority, usually the Roadmaster or an Assistant Roadmaster, who calls in the needed resources. In the meantime, the field MOW forces provide protection in the area requiring remedial action.

Each day for a TPIRR field maintenance crew may involve different work than the previous day. In addition to regular duties, which the Foreman of each crew will have planned, the Roadmaster or other supervisor will have specific tasks that will be referred to a particular crew or a combination of crews.

On a given day, knowing what the expected traffic will be, and thus the work window available, a track crew (for example) may be able to move on track by hi-rail vehicle directly from its base to a location requiring the change-out of a defective rail which has precipitated a temporary slow order, thereby restricting the speed of trains. Another crew could have a similar task but, because of a differing circumstance with respect to train location and work window, must move by road (in its hi-rail vehicle) closer to the task's location, and then obtain a work window from the dispatcher.

Other activities can be scheduled more easily. For example, following the passage of an ultrasonic rail test car, some rails will require removal and joints must be Thermite-welded.

Since the testing is planned, the replacement of defective rails can be scheduled. The field track crew, assisted by a welding crew, can then be ready to replace the defective rail and weld it.

Ultimately, the TPIRR's field MOW crews are not relying on specific maintenance windows that are planned substantially in advance of the needed work. Instead the crews plan their days around specific information about the number of trains expected that day in their territory and the work that needs to be completed. Obviously, no scheduled maintenance would be performed during the TPIRR's peak traffic period.

TPIRR ROAD PROPERTY INVESTMENT
($ in Millions)

	Item (1)	Amount (2)
1.	Land	$3,956
2.	Roadbed Preparation	3,746
3.	Track Construction	8,494
4.	Tunnels	1,596
5.	Bridges	3,438
6.	Signals and Communications	1,554
7.	Buildings and Facilities	985
8.	Public Improvements	226
9.	Subtotal	$23,996
10.	Mobilization	541
11.	Engineering	2,004
12.	Contingencies	2,258
13.	Total	$28,799

Source: See e-workpaper "III-F Total.xlsx"

RETROSPECTIVE APPRAISAL OF LAND FOR TOTAL PETROCHEMICALS & REFINING USA, INC. (TPI) STAND ALONE RAILROAD (SAR) 6,865.9 MILES IN 17 EASTERN STATES AND THE DISTRICT OF COLUMBIA AS OF JULY 1, 2010

FOR

L. E. PEABODY & ASSOCIATES, INC.

RETROSPECTIVE APPRAISAL OF LAND FOR
TOTAL PETROCHEMICALS & REFINING USA, INC. (TPI)
STAND ALONE RAILROAD (SAR)
6,865.9 MILES IN 17 EASTERN STATES
AND THE DISTRICT OF COLUMBIA
AS OF JULY 1, 2010
FOR
L. E. PEABODY & ASSOCIATES, INC.

HARPS & HARPS, INC.
MERIT REAL ESTATE ANALYSIS, INC.
RAIL TRAC ASSOCIATES
1111 14th Street, NW, Suite 600
Washington, DC 20005-5603
Tel. 202-682-2194 Fax 202-682-1579

February 9, 2014

Mr. Thomas D. Crowley
President
L. E. Peabody & Associates, Inc.
1501 Duke Street, Suite 200
Alexandria, Virginia 22314

Re: 80,927.4 acres of land, located in 17 eastern states and the District of Columbia, representing a hypothetical right-of-way for a 6,865.9 mile "stand alone railroad", for a proceeding before the Surface Transportation Board

Dear Mr. Crowley:

In accordance with your request, we have appraised the property captioned above. The purpose of the appraisal is to arrive at an opinion of the acquisition costs of the hypothetical right-of-way as of July 1, 2010.

As a result of our analysis, we are of the opinion that the summation of the market value/acquisition prices, of the hypothetical right-of-way, as of July 1, 2010, is as set forth on the Summary of Conclusions located on page 10 of the attached summary report, of which this letter is an integral part.

The analysis and reasoning leading to the conclusions, along with the assumptions and conditions on the conclusions, which may be material, are set forth within the attached summary report. We trust this information is of assistance to you. If you have any questions or comments, please contact us. Thank you for this opportunity to be of service.

Very truly yours,

Harps & Harps, Inc.
Merit Real Estate Analysis, Inc.
Rail Trac Associates

Attachment

Table of Contents

CERTIFICATION

The Undersigned do hereby certify that, to the best of our knowledge and belief:

The statements of facts contained in this report are true and correct;

The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are his personal, impartial, and unbiased professional analysis, opinions and conclusions;

We have no present or prospective interest in the property that is the subject of this report, and have no personal interest with respect to the parties involved;

We have performed one appraisal service regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment;

Our engagement in this assignment was not contingent upon developing or reporting predetermined results;

Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal;

The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice;

The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;

One or more of the undersigned inspected various portions of the hypothetical right-of-way as set forth below and relied on Google Earth aerial imagery for the balance;

The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

In addition to permanent appraisal licenses held by the undersigned, the following temporary appraisal licenses were obtained from state appraisal licensing authorities, where required by state law:

State	License No.
Alabama	00885
Florida	TP-5668
Illinois	572.003781
Indiana	TP-21301480
Louisiana	no number
Mississippi	TG-2600
North Carolina	6570
Pennsylvania	003485
South Carolina	2014004
Tennessee	00057139
West Virginia	11-002

As of the date of this report, Richard R. Harps, Elizabeth W. Vandermause and John Pinto have completed the continuing education program of the Appraisal Institute.

As of the date of this report, Daniel C. Vandermause has completed the continuing education program for a Practicing Affiliate of the Appraisal Institute.

Disclosure of the contents of this appraisal report is governed by the by-laws and Regulations of the Appraisal Institute.

Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraisers or the firm with which they are connected or the MAI or SRA designation) shall be disseminated to the public through advertising media, public relations media, news media, sales media or any other public means of communications without the prior written consent and approval of the undersigned.

Signed by:

Richard R. Harps, MAI, CRE

John G. Pinto, CRE

Elizabeth W. Vandermause, MAI

Daniel C. Vandermause

ASSUMPTIONS AND LIMITING CONDITIONS

This analysis, the sole function of which is to assist L. E. Peabody & Associates in preparing the information for a rate filing with the Surface Transportation Board in the case of Total Petrochemicals & Refining USA, Inc. (TPI) vs. CSX Transportation, has been made with the following general and specific assumptions:

The subject of this appraisal is 80,927.4 acres of land, assumed to be unimproved (a hypothetical condition), located in 17 eastern states and the District of Columbia, comprising the underlying land for a hypothetical “Stand Alone railroad”, to be used in the above rate filing with the Surface Transportation Board. Although the hypothetical rail route generally follows the existing railroad lines of CSX Transportation, the subject of this appraisal is not defined in terms of individual parcels of land with specific legal descriptions. As such, the appraisers can have no knowledge of specific property conditions, such as soil conditions, environmental conditions, and other specific property characteristics that would typically impact the valuation of a specific parcel of land.

The location of the land included in this analysis is generally based on the location of the existing railroad right-of-way of CSX Transportation. The specific routes included in the analysis were provided by L. E. Peabody & Associates.

Based on client instructions, the width of the hypothetical railroad right-of-way is generally 100-feet wide in rural areas and 75-feet in urban areas. Additional land acreage for rail yards and other railroad infrastructure is included at locations specified by L. E. Peabody & Associates.

In this appraisal, the “Across-the-fence” (ATF) methodology is employed. As the name suggests, this method estimates the value of the right-of-way by establishing the value of adjacent lands. By considering sales of parcels of land in reasonable proximity to the subject having the same land use as lands abutting the subject, the appraiser can establish the land value "Across-the-fence" from the subject property.

As instructed by the client, a key concept of a “Stand Alone Railroad” (SAR) is the lack of barriers to entry for the SAR. In the case of purchasing land for the SAR’s right-of-way, the lack of barriers to entry means that the utility (and corresponding market value) of the railroad right-of-way is identical to the utility of the across-the-fence properties. In other words, no corridor factors are to be applied to account for either an enhanced value of a corridor, or a reduction in value if no demand exists for that corridor. The lack of barriers to entry also means that other factors that might be relevant to a valuation of an individual parcel, including, but not limited to the impact of partial takings, the value of remainders, and severance damage issues are not considered.

The properties are assumed to be vacant and unimproved (a Hypothetical Condition).

This analysis relies on an extraordinary assumption that there are no unusual soil or property characteristics, including any environmental implications, which would adversely impact the ability of an owner to utilize the site or property for any legally permitted use.

That all environmental corrections have been completed prior to the effective date of the analysis and that there would be no diminution in value due to 'public perception' associated with any such implications.

That the property will be able to meet all requirements of laws pertaining to environmental considerations, as they may pertain to the subject. It is also assumed that the property will comply with all provisions of State and Federal laws and regulations regarding underground and above grade storage tanks as they pertain to subject.

That any and all substances which might create any environmental hazard HAVE BEEN REMOVED, CONTAINED, OR MADE ENVIRONMENTALLY SAFE prior to any transfer of the property, and the value(s) set forth herein assume that any and all such cost of removal and/or abatement have already been expended.

That title to the property is assumed to be good and marketable.

That any encroachments, projections, occupancies, etc., which exist or may be found to exist in a current or future title search of the property would have no detrimental effect on the ability of an owner to utilize the property for its highest and best use, including, but not limited to sale, use and occupancy, or any other use.

It is assumed that there are no historic implications which would adversely impact the ability to utilize the property.

No opinion is intended to be expressed for matters which require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers.

The property is analyzed free and clear of any and all liens or encumbrances unless otherwise stated. Responsible ownership and competent property management are assumed.

This analysis assumes that all real estate taxes, personal property taxes, or other taxes owed to any governmental or other body are current.

The information furnished by others is believed to be reliable. However, no warranty is given for its accuracy. It is assumed that all information known to the client and relative to the valuation has been accurately furnished and that there is no undisclosed information or documents affecting the use of the property or the valuation herein.

The liability of Harps and Harps, Inc., Merit Real Estate Analysis, Inc., and Rail Trac Associates is limited to the client only, not subsequent parties or users, and to the fee actually received by the appraiser. Further, there is no accountability, obligation or liability to any other party. If this report is placed in the hands of anyone other than the client, the client shall make such party aware of all limiting conditions and assumptions of the assignment and related discussion. The appraiser is in no way to be responsible for any costs incurred to discover or correct any deficiencies of any type present in the property, physically, financially and/or legally. In the event the report is placed in the hands of a third party, it is required that such party be made cognizant of any and all limiting conditions resulting from the basis of appraiser's employment and discussions related thereto as well as those set forth in the report. Acceptance of and/or use of this analysis report by the client or any third party constitutes acceptance of the above conditions.

Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the analyst, and in any event only with proper written qualification and only in its entirety.

The analyst herein by reason of this analysis is not required to give further consultation, testimony, or be in attendance in court with reference to the property in question unless arrangements have been previously made.

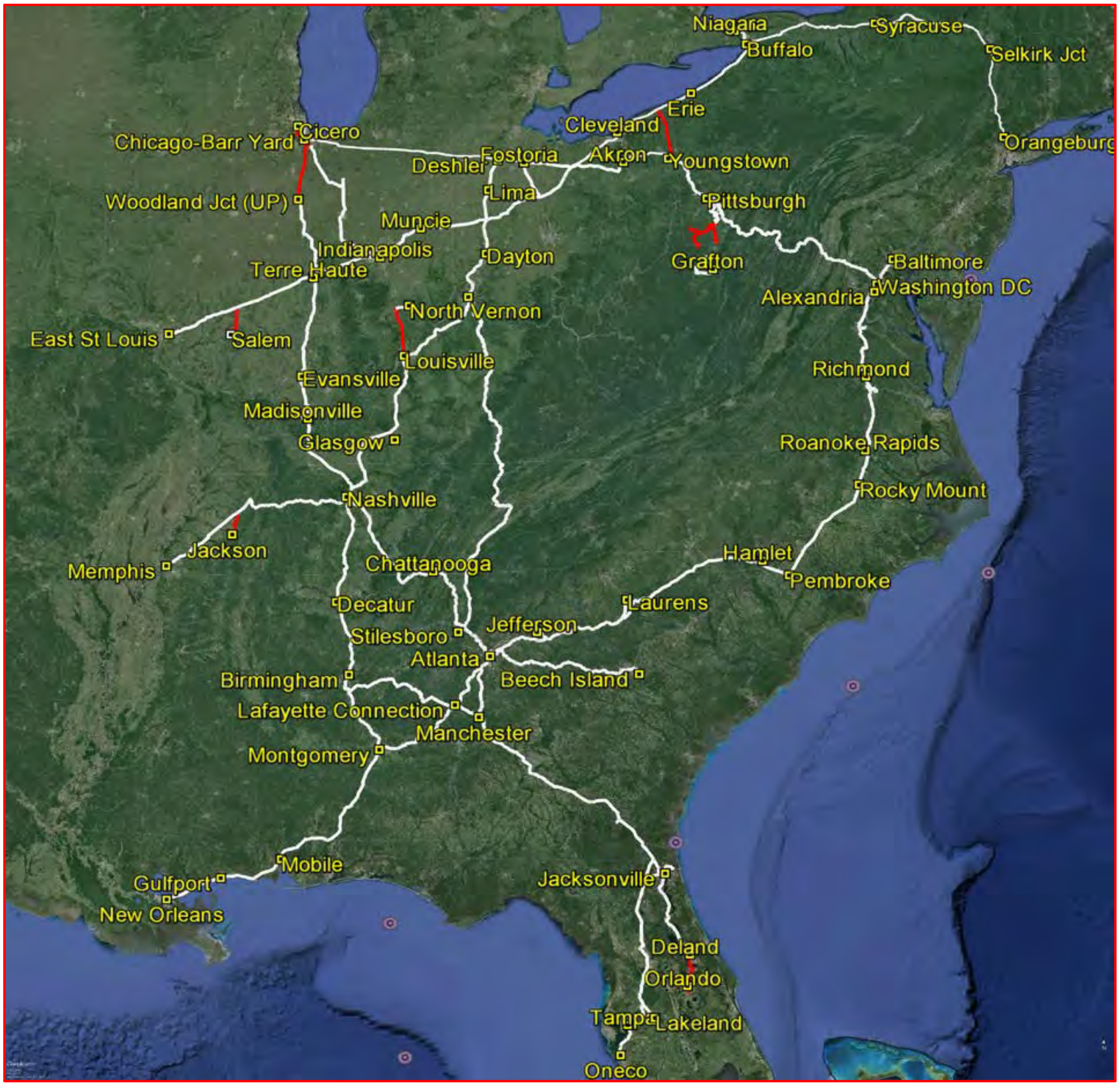
Neither all nor any part of the contents of this report (especially any conclusion as to value, the identity of the analyst, or the firm with which the analyst is connected) shall be disseminated to the public through advertising, public relations, news, sales or other media without the prior written consent and approval of the analysts.

The value reported in dollars is on the basis of the currency prevailing as of the effective date of the appraisal. The values estimated in this analysis are based on economic, physical and tax conditions existing as of the effective date of appraisal.

SUMMARY OF CONCLUSIONS

Subject Property	80,927.4 acres of land, assumed to be unimproved, located in 17 eastern states and the District of Columbia, comprising the underlying land for a hypothetical “stand alone railroad”, to be used in a rate proceeding before the Surface Transportation Board
Client	L. E. Peabody & Associates
Date of Valuation	Retrospective value, as of July 1, 2010
Dates of Inspection	Various dates during September 2010 to June 2011
Date of Transmittal	February 9, 2014
Property Rights	Fee Simple Estate
Highest and Best Use	Varied highest and best uses, based on the “across-the-fence” methodology, which considers the land uses on each side of the hypothetical railroad right-of-way
Site Area	80,927.4 acres
Improvements	For this analysis, the land is assumed to be vacant and unimproved (a hypothetical condition).
Intended Use	To serve as a basis for preparing a submittal for a rate case before the Surface Transportation Board in the proceeding known as Total Petrochemicals & Refining USA, Inc. (TPI) vs. CSX Transportation.
Intended User	L. E. Peabody and Associates, and other firms working on behalf of TPI in the case before the Surface Transportation Board.

TPI STAND ALONE RAILROAD (SAR)



TPI STAND ALONE RAILROAD NETWORK

TRACKAGE RIGHTS VIA VARIOUS RAILROADS (<u>Not</u> valued in this appraisal)

Specific Assumptions

- The location of the land included in this analysis is generally based on the location of the existing railroad right-of-way of CSX Transportation. The specific routes included in the analysis were provided by L. E. Peabody & Associates.
- Based on client instructions, the width of the hypothetical railroad right-of-way is generally 100-feet wide in rural areas, and 75-feet in urban areas. Additional land acreage for rail yards and other railroad infrastructure is included at locations specified by L. E. Peabody & Associates.
- This valuation is based on the hypothetical condition that all land is vacant and unimproved. A Hypothetical Condition is defined as "a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis."[1]
- This analysis relies on an extraordinary assumption[2] that there are no unusual soil or property characteristics, including any environmental implications, which would adversely impact the ability of an owner to utilize the site or property for any legally permitted use.

Valuation Methodology

- In this appraisal, the "Across-the-fence" (ATF) methodology is employed. As the name suggests, this method estimates the value of the right-of-way by establishing the value of adjacent lands. By considering sales of parcels of land in reasonable proximity to the subject having the same land use as lands abutting the subject, the appraiser can

[1] Uniform Standards of Professional Appraisal Practice, 2014-2015 Edition; The Appraisal Standards Board of the Appraisal Foundation, Washington, D.C., page U-3.

[2] An "Extraordinary Assumption" is defined by the Uniform Standards of Professional Appraisal Practice as "an assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser's opinions or conclusions."; USPAP 2014-2015 Edition, page U-3, The Appraisal Foundation.

establish the land value "Across-the-fence" from the subject property.

- As instructed by the client, a key concept of a “Stand Alone Railroad” (SAR) is the lack of barriers to entry for the SAR. In the case of purchasing land for the SAR’s right-of-way, the lack of barriers to entry means that the utility (and corresponding market value) of the railroad right-of-way is identical to the utility of the across-the-fence properties. In other words, no corridor factors are to be applied to account for either an enhanced value of a corridor, or a reduction in value if no demand exists for that corridor. The lack of barriers to entry also means that other factors that might be relevant to a valuation of an individual parcel, including, but not limited to the impact of partial takings, the value of remainders, and severance damage issues are not considered.
- The final estimate of value reflects a baseline fee simple land value for the entire TPI Stand Alone Railroad (SAR), adjusted for:
    - System Mileage Variation (to reflect client’s system mileage estimate)
    - Additional land for communications facilities
    - Additional land for yards and other support facilities
    - Removal of fee simple land value for areas covered by existing land use easement agreements

The table below summarizes these adjustments, which are described in detail in this report.

ADJUSTMENTS TO VALUATION

TPI STAND ALONE RAILROAD (SAR)

Component of Valuation	Total Miles	Total Acres	Avg. Value per Acre	Estimate of Value as of July 1, 2010
TPI Stand Alone Railroad - Fee Simple Land Value	6,871.00	81,203.5	$42,674	$3,465,300,000
Less: Adjustment for System Mileage Variation	(5.06)	(59.8)	$42,674	($2,600,000)
TPI SAR - Fee Simple Land Value (Adjusted for Mileage Variation)	6,865.94	81,143.7	$42,674	$3,462,700,000
Plus: Land for Communications Facilities	--	568.0	$56,162	$31,900,000
Plus: Land for Yards & Other Support Facilities	--	7,328.8	$123,499	$905,100,000
Less: Fee Simple Land Value for Easement Areas	--	(8,113.1)	$54,652	$ (443,400,000)
Net Land Valuation for TPI Stand Alone Railroad	**6,865.9**	**80,927.4**	**$48,887**	**$3,956,300,000**
Net Land Valuation for TPI Stand Alone Railroad (rounded)				**$3,960,000,000**

As a result of our analysis, we are of the opinion that the summation of the acquisition prices for the hypothetical right-of-way for 6,865.9 route miles in 17 states and the District of Columbia, for the TPI Stand Alone Railroad, as of July 1, 2010 is:

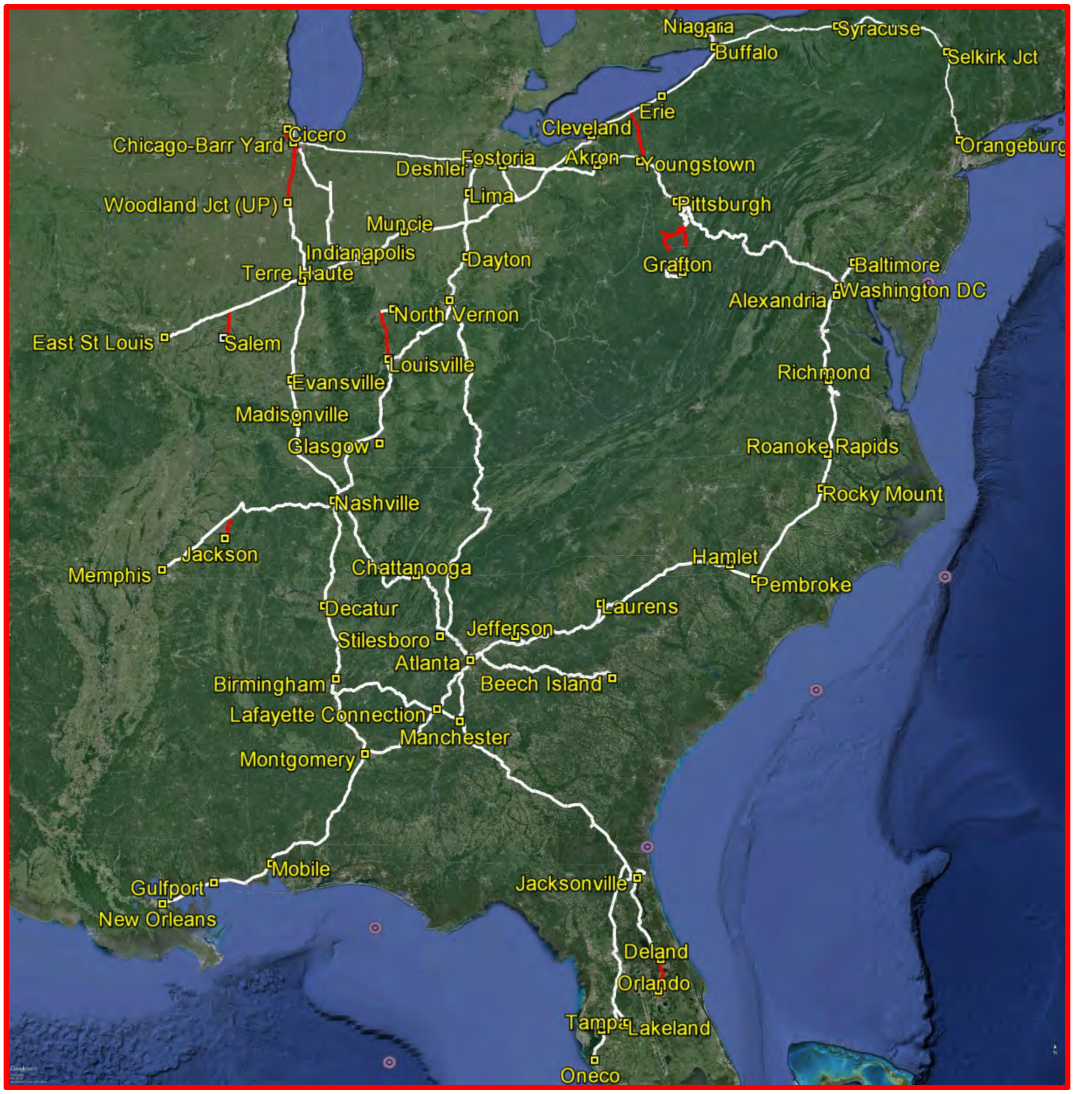
Three-Billion, Nine-Hundred Sixty Million Dollars

$3,960,000,000 (rounded)

This opinion of value is subject to all general and specific assumptions and conditions contained within the report. Please note that the conclusions reached were based on the information as set forth herein, and are specifically and generally limited by the assumptions and conditions set forth within the report and subject to the certification attached hereto. The assumptions and conditions set forth throughout the report are an integral part of this analysis and have a bearing on the conclusions reached herein.

PURPOSE OF APPRAISAL AND GENERAL INFORMATION

Appraisal of the underlying land to support a hypothetical "stand alone railroad" consisting of 6,865.9 miles located in 17 eastern states and the District of Columbia. The total acreage of the subject property is 80,927.4 acres of land, which is assumed to be vacant and unimproved for purposes of this analysis.



Purpose of the Appraisal

The purpose of the appraisal is to estimate the retrospective market value of the hypothetical property as if vacant and unimproved (a hypothetical condition), utilizing the "across-the-fence" methodology.

Market Value is defined as “the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.”[3]

A Hypothetical Condition is defined as “a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis.”[4]

An Extraordinary Assumption is defined as “an assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser’s opinions or conclusions.”[5]

Appraisal and Report Type

The analysis used in this valuation conforms to the scope of services set forth and is being presented in a summary appraisal report.

Legal Description

The property is hypothetical, based generally on the location of the existing rail lines of CSX Transportation, Inc., but not conforming to any existing land parcels or subdivisions.

Intended Use

The intended use of this report is to serve as a basis for preparing a submittal for a rate case before the Surface Transportation Board in the proceeding known as Total Petrochemicals & Refining USA, Inc. vs. CSX Transportation, Inc.

---

[3] The Appraisal of Real Estate, Fourteenth Edition; The Appraisal Institute, Chicago, IL, page 23.

[4] Uniform Standards of Professional Appraisal Practice, 2014-2015 Edition; The Appraisal Standards Board of the Appraisal Foundation, Washington, D.C., page U-3.

[5] Ibid, page U-3.

Intended User

The intended user of this report is L. E. Peabody and Associates, and other firms working on behalf of Total Petrochemicals, Inc. in the case before the Surface Transportation Board.

Client

The client is L. E. Peabody & Associates, representing Total Petrochemicals & Refining USA, Inc. (TPI).

Date of Appraisal

The effective date of valuation is July 1, 2010, the date specified by the Surface Transportation Board in the above proceeding. The report was prepared between August 2010 and February 2014. The date of the report is February 9, 2014.

Exposure Time

Exposure Time is defined by the Uniform Standards of Professional Appraisal Practice[6] as "The estimated length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal."

In this analysis, land valuations are being estimated for 4,642 line segments, resulting in 9,284 parcels, spread over 17 states and the District of Columbia. Under the assumptions and conditions set forth herein (lack of barriers to entry, hypothetical parcels, etc.) the exposure time associated with the value estimate set forth herein is estimated at a nominal one month.

Specific Instructions from Client

The client specified the route to be used for each segment of the hypothetical SAR, and the location and acreage of yards, communication towers, and other support facilities.

The client specified locations along the hypothetical SAR where land use/easement agreements with land owners or trackage rights agreements with other railroads would not require fee

[6] Uniform Standards of Professional Appraisal Practice, 2014-2015 Edition, The Appraisal Foundation, page U-2.

simple acquisitions of land. These areas are therefore excluded from the valuation set forth herein.

Summary of the Appraisal Problem

The subject property consists of a railroad right-of-way that is 6,865.9 miles long located in 17 eastern U.S. states plus the District of Columbia. The hypothetical right-of-way being appraised is generally 100 feet wide in the rural areas, and 75 feet wide in urban areas. With a 100-foot width, a mile of right-of-way consists of 12.12 acres, while a mile of right-of-way with a 75-foot width consists of 9.09 acres. Acreage within yards and other support facilities varied and was specified by the client.

The hypothetical right-of-way encompasses 80,927.4 acres of land and follows existing CSX Transportation rail lines, as specified by the client. The hypothetical SAR does not include all the CSX Transportation routes, but does include other segments needed for the hypothetical SAR. No specific property, delineated by legal description, is valued in this assignment. The properties valued are, as stated, hypothetical, but they are generally consistent with the locations of the specified CSX Transportation routes and other routes as set forth.

In this appraisal, the “Across-the-fence” (ATF) methodology is employed. As the name suggests, this method estimates the value of the right-of-way by establishing the value of adjacent lands. By considering sales of parcels of land in reasonable proximity to the subject having the same land use as lands abutting the subject, the appraiser can establish the land value "Across-the-fence" from the subject property.

As instructed by the client, a key concept of a “Stand Alone Railroad” (SAR) is the lack of barriers to entry for the SAR. In the case of purchasing land for the SAR’s right-of-way, the lack of barriers to entry means that the utility (and corresponding market value) of the railroad right-of-way is identical to the utility of the across-the-fence properties. In other words, no corridor factors are to be applied to account for either an enhanced value of a corridor, or a reduction in value if no demand exists for that corridor. The lack of barriers to entry also means that other factors that might be relevant to a valuation of an individual parcel, including, but not limited to the impact of partial takings, the value of remainders, and severance damage issues are not considered.

Project Team and Main Responsibilities

The signatories to this report worked as a team to develop this analysis. Individual members of the team had particular responsibilities in the project:

- Richard R. Harps, MAI, CRE: Primary responsibility for valuation and project review.
- John G. Pinto, CRE: Line segment definition, physical property inspections, and valuation review.
- Elizabeth W. Vandermause, MAI: Valuations and valuation review, and physical property inspections.
- Daniel C. Vandermause: Subject property definition, physical property inspections and valuation review.

Scope of the Assignment

As noted above, the subject property consists of a hypothetical railroad right-of-way that is 6,865.9 miles long, located in 17 eastern U.S. states plus the District of Columbia. The SAR (Stand Alone Railroad) contains approximately 80,927.4 acres of land. In order to determine the summation of the values of the land for the SAR, the "across-the-fence" values for the land adjacent to the SAR must be estimated.

To accomplish this, aerial imagery from Google Earth Pro and other online resources (such as Bing.com) were utilized to trace the path of the SAR's right-of-way. The right-of-way is split down the centerline, with an adjacent land use defined for half of the right-of-way width on each side of the centerline.

The changes in adjacent land uses were used to define a total of 4,642 line segments, with an average length of 1.48 miles, as shown on the table set forth below:

AVERAGE LENGTH OF LINE SEGMENTS TPI STAND ALONE RAILROAD (SAR)			
Route Name	Total Miles	Number of Line Segments	Average Segment Length (Miles)
ALABAMA	635.5	254	2.50
DISTRICT OF COLUMBIA	14.7	37	0.40
FLORIDA	479.9	420	1.14
GEORGIA	929.2	689	1.35
ILLINOIS	230.3	130	1.77
INDIANA	693.0	417	1.66
KENTUCKY	593.6	281	2.11
LOUISIANA	34.9	14	2.49
MARYLAND	107.3	159	0.67
MISSISSIPPI	74.3	59	1.26
NEW YORK	517.6	485	1.07
NORTH CAROLINA	280.6	229	1.23
OHIO	716.3	436	1.64
PENNSYLVANIA	282.5	164	1.72
SOUTH CAROLINA	162.9	93	1.75
TENNESSEE	748.1	480	1.56
VIRGINIA	215.5	205	1.05
WEST VIRGINIA	155.0	90	1.72
GRAND TOTAL: TPI SAR	6,871.0	4,642	1.48

Note: The above table reflects total miles and total number of line segments prior to adjustments.

A new line segment was defined when the “across-the-fence” land use changed on either side of the railroad right-of-way. Although the average line segment defined was 1.48 miles, in urban areas, the average line segment length was much shorter. Within urban areas, land uses (and corresponding market values) change with more frequency than in rural areas, creating shorter line segments in the urban areas. Some examples of the length of the average line segments in urban areas are as follows:

Urban Area	Avg. Line Segment
Atlanta, GA	0.59 miles
Buffalo, NY	0.53 miles
Chicago, IL	0.46 miles
Indianapolis, IN	0.74 miles
Louisville, KY	0.67 miles
Nashville, TN	0.47 miles
Pittsburgh, PA	0.55 miles
Washington, DC	0.40 miles

In the more rural areas, line segments are longer not only due to long stretches of agricultural and/or timber uses, but even in smaller "rural towns", the market value of land does not vary significantly by specific land use.

The next step in the analysis was to physically inspect the SAR's right-of-way for the major urban areas. These physical inspections, performed during September and October 2010, provided a check of the land use determinations made using aerial imagery, as well as to provide additional information on the character and types of land uses in the neighborhood. Physical inspections were performed in the following 16 urban areas:

Urban Area Inspected	Miles Inspected
Atlanta, GA	108
Birmingham, AL	13
Buffalo, NY	38
Chicago, IL	24
Cincinnati, OH	34
Cleveland, OH	32
Indianapolis, IN	33
Jacksonville, FL	24
Louisville, KY	23
Memphis, TN	11
Mobile, AL	14
Montgomery, AL	11
Nashville, TN	28
New Orleans, LA	8
Pittsburgh, PA	38
Tampa, FL	13
TOTAL	**452**

In addition to the physical inspections in the above 16 urban areas, the team members, based on their long-term area of market concentration, were familiar with surrounding land uses in the Baltimore-Washington DC-Northern Virginia corridor.

These on-the-ground inspections confirmed the reliability of determining the adjacent uses for the line segments using aerial imagery from Google Earth and other internet sites. Over 1,700 photographs, showing adjacent properties and surrounding neighborhoods, were taken during the physical inspections. These photos were geocoded to document the location of each photo, and to display the photos next to each line segment on Google Earth Pro.

Based on the aerial imagery reviewed, and the physical inspections, the distribution of the across-the-fence land uses was determined. The following table illustrates the distribution of land uses by state:

ACRES BY LAND USE TYPE TPI STAND ALONE RAILROAD (SAR)							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
ALABAMA	754.5	847.2	101.7	4,543.2	839.5	458.0	**7,544.1**
DISTRICT OF COLUMBIA	52.0	48.3	26.9	0.0	0.0	0.0	**127.3**
FLORIDA	966.9	846.8	274.8	3,160.5	85.6	191.7	**5,526.2**
GEORGIA	2,516.3	1,638.9	566.8	5,677.6	463.3	293.5	**11,156.4**
ILLINOIS	196.5	142.1	10.7	1,920.5	378.8	51.4	**2,700.0**
INDIANA	951.9	832.1	65.5	5,171.4	720.4	470.7	**8,212.0**
KENTUCKY	786.7	662.1	131.9	4,933.7	572.2	8.1	**7,094.7**
LOUISIANA	12.9	49.5	33.4	0.0	0.0	281.1	**376.8**
MARYLAND	316.0	437.2	87.4	202.1	0.0	166.5	**1,209.3**
MISSISSIPPI	157.8	79.5	54.4	0.0	100.2	344.5	**736.2**
NEW YORK	878.7	1,093.2	138.9	3,228.1	74.2	705.2	**6,118.4**
NORTH CAROLINA	469.5	497.6	145.7	1,895.0	292.2	98.4	**3,398.4**
OHIO	1,036.9	1,607.3	53.5	5,005.8	501.2	344.3	**8,549.1**
PENNSYLVANIA	200.1	650.2	35.9	863.2	207.5	1,320.6	**3,277.4**
SOUTH CAROLINA	157.0	108.8	38.2	1,596.5	40.7	29.9	**1,971.2**
TENNESSEE	1,485.7	962.8	207.6	5,133.2	794.8	222.3	**8,806.4**
VIRGINIA	719.3	417.0	88.0	893.3	117.9	286.2	**2,521.9**
WEST VIRGINIA	65.0	87.1	29.3	992.1	342.1	362.1	**1,877.7**
TOTAL ACRES	**11,723.7**	**11,007.8**	**2,090.7**	**45,216.2**	**5,530.8**	**5,634.4**	**81,203.5**
PERCENT OF TOTAL	***14%***	***14%***	***3%***	***56%***	***7%***	***7%***	***100%***
Acres in above table are based on land areas valued, excluding route over water of 246.6 acres.							

Note: The above table reflects total acres prior to adjustments.

Once the land use on each side of the SAR's right-of-way had been determined, the area of the right-of-way was computed using a width of 100 feet in rural areas and 75 feet in urban areas. As instructed by the client, the division of the right-of-way into rural and urban was based on the land use and the general density of development within the surrounding areas, and in some cases, on observed changes in land values when transitioning from rural areas to urban areas. Where the right-of-way traversed clearly urban areas, the right-of-way width was set at 75 feet. Where the right-of-way traversed clearly rural areas, areas with lower density of development, smaller rural towns and undeveloped areas, the width of the right-of-way was set at 100 feet. Our analysis resulted in the majority of the right-of-way being set at 100 feet in width, with the average width for the 4,642 line segments being 97.5 feet.

The 4,642 line segments result in 9,284 individual adjacent land uses (one on each side of the hypothetical right-of-way). The next section discusses the land valuation methodology used in this analysis.

Approaches to Value

There are three approaches used to analyze market data to arrive at a value estimate for a property--sales comparison, income capitalization, and cost analysis. All three approaches may be used; however, in many instances, one or more of the approaches will have greater bearing on the value estimate, depending on the type of property, use of the appraisal, quantity of the data available for analysis and quality of the available data.

The sales comparison approach produces a value estimate based on comparisons of the subject property with comparable properties that have sold recently. The approach is useful for valuing all property types for which there is sufficient number of comparable transactions to create definable value patterns in the market. Where there are insufficient comparables, the sales comparison approach may be limited or inappropriate. In addition, rapidly changing economic conditions and governmental restrictions may reduce the usefulness of this approach.

The income capitalization approach produces a value estimate based on an analysis of a property's capacity to generate monetary benefits and converting those benefits into an indication of present value. These benefits include the right to receive all profits accruing to the real property interest during the holding period (the term of ownership) plus the proceeds from the resale of the property or the reversion of the property interest at the termination of the investment. Expected future benefits, relationship between supply and demand, and competing investments all have an impact on the value indication. Income producing property is not always held in fee simple, but is likely to be leased, and valuations of the leased fee are typically made.

The cost approach produces an indication of value by deducting from the total cost to produce the subject, including land, improvements and entrepreneurial profit, the amount of depreciation from all sources, physical, functional and economic. The cost approach is useful for new or nearly new improvements and where there is limited or inadequate market data, as in the case of certain special purpose properties.

This analysis is being performed to determine the market value of the land, as if vacant and unimproved, associated with the hypothetical SAR, as of July 1, 2010. The most appropriate method of estimating the value of the land is considered to be the direct sales comparison approach using sales and other data which are appropriate for comparison to subject's particular circumstances.

The land is being valued subject to the hypothetical condition that, regardless of the current condition of the land, the land is assumed to be vacant and unimproved. Neither an income approach nor a cost approach is considered warranted.

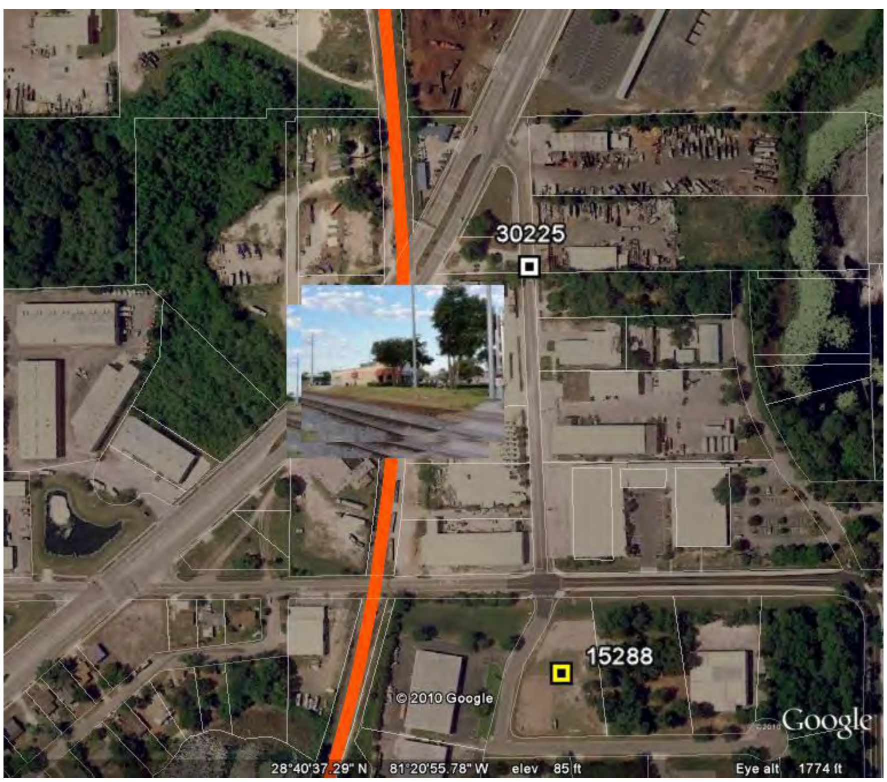
SALES COMPARISON APPROACH

The subject property consists of a hypothetical railroad right-of-way that is 6,865.9 miles long located in 17 eastern states and the District of Columbia. Based on adjacent land uses, the hypothetical right-of-way was divided into 4,642 individual line segments. The 4,642 line segments result in 9,284 individual adjacent land uses (one on each side of the hypothetical right-of-way), which were valued in this analysis using the sales comparison approach.

Comparable sales were developed from three main sources:

1. The CoStar/COMPS national database of sales
2. The CoreLogic national database of sales
3. Sales obtained directly from local appraisers, assessors and other market participants

Once the sales had been gathered, analysis of the sales utilized computer-based geographic tools, such as Google Earth Pro. The image below is from Google Earth:



The above photo from Google Earth Pro is of a portion of the SAR right-of-way (Orange line), based on the current location of the CSX Transportation rail line in this area. The icons of photographs shown in the center of the above image are geo-coded photographs taken on our physical inspection, showing the exact location each photograph was taken. The two icons with numbers (sale number in our analysis) indicate the location of comparable sales in our database.

Total sales in our database for this analysis included about 30,000 sales from CoreLogic, about 7,000 sales from CoStar/COMPS, and about 1,000 sales obtained from local appraisers and assessors. There is some duplication of sales from these three sources, but the combination of the three main sales sources provided a good representation of sales across the entire 6,865.9 mile rail network.

The date of value for this appraisal is July 1, 2010. Whenever possible, recent land sales have been utilized in this analysis. However, given the reduced level of land sales since the economic downturn, it was necessary to reach back several years, in some instances as far back as 2007, to obtain sufficient land sales for the analysis. In cases where older land sales were utilized in the analysis, an adjustment for market conditions was applied. This adjustment will be described in more detail below.

In an “across-the-fence” (ATF) methodology, the appraiser can establish the land value "Across-the-fence" from the subject property by considering sales of parcels of land in reasonable proximity to the subject having the same land use and similar uses as lands abutting the subject. When searching for land sales in the general time frame of 2009[7] to July 2010, the volume of sales transactions for land was significantly reduced due to the economic downturn.

It was determined by the appraisers that concentrating on a small number of existing sales of land in the proximity of the SAR would increase the likelihood that the true value of land along the SAR would be affected by conditions of sale which could not be identified in all cases. A more reasonable approach in determining the value of each type of land in this

[7] In some cases, where sufficient sales in the 2009 to mid-2010 timeframe were not available, sales from 2007 or 2008 were utilized.

analysis was to broaden the analysis area to encompass more sales. This enabled the appraisers to more accurately reflect the market value of the different types of land that would be encountered by the purchaser of the land for the SAR. These overall estimates of market value for land, which were typically developed for a county, were then compared to individual sales that occurred in proximity to the SAR. In cases where a discrepancy existed between the overall countywide market value and the prices for sales in proximity to the SAR, the estimate of market value would be adjusted to reflect the sales in proximity to the SAR, if a rationale for the discrepancy was evident. For example, if the SAR went through an older industrial area with little new development, it would be reasonable to estimate a lower unit value for this older industrial land, compared to newer industrial developments in other parts of the county.

Land Use Categories

For analysis purposes, both “across-the-fence” land uses and comparable sales were grouped into six main categories:

- Residential (R)
- Industrial (I)
- Commercial (C)
- Agricultural (A)
- Rural Town (RT)
- Restricted (X)

Within these six broad land use categories, subcategories defined density of use and other relevant factors. For example, agricultural land was identified, where possible, as grazing land (AGG), crop land (AGC) or timber land (AGT). The table below illustrates the six categories of land and the subcategories for each. In many cases, available data on a comparable sale only allowed a general categorization (shown below as “Use Codes”), but where additional information was available, subcategories were also attached to sales data and “across-the-fence” land uses.

USE CODES								
CATEGORIES		**DENSITY CODES**			**REPORT CODES**			
Use Description	**USE CODES**	**HIGH**	**MEDIUM**	**LOW**	**(Use/Density)**			
Residential	**R**	**H**	**M**	**L**	**RH**	**RM**	**RL**
Industrial Light	**IL**	**H**	**M**	**L**	**ILH**	**ILM**	**ILL**
Industrial Heavy	**IH**	**H**	**M**	**L**	**IHH**	**IHM**	**IHL**
Commercial - Office	**CO**	**H**	**M**	**L**	**COH**	**COM**	**COL**
Commercial - Retail	**CR**	**H**	**M**	**L**	**CRH**	**CRM**	**CRL**
Agricultural	**AG**	**G**RAZING	**C**ROPS	**T**IMBER	**AGG**	**AGC**	**AGT**
Rural Town	**RT**				**RT**		
Restricted (FP/Wet/Slopes)	**X**	X	X	X	**X**		
Gov (Parks/School/Other)	Government uses will be ignored. Use private H&BU in vicinity.						
Railroad Industrial	Rail industrial uses will be ignored. Use closest private H&BU.						
Special Purpose / Private	Make a note of spreadsheet to flag. Use private H&BU nearby land use.						

The "Rural Town" category was utilized for smaller towns and cities. The Rural Town designation reflects all categories of land sales within small towns.

The "Restricted" (X) land use category was utilized to designate land that, because of steep slopes, wetlands, floodplain, or other factors, had little or no development potential. In this analysis, all "X" land received some nominal value.

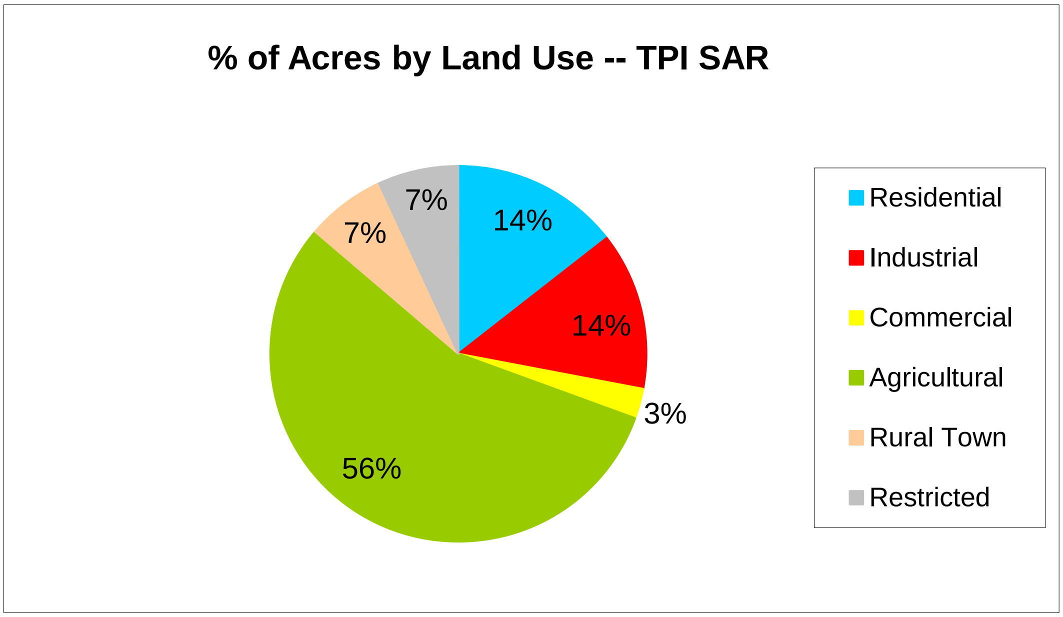
Some "across-the-fence" land uses involved mineral extraction. In these cases, the land use was defined as the overall land use for that area (e.g. agricultural or industrial), reflecting the fact that a purchaser of an SAR right-of-way would not be interested in purchasing underlying mineral rights, but only surface rights.

Similarly, when possible, land uses designated as timber land were valued in this analysis based on the underlying value of the land. The purchaser of an SAR right-of-way would logically sell the rights to the existing timber on the right-of-way, producing an underlying land value for the right-of-way. Timber sales data for the Southeastern states was obtained from a timberland broker and appraiser, J.W. Sewall Company of Maine. This data on timber sales in the southeast included their company's analysis of the split between the timber value and the underlying land value, which was useful when valuing the timberland on the SAR.

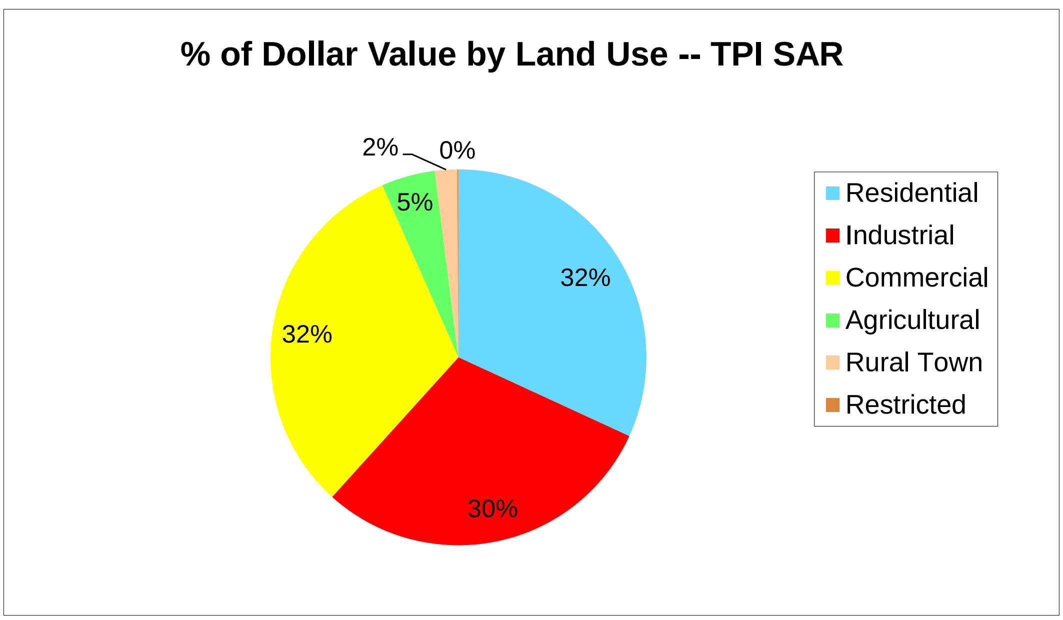
When the SAR encountered a significant water crossing (“significant” being defined generally as water crossings of over 0.10 mile, or about 500 feet), the land use was designated as River (RIV) and no land value was estimated for these water crossings. Minor water crossings, and non-water crossings (such as crossings over roads or other railroads) were valued in this analysis based on the surrounding land uses. Based on the standard right-of-way widths of 75 feet/100 feet, the total acreage over significant water crossings for the TPI SAR is 246.6 acres, or 0.3% of the total acreage of the SAR.

Existing tunnels were given fee simple land values, based on the surface land uses along the route. Where the across-the-fence land use was a government use, a special purpose use (such as a cemetery or a house of worship), a road, or a railroad use, the analysis looked beyond these uses, and applied a land use typical of the surrounding area.

On an acreage basis, the distribution of land uses by the six land use categories, for the entire TPI SAR is shown below:



Another way to look at the distribution of land uses is by the percent of total land value accounted for by the six categories of land use:



In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 56% of the total acreage

for the TPI SAR, accounts for only 5% of the total land value. By contrast, industrial land accounts for 30% of market value, but only 14% of the acreage.

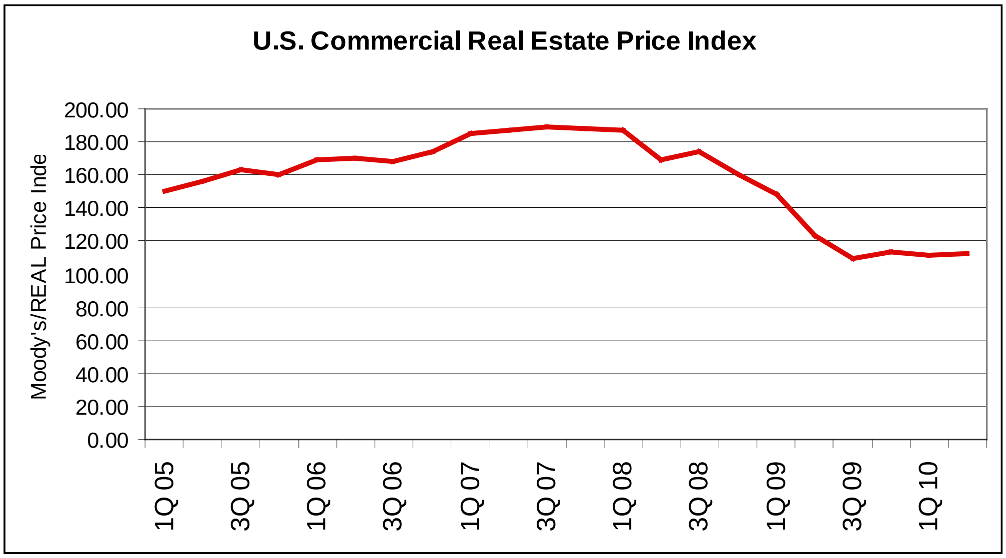
A more detailed breakdown by land use category for individual routes within each state is provided in later sections of this report.

Adjustment for Market Conditions

The date of value for this appraisal is July 1, 2010. Whenever possible, recent land sales have been utilized in this analysis. However, given the reduced level of land sales since the economic downturn, it was necessary to reach back several years, in some instances as far back as 2007, to obtain sufficient land sales for the analysis.

The period from 2007 to mid-2010 was one of significant changes in the market for all types of land in the eastern United States. As early as mid-2007 national housing prices had already fallen 6% from their 2006 peak, and mortgage foreclosures were on the rise. By August 2007, national housing prices were falling, for the first time since the 1930’s. By mid-2008, housing prices had fallen by 20% from their peak. On September 12, 2008 Lehman Brothers declared bankruptcy and the economic downturn accelerated rapidly.

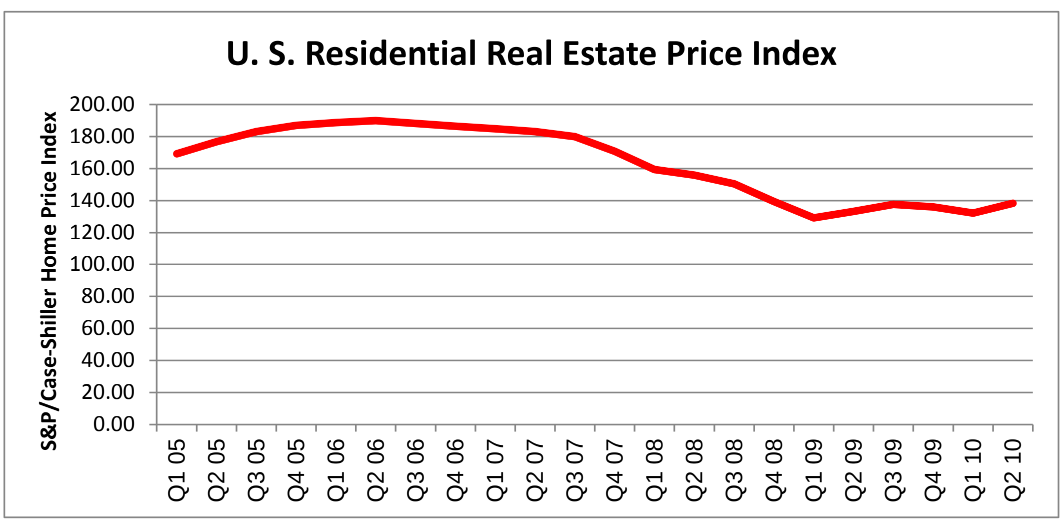
Commercial real estate prices generally peaked in 2007, fell during 2008 and the first nine months of 2009, and then began to stabilize:



Source: Moody's/REAL Commercial Property Price Indices

The above graph is based on the Moody's/REAL Commercial Property Prices Indices, which were developed by MIT as a tool to measure changes in commercial real estate prices over time. This index is developed by comparing consecutive sales of the same improved properties, therefore providing an "apples to apples" comparison of the market pricing changes occurring over time.

The Standard & Poor's/Case-Shiller Home Price Indices are similarly-constructed price indices for single family home sales.

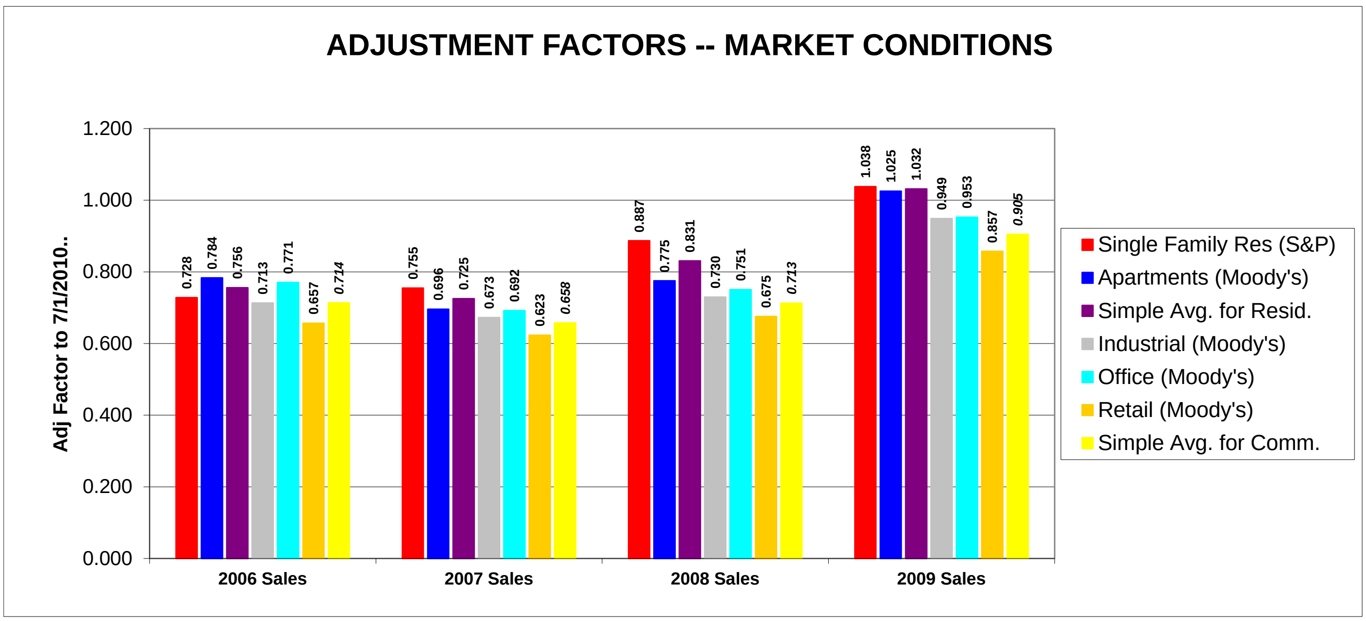


Source: Standard & Poor's/Case-Shiller Home Price Indices

In this analysis, these two published indices of improved real estate property pricing are utilized to adjust for market conditions for the land sales in the analysis. Although these indices are based on the pricing of improved properties, it is reasonable to utilize these indices to adjust land prices since the basic driver of land value is the resulting value of the improvements that can be constructed on that land. In a period of falling prices for improved properties, the value of the underlying land must also fall. In fact, if the cost of new improvements does not fall as fast as the pricing of the improved properties, the underlying value of the land will fall even faster than the value of the improved property.

In an analysis such as this one, covering many property types in many geographic locations, it is not practical to account for the multiple factors which could cause changes in land prices to vary from changes in improved property prices. For this analysis, the use of the Moody's and S&P/Case-Shiller indices provides a consistent and reliable measure of the changes in real estate market conditions over time.

The adjustment factors for market conditions used in this analysis can be seen in the graph below:



Analysis and Valuation of Non-Agricultural Land

In analyzing land values, a basic procedure was utilized when analyzing residential, commercial, industrial or rural town land, and a slightly different procedure was utilized to analyze agricultural or restricted land (wetlands, steep slopes, etc.). This section will describe the basic procedures utilized when analyzing non-agricultural land.

The sales data was sorted by county and/or city and by land use. Next, the sales in each use category were grouped by date of sale and adjustments for market conditions were applied. The individual sales, in each land use category, that had a significant impact on the average price per acre were highlighted.

An average value per acre takes into consideration the physical differences, types of locations, size difference, and any other elements that impact value when purchasing a variety of parcels at one time.

When a variety of parcels are purchased and assembled for a project or development, some parcels in the assemblage will cost more than others. Some will have inferior attributes from the other tracts and cost less. Some purchases will reflect the price of a key parcel in the assemblage. There will be parcels and tracts that are far superior to the other parcels in the area but in the end, an average price is budgeted and spent on an assemblage to take all these situations into account. This valuation technique reflects that approach that the market takes in similar situations.

The overall average price per acre for a county or urban area was tested regularly to check if the average values were providing a reliable conclusion of value. The average price per acre provided a reliable value indication in most locations. In several cases it was found that a higher value was required on isolated segments that were located in the heart of the high density central business district, or in other areas whose land use and development patterns clearly differed from the more typical development in that area.

There were some areas where there was very little or no recent land sales activity. In the majority of these cases, these areas were in the more rural counties. There are locations with miles of remote stretches of track that have few land owners and no sales that took place over our analysis period. In these cases, several techniques were utilized to arrive at a supportable average value per acre. Land sales in adjacent counties within the same state or within the same general area were reviewed. Sales of land in a wider area were reviewed if they resembled similar land uses and would be expected to attract similar buyers. This approach gave us sufficient auxiliary data and market information to arrive at a supportable value conclusion.

Benchmarks were also considered in arriving at and/or as support for valuations in locations that had few recent sales. In order to gauge the value of land, the price of housing or commercial rents was often examined. These general benchmarks helped identify the locations with similar pricing and values in order to determine what data was similar to the areas where land was not trading.

After the routes were valued, the unit values per acre were sorted from high to low within each state, county by county. This data sort was utilized to check how the value changed as the routes went from rural areas into more developed areas and then into the high-density, higher-priced urban areas. The consistency of the analysis from region to region was also analyzed.

Sales data from both the CoStar national database and the CoreLogic national sales database were utilized in the analysis. CoStar sales data typically had more specific sale information to use in arriving at a value conclusion. There was usually a higher volume of sales available from the CoreLogic data base, which allowed for a reliable way to validate the conclusions from the Costar data and data from LoopNet, local appraisers and assessors.

Analysis and Valuation of Agricultural Land

Several sources of data were used to value the agricultural land. For agricultural and rural areas that CoStar did not cover, a large volume of sales from the CoreLogic database was often available. Where necessary, the CoreLogic data was supplemented with sales from local assessors and appraisers. Timber sales data for the Southeastern states was obtained from a timberland broker and appraiser, J.W. Sewall Company of Maine. This data on timber sales in the Southeast included their company's analysis of the split between the timber value and the underlying land value, which was useful when valuing the timberland on the SAR.

Annual reports on the prices for agricultural land published by the USDA (United States Department of Agriculture) were also utilized in the analysis. The data from the USDA was often comparable to the prices in the sales data from the other sources we referenced. The USDA data includes values for crop land, grazing land and farm land.

The value of any underlying rights, such as mineral, timber, wind generation or natural gas exploration, is not included in the value of the underlying land in this analysis. It is presumed that such underlying rights would be retained by the former land owner if these lands were purchased for the TPI SAR.

Adjustments to Base Valuation

Once a base land valuation had been developed in this analysis, four adjustments were made to produce the final valuation:

1. System mileage variation (system mileage provided by client vs. appraisers' estimate)
2. Land for communication facilities
3. Land for yards and other support facilities
4. Removal of fee simple land valuation for areas covered by existing land use/easement agreements

The system mileage variation adjustment is needed to correct for a small difference between the system mileage provided by the client, and the cumulative mileage developed by the appraisers using Google Earth Pro measurement tools. In this analysis, the appraisers' estimate of total system mileage was greater than the mileage provided by the client by 5.06 miles, a difference of about 0.07 percent over the 6,865.9-mile

SAR. This small difference in estimated system mileage is probably caused by de minimis cumulative errors in physically plotting the valuation segments along the SAR right-of-way as displayed on Google Earth Pro.

A second adjustment was performed to account for additional land needed to support communications facilities.

A third adjustment accounts for additional land needed for yards and other support facilities. L. E. Peabody & Associates provided information on the location of yards for the SAR network, and the land area required for each yard facility.

Situations in which the SAR is able to utilize portions of the right-of-way without having fee ownership in the underlying land were identified by L. E. Peabody & Associates, and for these portions of the SAR, the fee simple land value was excluded in this analysis. The total land area for the SAR network where a fee simple land value was not calculated is 8,113.1 acres. The applicable fees or rents that would be incurred by the SAR to utilize these land areas are to be added to the analysis outside of this appraisal.

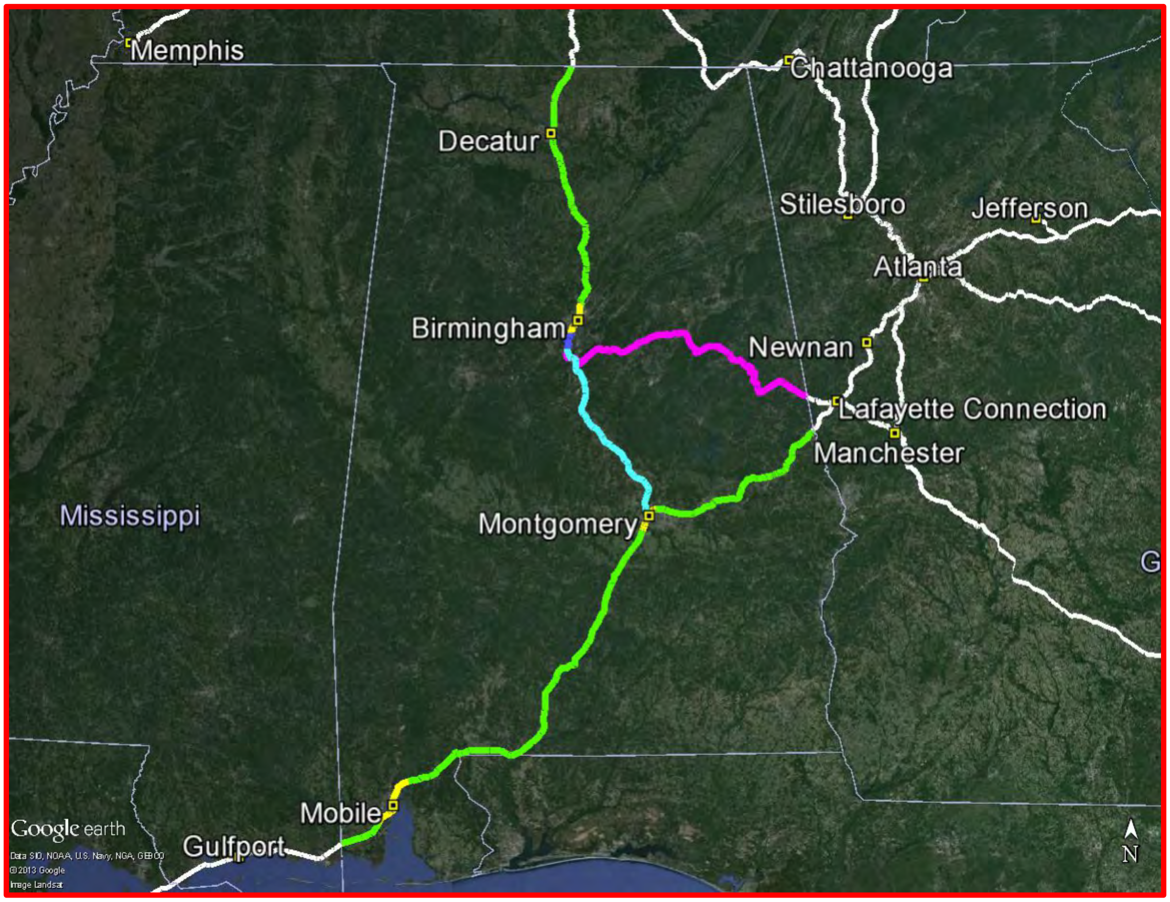
These four adjustments are presented in more detail in a later section of this report.

In the following sections, organized alphabetically by state, the general characteristics of the areas traversed by the TPI Stand Alone Railroad are described, followed by a presentation of the valuation by route for each state. The detailed calculation of value for each route in the SAR (a total of 101 routes), can be found in Section III-F-1 in the submission to the Surface Transportation Board.

VALUATION

Alabama

The length of the TPI SAR within Alabama is 635.5 miles and consists of eight routes, delineated as follows:



- Birmingham, AL: This 13.3 mile route (YELLOW line on above map) through Birmingham passes through mainly older industrial areas, with a portion of the route passing east/west along the south end of the older CBD.

- Montgomery, AL: This 10.9 mile route (YELLOW line) passes through mainly older industrial areas of Montgomery. The route also passes through a revitalized area along the Alabama River, which includes the old Montgomery Union Station, and a minor league baseball park.

- Mobile, AL: The SAR route through Mobile (YELLOW line) is 14.2 miles in length, passing through mainly industrial areas along the Mobile River. A portion of the SAR passes through the far eastern edge of the CBD, with the route passing under the convention center.

- New Orleans, LA to Atlanta, GA: This 265.5-mile route (GREEN line) through the state of Alabama begins in the southwest corner of the state, and continues northeast to the Alabama/Georgia state line. This route segment excludes the urban areas of Mobile and Montgomery (see above). This route is mainly rural, with 63% of the adjacent land uses being agricultural.

- Parkwood, AL to Birmingham, AL: This 6.8-mile route (DARK BLUE line) connects Parkwood with the south end of Birmingham. A total of 64% of the adjacent land uses are residential along this route.

- Montgomery, AL to Parkwood, AL: This 83.9-mile route (LIGHT BLUE line) connects Montgomery to Parkwood, which is located just to the south of Birmingham. The land uses along this route are mainly residential and agricultural.

- Birmingham, AL to Nashville, TN: This 105.2-mile route (GREEN line) begins in the northern portion of Birmingham and runs through mainly rural areas to the Alabama/Tennessee state line.

- Lagrange, GA to Parkwood, AL: The Alabama portion of this route consists of a 135.7-mile line (PURPLE line) running west from the Georgia/Alabama state line, to Parkwood, AL. Agricultural uses account for 84% of the adjacent land uses along this route.

The 635.5 route miles in the state of Alabama were divided into 254 line segments, with an overall average line segment length of 2.50 miles for the SAR right of way in the state of Alabama:

AVERAGE LENGTH OF LINE SEGMENTS ALABAMA			
Route Name	Total Miles	Number of Line Segments	Average Segment Length (Miles)
Birmingham AL	13.3	13	1.03
Montgomery AL	10.9	15	0.73
Mobile AL	14.2	15	0.94
New Orleans LA to Atlanta GA	265.5	72	3.69
Parkwood AL to Birmingham AL	6.8	3	2.27
Montgomery AL to Parkwood AL	83.9	48	1.75
Birmingham AL to Nashville TN	105.2	63	1.67
Lagrange GA to Parkwood AL	135.7	25	5.43
TOTAL STATE	**635.5**	**254**	**2.50**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE ALABAMA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Birmingham AL	27.8	81.3	12.1	0.0	0.0	0.0	121.2
Montgomery AL	32.6	47.6	18.9	0.0	0.0	0.0	99.1
Mobile AL	50.2	64.4	11.0	0.0	0.0	0.0	125.6
New Orleans LA to Atlanta GA	100.5	313.6	16.1	2,029.8	536.5	221.2	3,217.8
Parkwood AL to Birmingham AL	53.0	3.3	0.0	26.4	0.0	0.0	82.7
Montgomery AL to Parkwood AL	205.5	165.0	18.8	412.8	95.1	118.7	1,015.9
Birmingham AL to Nashville TN	262.7	155.5	24.9	699.5	66.5	29.6	1,238.6
Lagrange GA to Parkwood AL	22.2	16.4	0.0	1,374.8	141.3	88.5	1,643.2
TOTAL ACRES	**754.5**	**847.2**	**101.7**	**4,543.2**	**839.5**	**458.0**	**7,544.1**
PERCENT OF TOTAL	***10%***	***11%***	***1%***	***60%***	***11%***	***6%***	
Acres in above table are based on land areas valued, excluding route over water of 25.27 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the

fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Alabama is agricultural at 60%, with industrial land uses accounting for another 11% of the adjacent land uses in Alabama.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Alabama, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type)
ALABAMA

Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Birmingham AL	$155,000	$75,000	$245,000				$110,326
Montgomery AL	$210,000	$75,000	$180,000				$139,390
Mobile AL	$40,000	$70,000	$100,000				$60,633
New Orleans LA to Atlanta GA	$25,000	$40,000	$200,000	$1,996	$9,665	$100	$8,560
Parkwood AL to Birmingham AL	$40,000	$75,000		$11,000			$32,163
Montgomery AL to Parkwood AL	$19,316	$62,558	$110,000	$2,000	$8,000	$100	$17,678
Birmingham AL to Nashville TN	$19,236	$41,364	$80,000	$5,629	$26,967	$200	$15,511
Lagrange GA to Parkwood AL	$27,432	$40,000		$2,585	$8,000	$100	$3,625

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE ALABAMA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Birmingham AL	$4,311,818	$6,095,455	$2,962,273	$0	$0	$0	$13,369,545
Montgomery AL	$6,844,091	$3,572,727	$3,395,455	$0	$0	$0	$13,812,273
Mobile AL	$2,009,091	$4,508,636	$1,100,000	$0	$0	$0	$7,617,727
New Orleans LA to Atlanta GA	$2,513,636	$12,545,455	$3,224,242	$4,052,048	$5,185,576	$22,121	$27,543,079
Parkwood AL to Birmingham AL	$2,118,788	$250,000	$0	$290,000	$0	$0	$2,658,788
Montgomery AL to Parkwood AL	$3,969,697	$10,323,939	$2,066,667	$825,576	$760,727	$11,867	$17,958,473
Birmingham AL to Nashville TN	$5,052,303	$6,433,333	$1,989,091	$3,937,333	$1,794,545	$5,918	$19,212,524
Lagrange GA to Parkwood AL	$608,485	$654,545	$0	$3,554,333	$1,130,667	$8,848	$5,956,879
TOTAL LAND VALUE	**$27,427,909**	**$44,384,091**	**$14,737,727**	**$12,659,291**	**$8,871,515**	**$48,755**	**$108,129,288**
PERCENT OF TOTAL	**25.4%**	**41.0%**	**13.6%**	**11.7%**	**8.2%**	**0.0%**	**100.0%**

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 60% of the total acreage in Alabama (see table on a previous page), accounts for only 11.7% of the total land value in the state. By contrast, industrial land accounts for 41.0% of market value, but only 11% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Alabama, the estimate of value for the land to support communication facilities is $814,529.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES ALABAMA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Birmingham AL	13.33	121.18	$110,326	0.53	1.06	$116,946
Montgomery AL	10.90	99.09	$139,390	0.44	0.88	$122,663
Mobile AL	14.15	125.64	$60,633	0.57	1.14	$69,122
New Orleans LA to Atlanta GA	265.47	3,217.82	$8,560	10.62	21.24	$181,805
Parkwood AL to Birmingham AL	6.82	82.67	$32,163	0.27	0.54	$17,368
Montgomery AL to Parkwood AL	83.94	1,015.88	$17,678	3.36	6.72	$118,795
Birmingham AL to Nashville TN	105.18	1,238.64	$15,511	4.21	8.42	$130,603
Lagrange GA to Parkwood AL	135.68	1,643.15	$3,625	5.43	10.86	$39,371
TOTAL STATE				**25.43**	**50.86**	**$796,672**
TOTAL STATE (Round Up for # of Towers)				**26.00**	**52.00**	**$814,529**

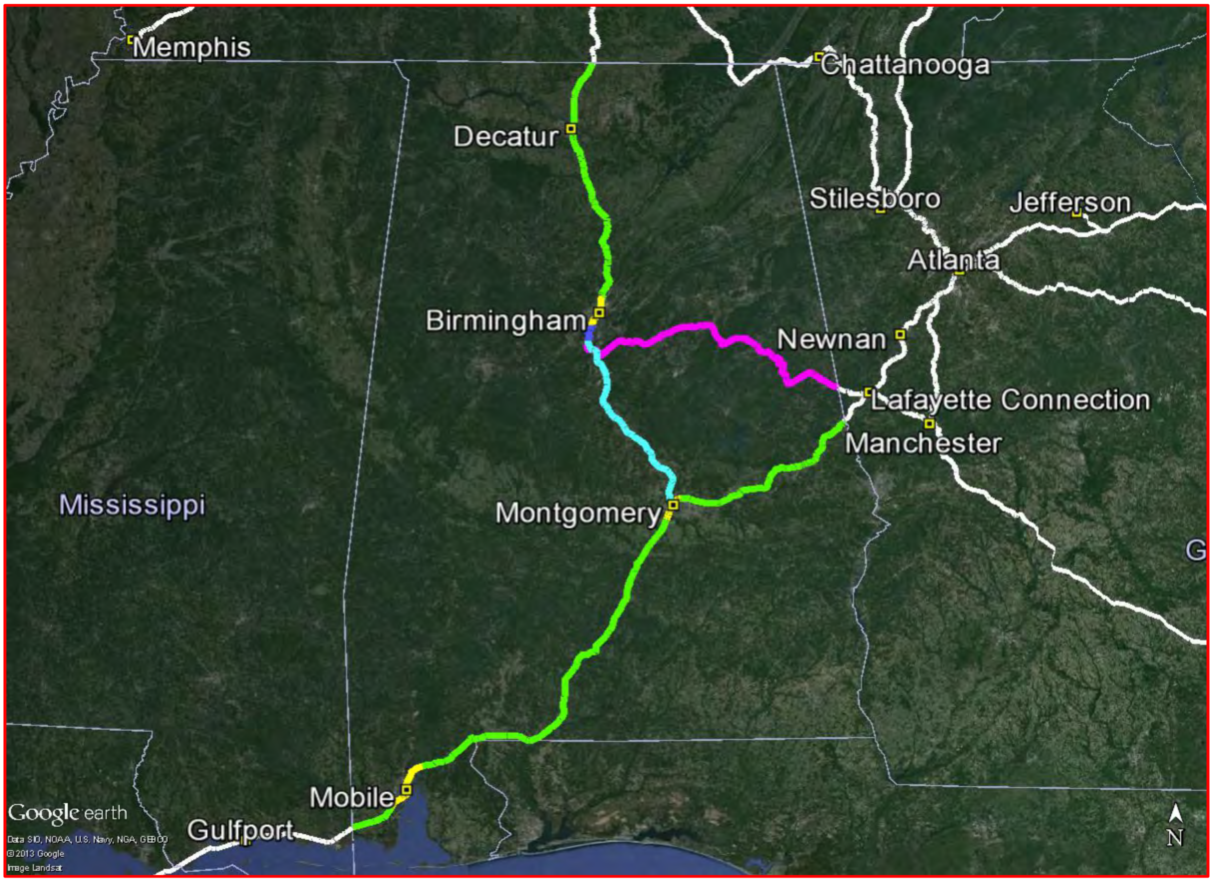
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Alabama, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Alabama. The total valuation of the 635.5 route miles, in the state of Alabama, as of July 1, 2010 is:

One-Hundred Eight Million, One-Hundred Thousand Dollars

$108,100,000 (rounded)

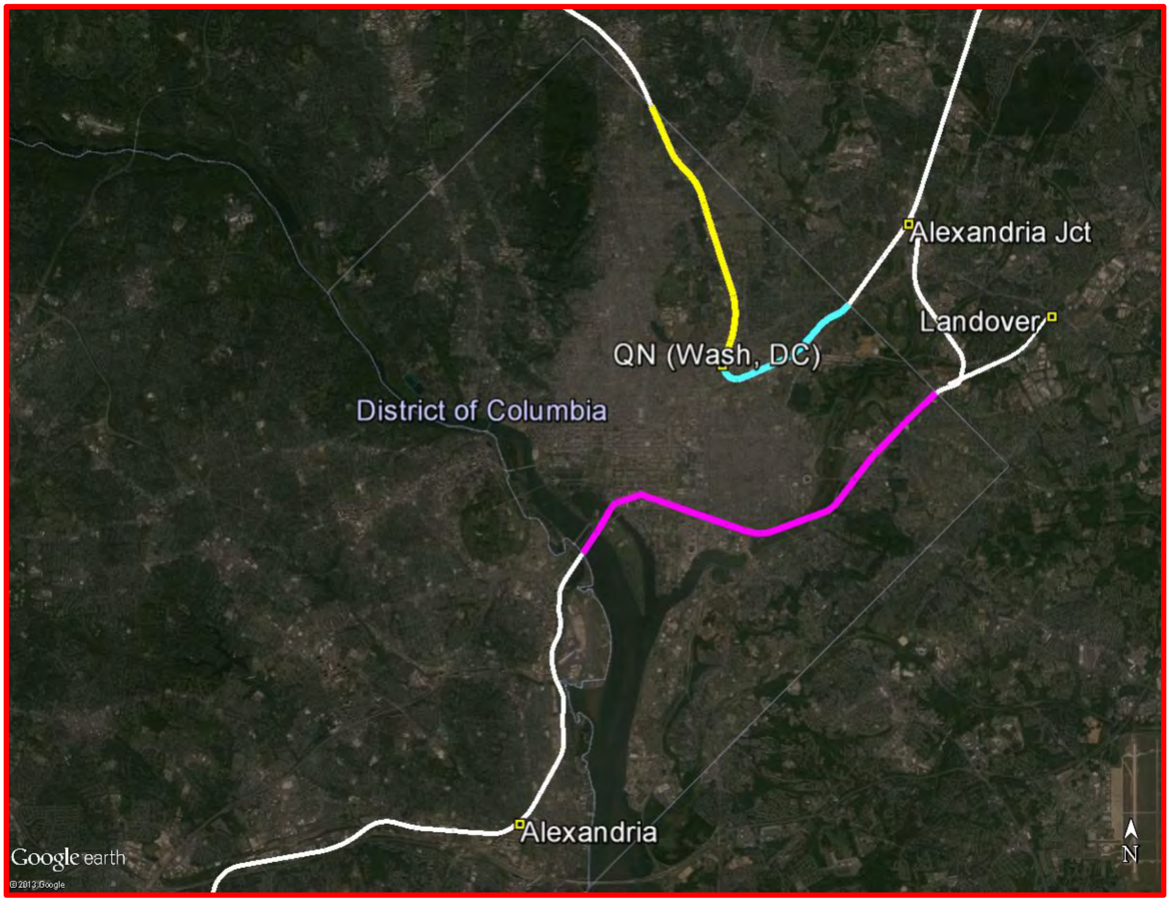
ALABAMA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres: Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
(yellow)	**Birmingham AL**	13.3	121.2	INDUS	67%	RESID	23%	$110,326	$13,369,545
(yellow)	**Montgomery AL**	10.9	99.1	INDUS	48%	RESID	33%	$139,390	$13,812,273
(yellow)	**Mobile AL**	14.2	125.6	INDUS	51%	RESID	40%	$60,633	$7,617,727
(green)	**New Orleans LA to Atlanta GA**	265.5	3,217.8	AGRIC	63%	R-TOWN	17%	$8,560	$27,543,079
(blue)	**Parkwood AL to Birmingham AL**	6.8	82.7	RESID	64%	AGRIC	32%	$32,163	$2,658,788
(cyan)	**Montgomery AL to Parkwood AL**	83.9	1,015.9	AGRIC	41%	RESID	20%	$17,678	$17,958,473
(green)	**Birmingham AL to Nashville TN**	105.2	1,238.6	AGRIC	56%	RESID	21%	$15,511	$19,212,524
(magenta)	**Lagrange GA to Parkwood AL**	135.7	1,643.2	AGRIC	84%	R-TOWN	9%	$3,625	$5,956,879
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR ALABAMA	**635.5**	**7,544.1**	**AGRIC**	**60%**	**INDUS**	**11%**	**$14,333**	**$108,129,288**
								(rounded)	**$108,100,000**

District of Columbia

The length of the TPI SAR within the District of Columbia is 14.7 miles and consists of three routes, delineated as follows:

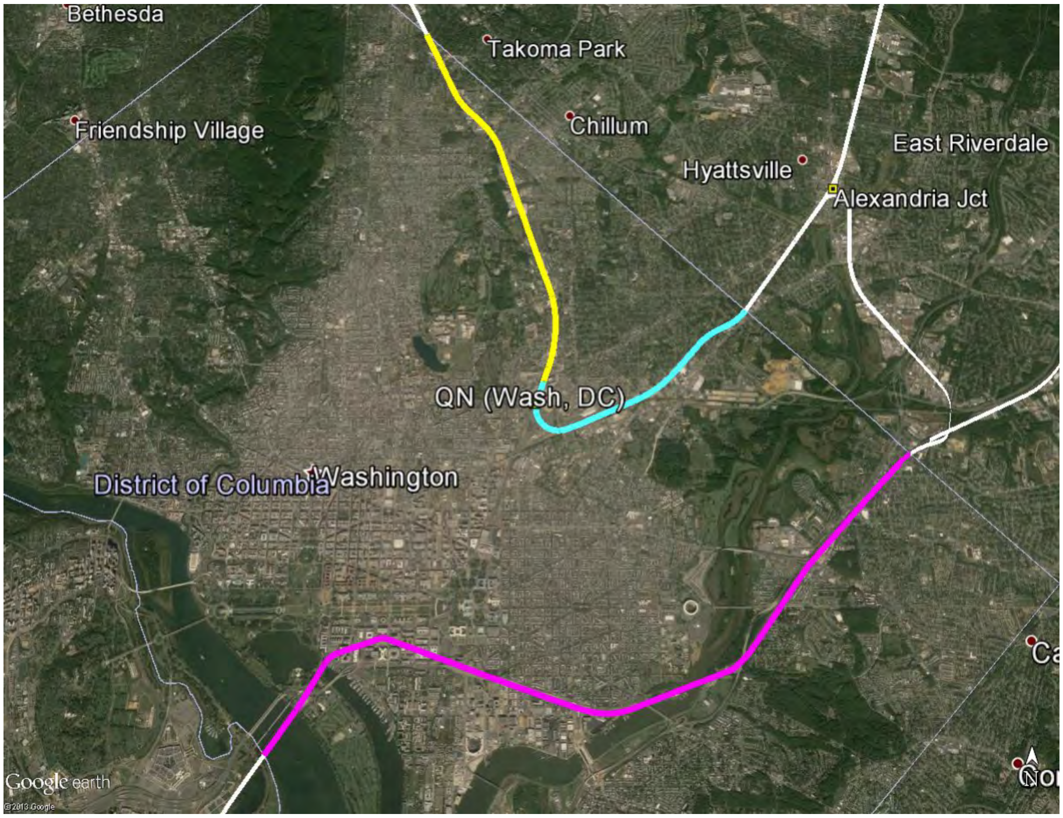


- Washington, DC (QN) to Baltimore, MD: This 2.9-mile route (BLUE line on above map) begins in the District at a location known as QN, where the route crosses Rhode Island Avenue, NW. This route turns to the northeast, paralleling New York Avenue and Bladensburg Road, running through mostly older industrial and residential areas. The route ends at the Maryland/DC line, near Eastern Avenue and Bladensburg Road. The predominant land use for this route is industrial at 69%.
- Germantown, MD to Washington, DC (QN): This 4.4-mile route (YELLOW line) begins at the

Maryland/DC line, near Takoma, DC. The route runs southeast into the District, passing mainly through older industrial and residential areas. This route ends at a location known as QN, where the route crosses Rhode Island Avenue, NW. This route is 49% residential and 49% industrial.

- Alexandria Junction, MD (JD) to Alexandria, VA: This 7.4-mile route (PURPLE line) begins at the Maryland/DC line near Eastern Avenue and Addison Road, near Fairmount Heights, MD. Passing through older residential and industrial areas, this route crosses the Anacostia River and turns west. As the route crosses South Capitol Street, it passes through an office district characterized by government office buildings, private, for-lease office buildings, hotels and commercial uses to support the office functions. Approaching the Potomac River, this route passes through parkland, which has been defined as water-related commercial land for the purposes of this analysis. Predominant land uses on this route are residential at 45% and commercial at 38%.

The exhibit below illustrates the location of each of the three TPI SAR routes in relation to the core development in the city:



The 14.7 route miles in the District of Columbia were divided into 37 line segments, with an overall average line segment length of 0.40 miles for the SAR right of way in the District of Columbia:

AVERAGE LENGTH OF LINE SEGMENTS DISTRICT OF COLUMBIA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Wash DC (QN) to Baltimore MD	2.9	5	0.58
Germantown MD to Wash DC (QN)	4.4	14	0.31
Alex Jct MD (JD) to Alexandria VA	7.4	18	0.41
TOTAL STATE	**14.7**	**37**	**0.40**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE DISTRICT OF COLUMBIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	5.0	18.2	3.0	0.0	0.0	0.0	26.3
Germantown MD to Wash DC (QN)	19.6	19.6	0.6	0.0	0.0	0.0	39.8
Alex Jct MD (JD) to Alexandria VA	27.5	10.5	23.2	0.0	0.0	0.0	61.2
TOTAL ACRES	**52.0**	**48.3**	**26.9**	**0.0**	**0.0**	**0.0**	**127.3**
PERCENT OF TOTAL	***41%***	***38%***	***21%***	***0%***	***0%***	***0%***	
Acres in above table are based on land areas valued, excluding route over water of 6.09 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in the District of Columbia is residential at 41%, with industrial land uses accounting for another 38% of the adjacent land uses in the District of Columbia.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in the District of Columbia, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) DISTRICT OF COLUMBIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	$2,500,000	$1,500,000	$4,000,000				$1,980,104
Germantown MD to Wash DC (QN)	$2,500,000	$1,500,000	$4,000,000				$2,031,963
Alex Jct MD (JD) to Alexandria VA	$5,483,444	$1,500,000	$13,890,411				$7,991,456

The average values per acre shown above reflect the overall urban composition of each route.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE DISTRICT OF COLUMBIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	$12,500,000	$27,340,909	$12,181,818	$0	$0	$0	$52,022,727
Germantown MD to Wash DC (QN)	$48,977,273	$29,386,364	$2,545,455	$0	$0	$0	$80,909,091
Alex Jct MD (JD) to Alexandria VA	$150,545,455	$15,750,000	$322,636,364	$0	$0	$0	$488,931,818
TOTAL LAND VALUE	**$212,022,727**	**$72,477,273**	**$337,363,636**	**$0**	**$0**	**$0**	**$621,863,636**
PERCENT OF TOTAL	***34.1%***	***11.7%***	***54.3%***	***0.0%***	***0.0%***	***0.0%***	***100.0%***

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the District of Columbia, the estimate of value for the land to support communication facilities is $10,002,676.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES DISTRICT OF COLUMBIA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Wash DC (QN) to Baltimore MD	2.89	26.27	$1,980,104	0.12	0.24	$475,225
Germantown MD to Wash DC (QN)	4.38	39.82	$2,031,963	0.18	0.36	$731,507
Alex Jct MD (JD) to Alexandria VA	7.40	61.18	$7,991,456	0.30	0.60	$4,794,874
TOTAL STATE				**0.60**	**1.20**	**$6,001,605**
TOTAL STATE (Round Up for # of Towers)				**1.00**	**2.00**	**$10,002,676**

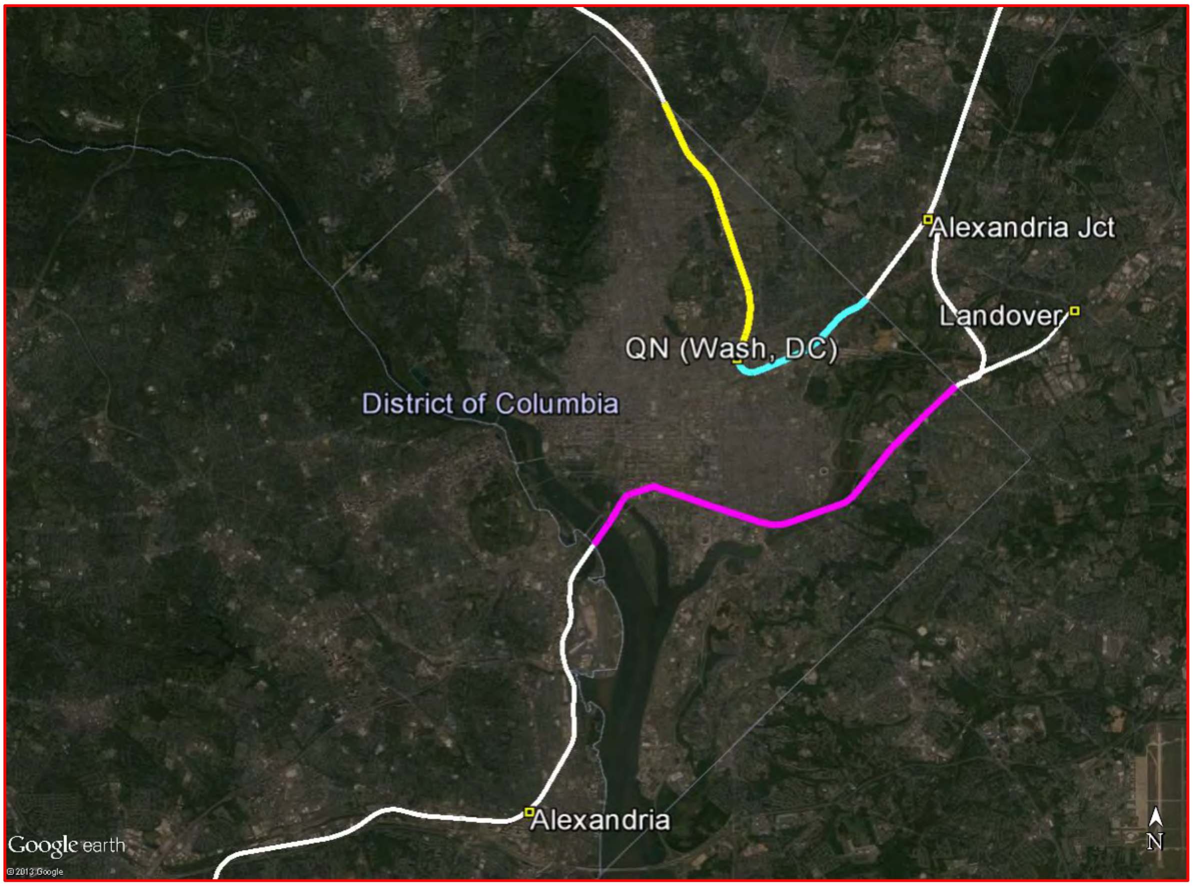
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the District of Columbia, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the District of Columbia. The total valuation of the 14.7 route miles, in the District of Columbia, as of July 1, 2010 is:

Six-Hundred Twenty-One Million, Nine-Hundred Thousand Dollars

$621,900,000 (rounded)

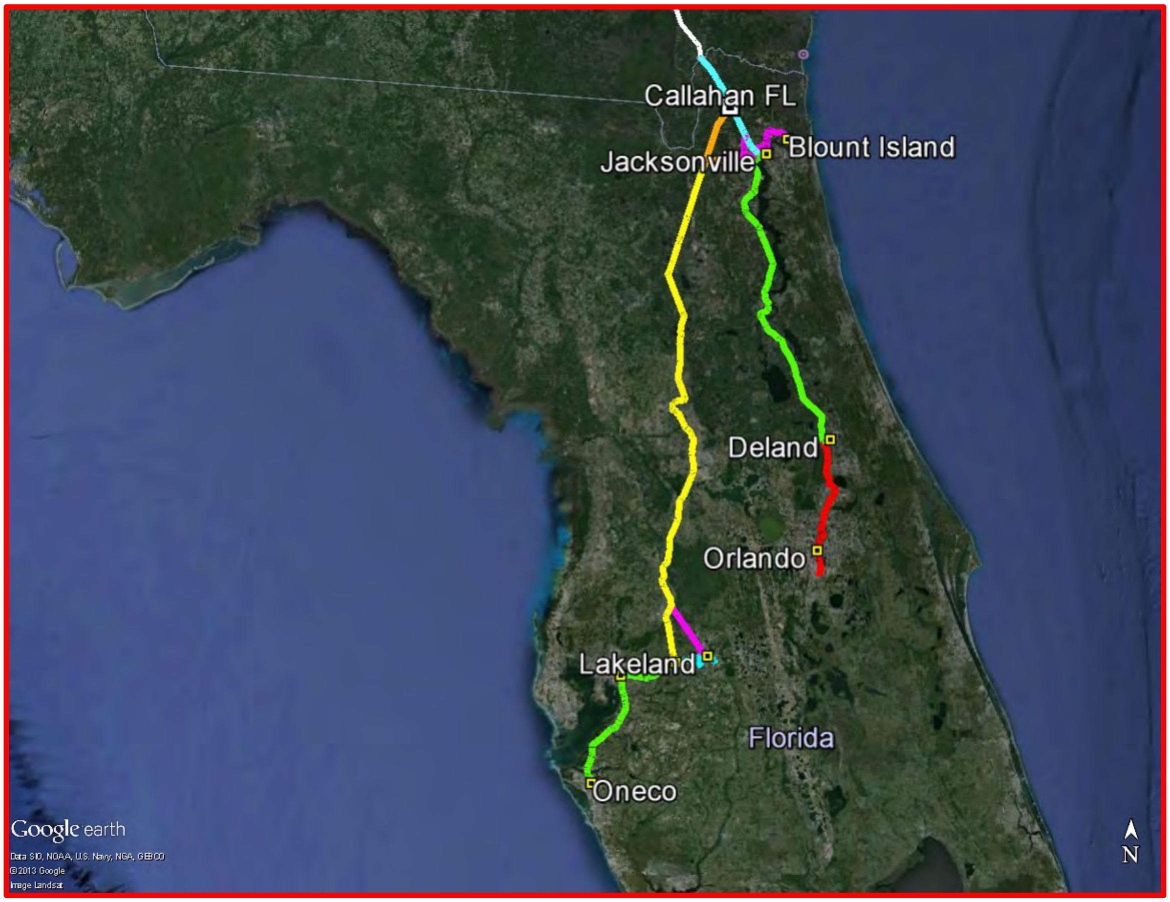
DISTRICT OF COLUMBIA



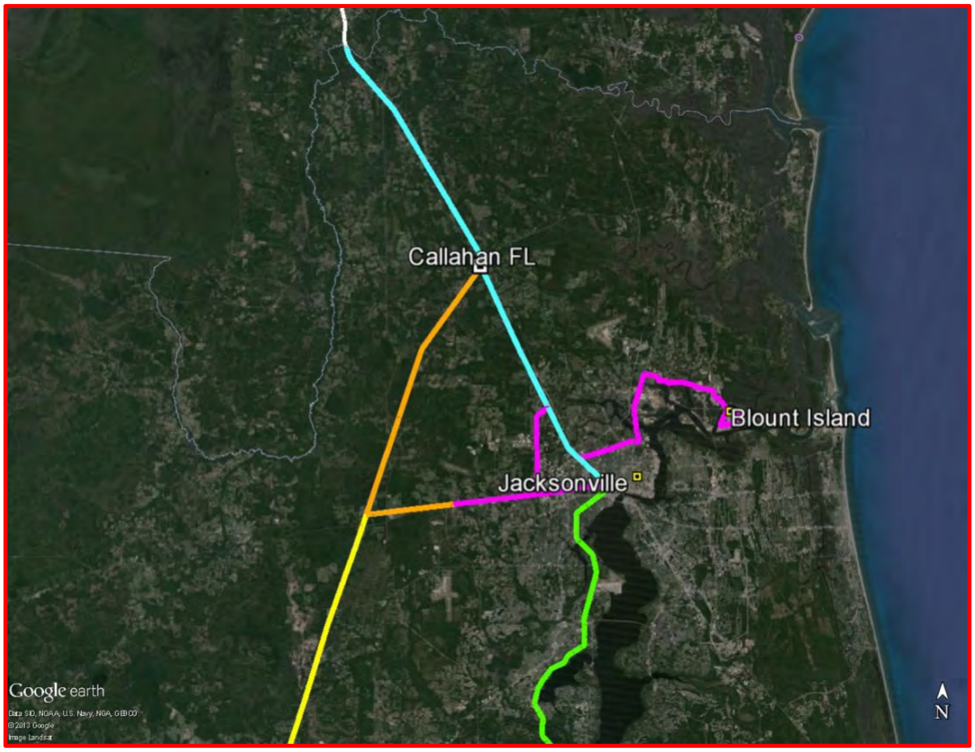
Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
	Wash DC (QN) to Baltimore MD	2.9	26.3	INDUS	69%	RESID	19%	$1,980,104	$52,022,727
	Germantown MD to Wash DC (QN)	4.4	39.8	RESID	49%	INDUS	49%	$2,031,963	$80,909,091
	Alex Jct MD (JD) to Alexandria VA	7.4	61.2	RESID	45%	COMM	38%	$7,991,456	$488,931,818
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR DISTRICT OF COLUMBIA	**14.7**	**127.3**	**RESID**	**41%**	**INDUS**	**38%**	**$4,886,071**	**$621,863,636**
								(rounded)	**$621,900,000**

Florida

The length of the TPI SAR within Florida is 479.9 miles and consists of eight routes, delineated as follows:



- Jacksonville, FL: This 26.6-mile route (PURPLE line on above map) starts west of Jacksonville, near the intersection of Halsema Street and West Beaver Street, and runs through older industrial and residential areas, ending at the wye in Jacksonville, just south of CSX's Moncrief Yard. Jacksonville also includes two branches: The Blount Island Branch and the Jacksonville TOFC Branch. This route is 69% industrial. The map on the next page illustrates the TPI SAR routes in the Jacksonville, FL area in more detail.



- North Union City, GA to Jacksonville, FL: This 37.1-mile route begins at the Georgia/Florida state line, and ends at the north side of Jacksonville. Agricultural land uses account for 61% of the adjacent land uses on this route.
- Callahan, FL to Baldwin, FL: This 26.4-mile route (GOLD line) is located just west of the Jacksonville area. Agricultural land uses predominate on this route.
- Jacksonville, FL to Orlando, FL: This 108.1-mile route (GREEN line) begins at the wye in Jacksonville, just south of CSX's Moncrief Yard, and runs south through Palatka to Deland. South of Deland, the route continues over trackage rights (RED line) to Orlando. The line between Deland and Orlando is owned by Florida DOT. The land value for trackage rights is NOT included in this analysis.

- Baldwin, FL to Plant City, FL: This 170.2-mile route (YELLOW line) begins at Baldwin (west of Jacksonville) and runs through mainly rural areas, passing through Waldo, Ocala, Wildwood, and ending at Plant City. Predominant land uses on this route include agricultural at 72% and residential at 12%.
- Plant City, FL to Oneco, FL: This 61.7-mile route (GREEN line) begins at Plant City and runs west to the industrial area of Tampa. This route turns south at Tampa, missing the Tampa CBD, and ends at Oneco, FL. Agricultural uses account for 30% of this route and residential uses account for an additional 28%.
- Plant City, FL to Lakeland, FL: This 18.3-mile route (BLUE line) begins at Plant City and runs east to Lakeland. This route is predominantly industrial (33% of land uses) and residential (25% of land uses).
- Vitis, FL to Lakeland, FL: This 19.7 mile route (PURPLE line) connects the Baldwin to Plant City route with the Lakeland area. Agriculture accounts for 62% of the adjacent land uses along this route.

The 479.9 route miles in the state of Florida were divided into 420 line segments, with an overall average line segment length of 1.14 miles for the SAR right of way in the state of Florida:

AVERAGE LENGTH OF LINE SEGMENTS FLORIDA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Jacksonville FL	38.3	56	0.68
N Union City GA to Jacksonville FL	37.1	25	1.48
Callahan FL to Baldwin FL	26.4	12	2.20
Jacksonville FL to Orlando FL	108.1	90	1.20
Baldwin FL to Plant City FL	170.2	107	1.59
Plant City FL to Oneco FL	61.7	87	0.71
Plant City FL to Lakeland FL	18.3	31	0.59
Vitis FL to Lakeland FL	19.7	12	1.64
TOTAL STATE	**479.9**	**420**	**1.14**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE FLORIDA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Jacksonville FL	73.3	262.2	12.1	16.8	0.0	17.2	381.6
N Union City GA to Jacksonville FL	119.8	37.0	12.1	267.6	0.0	1.2	437.6
Callahan FL to Baldwin FL	0.0	2.7	0.0	269.0	48.5	0.0	320.1
Jacksonville FL to Orlando FL	234.3	114.5	68.0	748.7	0.0	99.2	1,264.7
Baldwin FL to Plant City FL	236.7	190.0	91.7	1,470.5	29.5	11.5	2,029.9
Plant City FL to Oneco FL	179.3	147.2	42.8	192.2	7.6	62.5	631.6
Plant City FL to Lakeland FL	56.5	72.8	44.5	48.3	0.0	0.0	222.2
Vitis FL to Lakeland FL	67.0	20.4	3.6	147.4	0.0	0.0	238.4
TOTAL ACRES	**966.9**	**846.8**	**274.8**	**3,160.5**	**85.6**	**191.7**	**5,526.2**
PERCENT OF TOTAL	***17%***	***15%***	***5%***	***57%***	***2%***	***3%***	
Acres in above table are based on land areas valued, excluding route over water of 22.64 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Florida is agricultural at 57%, with residential land uses accounting for another 17% of the adjacent land uses in Florida.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Florida, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) FLORIDA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Jacksonville FL	$85,000	$200,000	$325,000	$2,400		$350	$164,206
N Union City GA to Jacksonville FL	$74,161	$200,000	$218,750	$6,419		$200	$47,169
Callahan FL to Baldwin FL		$200,000		$5,395	$15,781		$8,589
Jacksonville FL to Orlando FL	$57,010	$143,721	$345,818	$4,505		$350	$44,848
Baldwin FL to Plant City FL	$37,463	$99,336	$149,694	$6,633	$15,000	$500	$25,452
Plant City FL to Oneco FL	$51,802	$145,000	$291,189	$9,498	$30,000	$500	$71,537
Plant City FL to Lakeland FL	$48,015	$108,498	$146,769	$4,675			$78,223
Vitis FL to Lakeland FL	$45,000	$100,000	$125,000	$3,000			$24,947

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE FLORIDA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Jacksonville FL	$6,226,894	$52,439,394	$3,944,318	$40,364	$0	$6,008	$62,656,978
N Union City GA to Jacksonville FL	$8,882,500	$7,390,909	$2,651,515	$1,717,509	$0	$242	$20,642,676
Callahan FL to Baldwin FL	$0	$533,333	$0	$1,451,018	$765,152	$0	$2,749,503
Jacksonville FL to Orlando FL	$13,360,227	$16,449,545	$23,504,091	$3,372,982	$0	$34,735	$56,721,580
Baldwin FL to Plant City FL	$8,866,242	$18,878,409	$13,719,697	$9,753,412	$442,727	$5,758	$51,666,245
Plant City FL to Oneco FL	$9,288,258	$21,341,364	$12,468,182	$1,825,091	$229,091	$31,258	$45,183,242
Plant City FL to Lakeland FL	$2,712,121	$7,903,939	$6,537,879	$225,818	$0	$0	$17,379,758
Vitis FL to Lakeland FL	$3,016,364	$2,042,424	$446,970	$442,182	$0	$0	$5,947,939
TOTAL LAND VALUE	**$52,352,606**	**$126,979,318**	**$63,272,652**	**$18,828,376**	**$1,436,970**	**$78,001**	**$262,947,922**
PERCENT OF TOTAL	***19.9%***	***48.3%***	***24.1%***	***7.2%***	***0.5%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 57% of the total acreage in Florida (see table on a previous page), accounts for only 7.2% of the total land value in the state. By contrast, industrial land accounts for 48.3% of market value, but only 15% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Florida, the estimate of value for the land to support communication facilities is $1,981,622.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES FLORIDA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Jacksonville FL	38.34	381.58	$164,206	1.53	3.06	$502,470
N Union City GA to Jacksonville FL	37.10	437.64	$47,169	1.48	2.96	$139,619
Callahan FL to Baldwin FL	26.41	320.12	$8,589	1.06	2.12	$18,209
Jacksonville FL to Orlando FL	108.13	1,264.74	$44,848	4.33	8.66	$388,387
Baldwin FL to Plant City FL	170.23	2,029.94	$25,452	6.81	13.62	$346,658
Plant City FL to Oneco FL	61.73	631.61	$71,537	2.47	4.94	$353,393
Plant City FL to Lakeland FL	18.33	222.18	$78,223	0.73	1.46	$114,206
Vitis FL to Lakeland FL	19.67	238.42	$24,947	0.79	1.58	$39,416
TOTAL STATE				**19.20**	**38.40**	**$1,902,358**
TOTAL STATE (Round Up for # of Towers)				**20.00**	**40.00**	**$1,981,622**

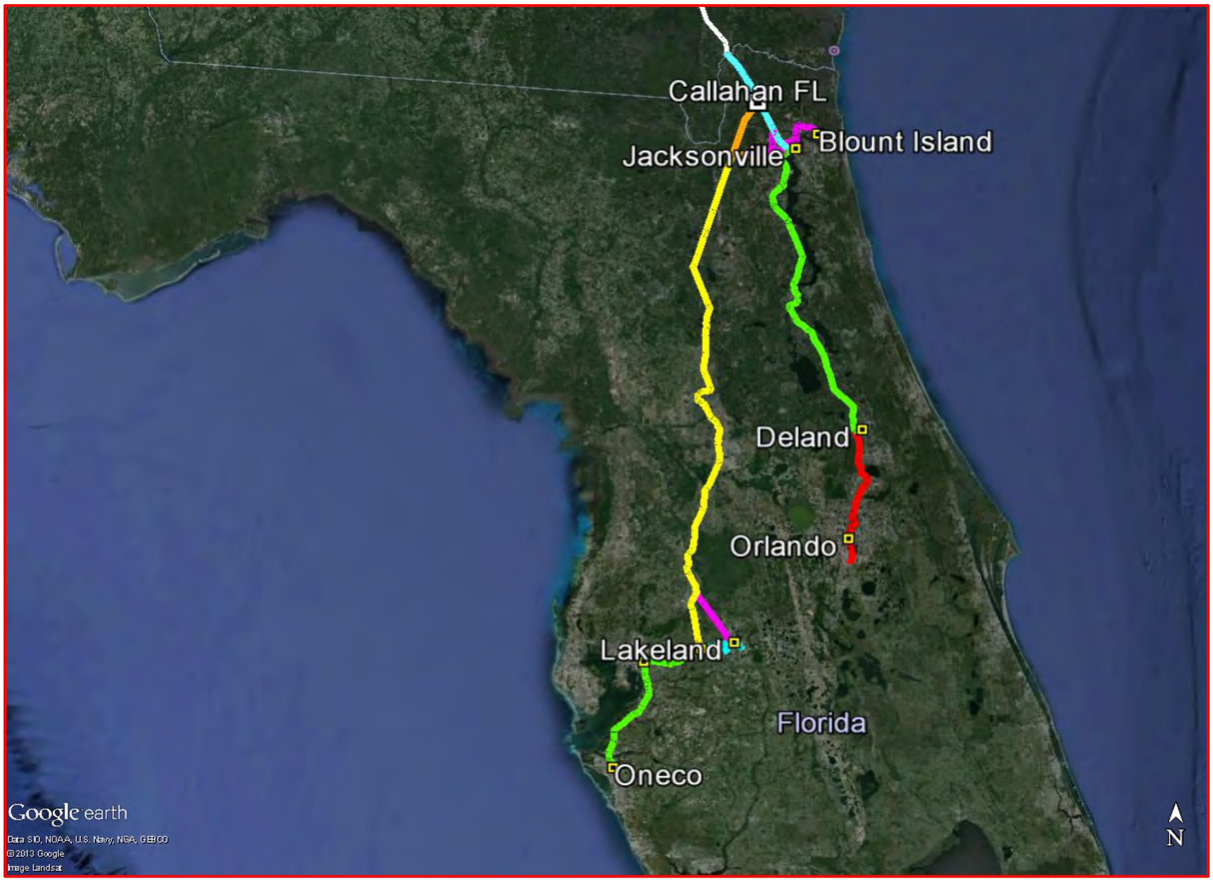
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Florida, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Florida. The total valuation of the 479.9 route miles, in the state of Florida, as of July 1, 2010 is:

Two-Hundred Sixty-Two Million, Nine-Hundred Thousand Dollars

$262,900,000 (rounded)

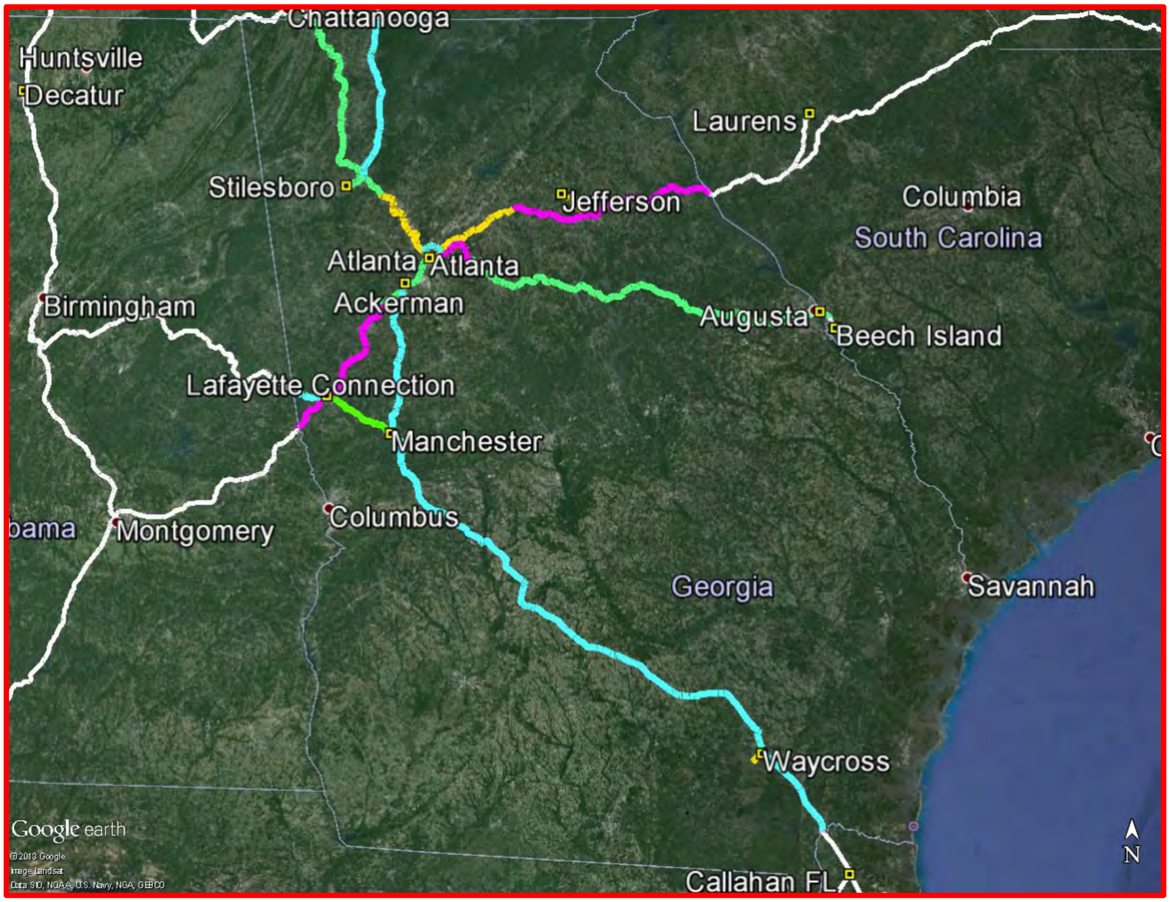
FLORIDA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres: Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
(magenta)	**Jacksonville FL**	38.3	381.6	INDUS	69%	RESID	19%	$164,206	$62,656,978
(cyan)	**N Union City GA to Jacksonville FL**	37.1	437.6	AGRIC	61%	RESID	27%	$47,169	$20,642,676
(orange)	**Callahan FL to Baldwin FL**	26.4	320.1	AGRIC	84%	R-TOWN	15%	$8,589	$2,749,503
(green)	**Jacksonville FL to Orlando FL**	108.1	1,264.7	AGRIC	59%	RESID	19%	$44,848	$56,721,580
(yellow)	**Baldwin FL to Plant City FL**	170.2	2,029.9	AGRIC	72%	RESID	12%	$25,452	$51,666,245
(green)	**Plant City FL to Oneco FL**	61.7	631.6	AGRIC	30%	RESID	28%	$71,537	$45,183,242
(cyan)	**Plant City FL to Lakeland FL**	18.3	222.2	INDUS	33%	RESID	25%	$78,223	$17,379,758
(magenta)	**Vitis FL to Lakeland FL**	19.7	238.4	AGRIC	62%	RESID	28%	$24,947	$5,947,939
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR FLORIDA	**479.9**	**5,526.2**	**AGRIC**	**57%**	**RESID**	**17%**	**$47,582**	**$262,947,922**
								(rounded)	**$262,900,000**

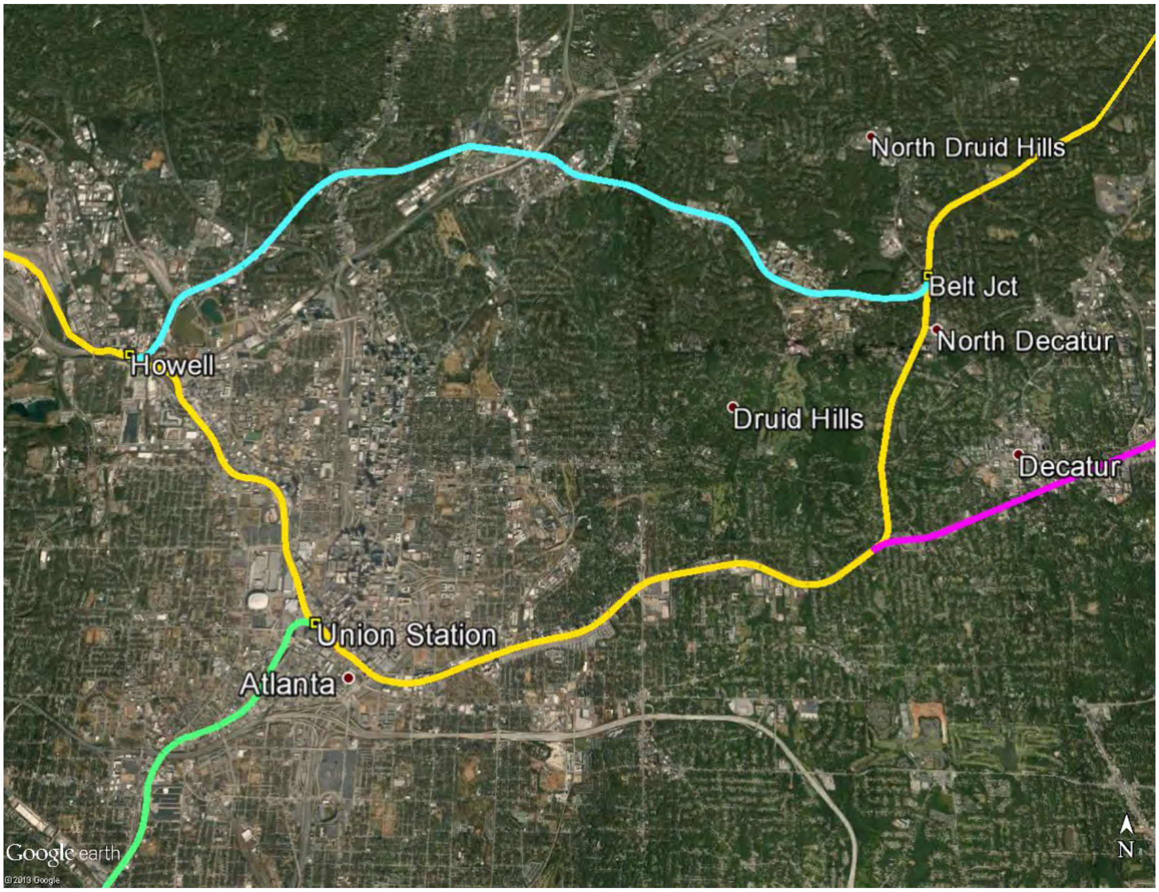
Georgia

The length of the TPI SAR within Georgia is 929.2 miles and consists of 15 routes, delineated as follows:



- Atlanta, GA (Acworth-Union Station-Dacula): The first SAR route in the Atlanta metro area (GOLD line on above map) begins its 74.1-mile route in the northwest portion of the Atlanta metro area, near Acworth. This route continues southeast into the CBD of Atlanta, passing through the redeveloped area around the Georgia World Congress Center, the Georgia Dome and Phillips Arena. The route proceeds southeast past the former site of Union Station and beneath the older CBD (the location of "Atlanta Underground"). Leaving the CBD, this route turns to the east past CSX's Hulsey Yard, and then turns northeast to the Gwinnett/Barrow County line near Dacula.

The map below illustrates the routes in the Atlanta, GA area in more detail:



- Atlanta, GA (Union Station to Palmetto): The second SAR route in the Atlanta metro area (GREEN line on maps)is 25.4 miles long, beginning at the former site of Union Station, and heading southwest through industrial and older commercial areas to the Fulton/Coweta County line, near Palmetto, GA. This route is 39% industrial and 31% commercial.
- Atlanta, GA (Decatur to Lithonia): The third Atlanta route (PURPLE line) is 17.0 miles long and is located in the southeast portion of the metro area, running from near Decatur (actually from Hulsey Junction, just east of CSX's Hulsey

Yard) to Lithonia, GA. This route is defined as 63% residential and 19% commercial.

- Atlanta, GA (Howell to Belt Junction): This 8.2-mile route (BLUE line) starts in the Howell Tower area and proceeds east to connect to the Acworth-Union Station-Dacula route at Belt Junction.
- Nashville, TN to Atlanta, GA: This 92.8-mile route (GREEN line) begins at the Tennessee/Georgia state line in northwest Georgia, and continues to the Cobb County line, near Acworth, GA (the beginning of the Atlanta greater metro area routes). This route is rural at the north end, and increasingly suburban in character at the south end. This route also includes a branch from Junta, GA (near Cartersville) to Stilesboro, GA.
- New Orleans, LA to Atlanta, GA: This 60.7-mile route (PURPLE line) runs from the Georgia/Alabama state line, near West Point, GA, northeast to the Fulton/Coweta County line near Palmetto, GA. This route is 54% agricultural.
- Pembroke, NC to Atlanta, GA: This 78.8-mile route (PURPLE line) runs west from the Georgia/South Carolina state line to the Gwinnett/Barrow County line. This route is a mix of rural areas and increasingly suburbanized areas as it approaches the Atlanta, GA greater metro area.
- Latonia KY to Junta, GA: This 60.0-mile route (BLUE line) runs north from Junta (near Cartersville) to the Georgia/Tennessee state line. Agricultural land uses account for 46% of the adjacent land uses on this route.
- Fowler Junction, GA to Jefferson, GA: This 13.7-mile branch line (GOLD line) is located northeast of the Atlanta area. Residential and agricultural uses predominate on this route.

- Union City, GA to Ackerman, GA: This 2.5-mile route (GOLD line) leaves the Union Station-Palmetto route at Union City, and goes through mainly industrial and agricultural areas to Ackerman.
- Atlanta, GA to Beech Island, SC: This 154.6-mile route in Georgia (GREEN line) is part of an overall route that ends in South Carolina. The portion of this route in Georgia includes the urban area of Augusta, GA. The destination of this route, Beech Island, SC, is located across the Savannah River from Augusta, GA. In Georgia, this route is 47% agricultural and 24% residential.
- North Union City, GA to Jacksonville, FL: The Georgia portion of this route (BLUE line) is 294.9 miles long. This is a rural route, with agricultural land accounting for 79% of the adjacent land uses.
- Waycross, GA Yard Branch: Waycross, GA is located in the southeast corner of the state. This 5.0-mile route (GOLD line) connects the North Union City, GA to Jacksonville, FL route with the Waycross yard.
- Lafayette Connection, GA to Manchester, GA: This 28.5-mile route (GREEN line) is located southwest of the Atlanta area. Agricultural land uses account for 74% of the adjacent land uses on this route.
- Parkwood, AL to Lafayette Connection, GA: This 12.9-mile route (BLUE line) begins at Lafayette Connection and continues to the Georgia/Alabama state line.

The 929.2 route miles in the state of Georgia were divided into 689 line segments, with an overall average line segment length of 1.35 miles for the SAR right of way in the state of Georgia:

AVERAGE LENGTH OF LINE SEGMENTS GEORGIA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Atlanta GA (Acworth-Union Sta-Dacula)	74.1	111	0.67
Atlanta GA (Union Station-Palmetto)	25.4	47	0.54
Atlanta GA (Decatur to Lithonia)	17.0	35	0.48
Atlanta GA (Howell to Belt Jct)	8.2	20	0.41
Nashville TN to Atlanta GA	92.8	69	1.35
New Orleans LA to Atlanta GA	60.7	28	2.17
Pembroke NC to Atlanta GA	78.8	64	1.23
Latonia KY to Junta GA	60.0	36	1.67
Fowler Jct GA to Jefferson GA	13.7	13	1.05
Union City GA to Ackerman GA	2.5	5	0.50
Atlanta GA to Beech Island SC	154.6	112	1.38
N. Union City GA to Jacksonville FL	294.9	124	2.38
Waycross GA Yard Branch	5.0	6	0.83
Lafayette Conn GA to Manchester GA	28.5	9	3.17
Parkwood Jct AL to Lafayette Conn GA	12.9	10	1.29
TOTAL STATE	**929.2**	**689**	**1.35**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE GEORGIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Atlanta GA (Acworth-Union Sta-Dacula)	430.7	227.9	183.6	19.2	0.0	0.0	861.4
Atlanta GA (Union Station-Palmetto)	81.9	108.1	83.7	0.0	0.0	0.0	273.7
Atlanta GA (Decatur to Lithonia)	129.3	37.6	38.7	0.0	0.0	0.0	205.6
Atlanta GA (Howell to Belt Jct)	28.9	28.8	33.2	0.0	0.0	3.4	94.3
Nashville TN to Atlanta GA	337.3	177.7	12.4	368.1	114.4	111.8	1,121.7
New Orleans LA to Atlanta GA	143.2	73.5	0.0	394.1	108.9	14.8	734.5
Pembroke NC to Atlanta GA	168.1	246.8	45.6	417.2	43.0	34.2	954.9
Latonia KY to Junta GA	242.7	57.5	9.4	332.4	63.0	22.2	727.2
Fowler Jct GA to Jefferson GA	65.9	7.6	0.0	62.2	21.7	8.7	166.2
Union City GA to Ackerman GA	2.1	22.5	0.0	5.5	0.0	0.0	30.1
Atlanta GA to Beech Island SC	448.0	283.0	82.0	868.9	112.2	68.8	1,863.0
N. Union City GA to Jacksonville FL	360.3	297.9	74.4	2,839.6	0.0	0.0	3,572.1
Waycross GA Yard Branch	19.6	8.7	0.0	32.2	0.0	0.0	60.5
Lafayette Conn GA to Manchester GA	41.7	44.7	3.8	255.8	0.0	0.0	345.9
Parkwood Jct AL to Lafayette Conn GA	16.6	16.6	0.0	82.5	0.0	29.6	145.3
TOTAL ACRES	**2,516.3**	**1,638.9**	**566.8**	**5,677.6**	**463.3**	**293.5**	**11,156.4**
PERCENT OF TOTAL	***23%***	***15%***	***5%***	***51%***	***4%***	***3%***	
Acres in above table are based on land areas valued, excluding route over water of 30.3 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Georgia is agricultural at 51%, with residential land uses accounting for another 23% of the adjacent land uses in Georgia.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Georgia, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) GEORGIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Atlanta GA (Acworth-Union Sta-Dacula)	$123,405	$185,354	$753,044	$10,000			$271,493
Atlanta GA (Union Station-Palmetto)	$356,437	$203,646	$626,792				$378,790
Atlanta GA (Decatur to Lithonia)	$75,000	$200,000	$325,000				$144,907
Atlanta GA (Howell to Belt Jct)	$234,906	$206,700	$439,434			$1,000	$289,845
Nashville TN to Atlanta GA	$13,346	$50,000	$208,049	$3,282	$7,500	$350	$16,115
New Orleans LA to Atlanta GA	$35,760	$68,240		$2,203	$14,328	$350	$17,112
Pembroke NC to Atlanta GA	$25,782	$85,357	$237,367	$3,270	$8,500	$350	$39,757
Latonia KY to Junta GA	$12,923	$50,000	$150,000	$2,958	$7,500	$350	$12,218
Fowler Jct GA to Jefferson GA	$32,624	$65,000		$6,000	$20,000	$350	$20,785
Union City GA to Ackerman GA	$300,000	$175,000		$11,000			$154,063
Atlanta GA to Beech Island SC	$39,094	$77,677	$142,439	$3,355	$8,500	$470	$29,565
N. Union City GA to Jacksonville FL	$44,040	$70,840	$271,500	$2,754			$18,191
Waycross GA Yard Branch	$35,000	$100,000		$3,000			$27,288
Lafayette Conn GA to Manchester GA	$32,855	$97,863	$75,000	$4,000			$20,381
Parkwood Jct AL to Lafayette Conn GA	$53,000	$100,000		$2,000		$500	$18,720

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE GEORGIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Atlanta GA (Acworth-Union Sta-Dacula)	$53,151,818	$42,243,939	$138,274,848	$191,515	$0	$0	$233,862,121
Atlanta GA (Union Station-Palmetto)	$29,195,455	$22,006,061	$52,460,606	$0	$0	$0	$103,662,121
Atlanta GA (Decatur to Lithonia)	$9,695,455	$7,527,273	$12,566,667	$0	$0	$0	$29,789,394
Atlanta GA (Howell to Belt Jct)	$6,790,909	$5,959,848	$14,587,879	$0	$0	$3,394	$27,342,030
Nashville TN to Atlanta GA	$4,501,212	$8,884,848	$2,584,848	$1,208,194	$858,182	$39,115	$18,076,400
New Orleans LA to Atlanta GA	$5,119,030	$5,016,667	$0	$868,121	$1,560,455	$5,197	$12,569,470
Pembroke NC to Atlanta GA	$4,334,515	$21,070,303	$10,818,182	$1,363,909	$365,758	$11,964	$37,964,630
Latonia KY to Junta GA	$3,136,061	$2,875,758	$1,409,091	$983,042	$472,727	$7,764	$8,884,442
Fowler Jct GA to Jefferson GA	$2,151,212	$492,424	$0	$373,455	$433,939	$3,055	$3,454,085
Union City GA to Ackerman GA	$636,364	$3,934,848	$0	$60,000	$0	$0	$4,631,212
Atlanta GA to Beech Island SC	$17,513,939	$21,984,848	$11,680,000	$2,914,788	$954,061	$32,379	$55,080,015
N. Union City GA to Jacksonville FL	$15,867,727	$21,101,212	$20,189,697	$7,821,115	$0	$0	$64,979,752
Waycross GA Yard Branch	$687,273	$866,667	$0	$96,545	$0	$0	$1,650,485
Lafayette Conn GA to Manchester GA	$1,369,939	$4,371,212	$286,364	$1,023,030	$0	$0	$7,050,545
Parkwood Jct AL to Lafayette Conn GA	$880,121	$1,660,606	$0	$165,091	$0	$14,788	$2,720,606
TOTAL LAND VALUE	**$155,031,030**	**$169,996,515**	**$264,858,182**	**$17,068,806**	**$4,645,121**	**$117,655**	**$611,717,309**
PERCENT OF TOTAL	***25.3%***	***27.8%***	***43.3%***	***2.8%***	***0.8%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 51% of the total acreage in Georgia (see table on a previous page), accounts for only 2.8% of the total land value in the state. By contrast, commercial land accounts for 43.3% of market value, but only 5% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of

Georgia, the estimate of value for the land to support communication facilities is $4,300,127.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES GEORGIA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Atlanta GA (Acworth-Union Sta-Dacula)	74.12	861.39	$271,493	2.96	5.92	$1,607,236
Atlanta GA (Union Station-Palmetto)	25.43	273.67	$378,790	1.02	2.04	$772,731
Atlanta GA (Decatur to Lithonia)	16.96	205.58	$144,907	0.68	1.36	$197,074
Atlanta GA (Howell to Belt Jct)	8.19	94.33	$289,845	0.33	0.66	$191,298
Nashville TN to Atlanta GA	92.84	1,121.70	$16,115	3.71	7.42	$119,575
New Orleans LA to Atlanta GA	60.73	734.55	$17,112	2.43	4.86	$83,164
Pembroke NC to Atlanta GA	78.78	954.91	$39,757	3.15	6.30	$250,471
Latonia KY to Junta GA	59.99	727.15	$12,218	2.40	4.80	$58,647
Fowler Jct GA to Jefferson GA	13.71	166.18	$20,785	0.55	1.10	$22,863
Union City GA to Ackerman GA	2.48	30.06	$154,063	0.10	0.20	$30,813
Atlanta GA to Beech Island SC	154.60	1,863.03	$29,565	6.18	12.36	$365,420
N. Union City GA to Jacksonville FL	294.94	3,572.13	$18,191	11.80	23.60	$429,301
Waycross GA Yard Branch	4.99	60.48	$27,288	0.20	0.40	$10,915
Lafayette Conn GA to Manchester GA	28.54	345.94	$20,381	1.14	2.28	$46,468
Parkwood Jct AL to Lafayette Conn GA	12.85	145.33	$18,720	0.51	1.02	$19,094
TOTAL STATE				**37.16**	**74.32**	**$4,205,071**
TOTAL STATE (Round Up for # of Towers)				**38.00**	**76.00**	**$4,300,127**

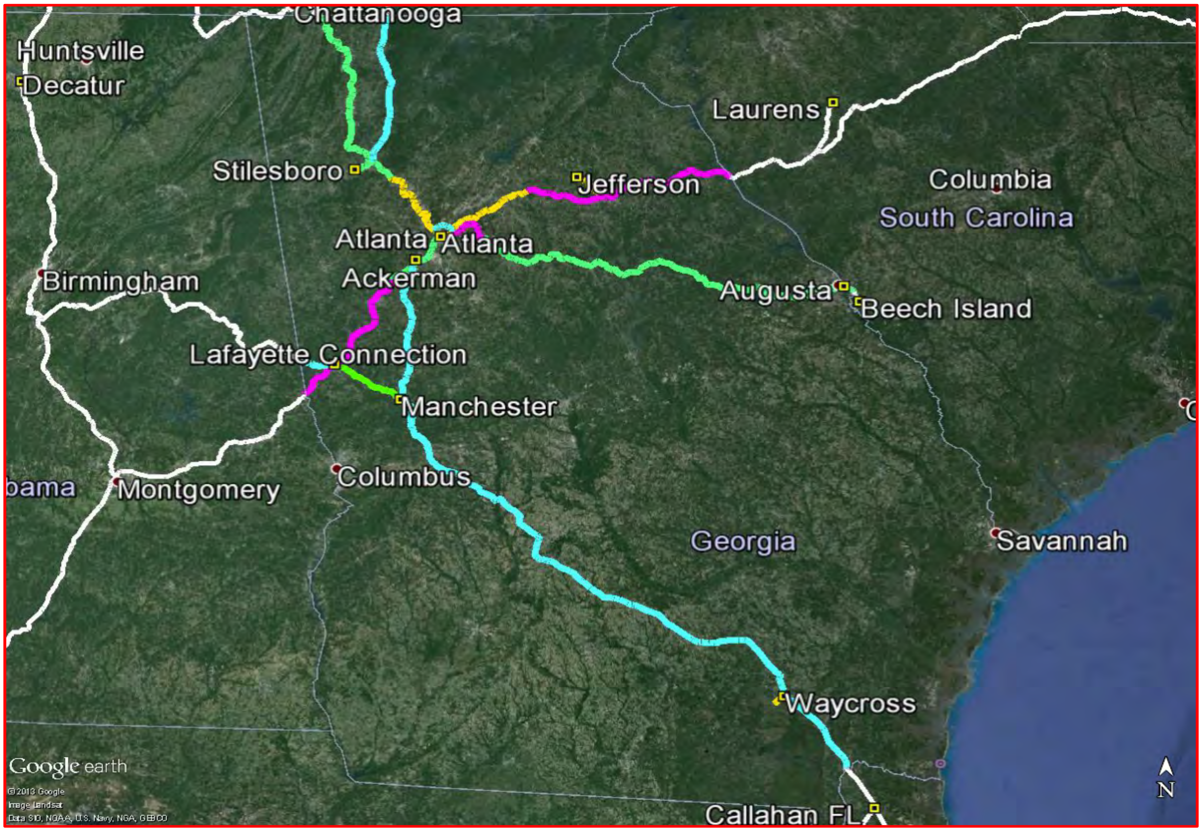
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Georgia, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Georgia. The total valuation of the 929.2 route miles, in the state of Georgia, as of July 1, 2010 is:

Six-Hundred Eleven Million, Seven-Hundred Thousand Dollars

$611,700,000 (rounded)

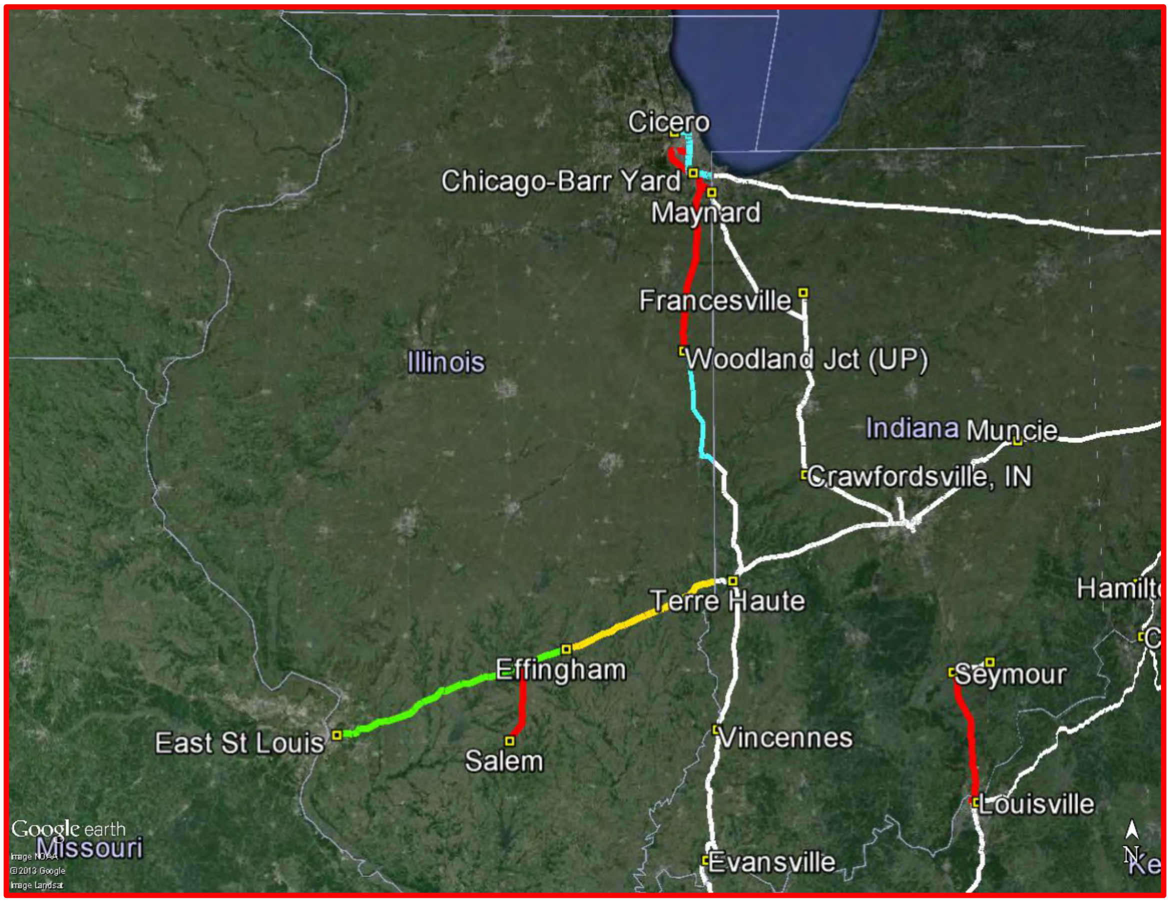
GEORGIA



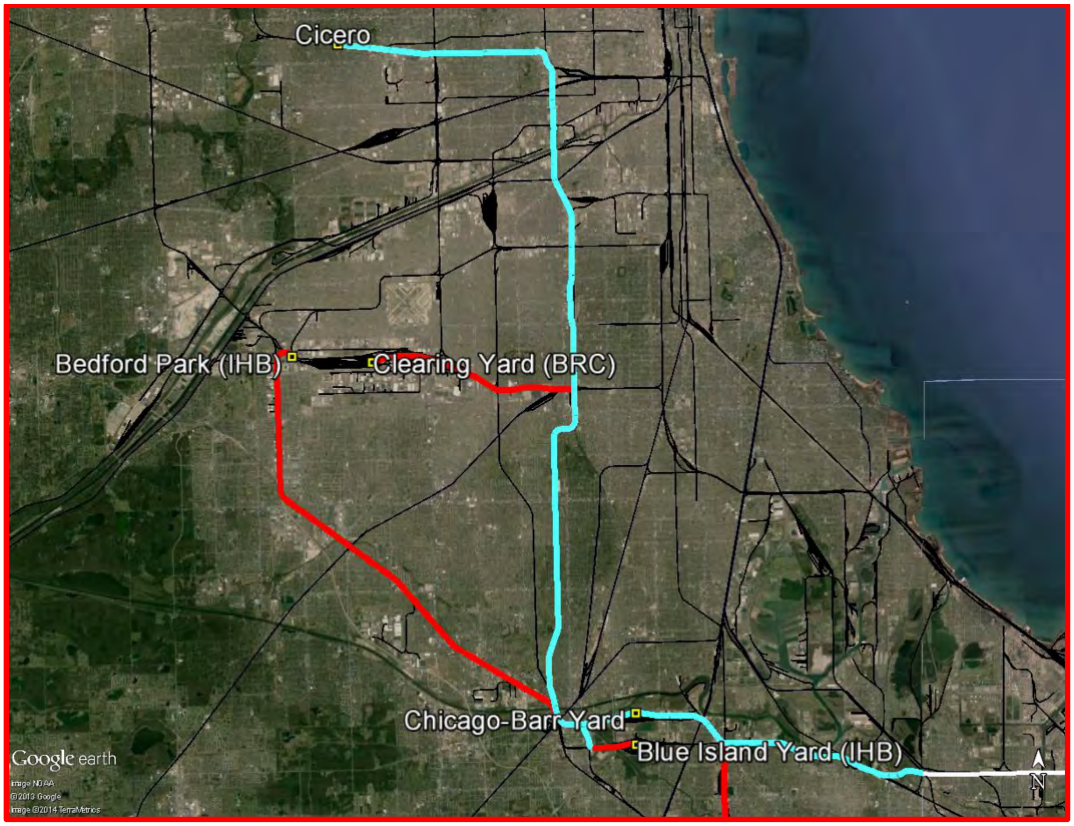
Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
(orange)	Atlanta GA (Acworth-Union Sta-Dacula)	74.1	861.4	RESID	50%	INDUS	26%	$271,493	$233,862,121
(green)	Atlanta GA (Union Station-Palmetto)	25.4	273.7	INDUS	39%	COMM	31%	$378,790	$103,662,121
(magenta)	Atlanta GA (Decatur to Lithonia)	17.0	205.6	RESID	63%	COMM	19%	$144,907	$29,789,394
(cyan)	Atlanta GA (Howell to Belt Jct)	8.2	94.3	COMM	35%	RESID	31%	$289,845	$27,342,030
(green)	Nashville TN to Atlanta GA	92.8	1,121.7	AGRIC	33%	RESID	30%	$16,115	$18,076,400
(magenta)	New Orleans LA to Atlanta GA	60.7	734.5	AGRIC	54%	RESID	19%	$17,112	$12,569,470
(magenta)	Pembroke NC to Atlanta GA	78.8	954.9	AGRIC	44%	INDUS	26%	$39,757	$37,964,630
(cyan)	Latonia KY to Junta GA	60.0	727.2	AGRIC	46%	RESID	33%	$12,218	$8,884,442
(orange)	Fowler Jct GA to Jefferson GA	13.7	166.2	RESID	40%	AGRIC	37%	$20,785	$3,454,085
(orange)	Union City GA to Ackerman GA	2.5	30.1	INDUS	75%	AGRIC	18%	$154,063	$4,631,212
(green)	Atlanta GA to Beech Island SC	154.6	1,863.0	AGRIC	47%	RESID	24%	$29,565	$55,080,015
(cyan)	N. Union City GA to Jacksonville FL	294.9	3,572.1	AGRIC	79%	RESID	10%	$18,191	$64,979,752
(orange)	Waycross GA Yard Branch	5.0	60.5	AGRIC	53%	RESID	32%	$27,288	$1,650,485
(green)	Lafayette Conn GA to Manchester GA	28.5	345.9	AGRIC	74%	INDUS	13%	$20,381	$7,050,545
(cyan)	Parkwood Jct AL to Lafayette Conn GA	12.9	145.3	AGRIC	57%	RES (X)	20%	$18,720	$2,720,606
(red)	Trackage Rights (Land NOT Valued)								
	TOTALS FOR GEORGIA	**929.2**	**11,156.4**	**AGRIC**	**51%**	**RESID**	**23%**	**$54,831**	**$611,717,309**
								(rounded)	**$611,700,000**

Illinois

The length of the TPI SAR within Illinois is 230.3 miles and consists of four routes, delineated as follows:



- Chicago, IL: This 30.0-mile (BLUE line on above map) route begins at State Line Tower, at the Indiana/Illinois state line and continues west and then north to Cicero, IL. The map on the next page illustrates the routes in the Chicago area in more detail. Land valuation is included in this analysis for the 30.0-mile route to Cicero, shown on the map below in BLUE. In addition, trackage rights are utilized (RED lines) to reach Clearing Yard, Bedford Park, and Blue Island yard. The underlying land value for these trackage rights routes is NOT included in this analysis.



- Marion, OH to Effingham, IL: This 60.6-mile route (YELLOW line) begins at the Indiana/Illinois state line and runs southwest to Effingham, with 84% of the adjacent land uses designated as agricultural.

- Effingham, IL to East St Louis, IL: This 93.8-mile route (GREEN line) begins at Effingham and runs southwest to East St. Louis, IL. Agricultural uses account for 83% of the adjacent land uses on this route.

- Nashville, TN to Woodland Junction, IL (UP): This 45.8-mile route (BLUE line) begins at the Indiana/Illinois state line, and proceeds north through Danville, IL, ending at Woodland Junction. For operational purposes, this route continues from Woodland Junction north about 66 miles to Dolton, IL (Chicago area), using trackage rights over the Union Pacific Railroad. The land under the Union Pacific trackage rights portion of the SAR is NOT included in this analysis.

The 230.3 route miles in the state of Illinois were divided into 130 line segments, with an overall average line segment length of 1.77 miles for the SAR right of way in the state of Illinois:

AVERAGE LENGTH OF LINE SEGMENTS ILLINOIS			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Chicago IL	30.0	65	0.46
Marion OH to Effingham IL	60.6	20	3.03
Effingham IL to E St Louis IL	93.8	28	3.35
Nashville TN to Woodland Jct IL (UP)	45.8	17	2.70
TOTAL STATE	**230.3**	**130**	**1.77**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE ILLINOIS							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Chicago IL	96.7	113.8	10.7	0.0	0.0	51.4	272.6
Marion OH to Effingham IL	0.0	0.0	0.0	619.2	115.7	0.0	734.9
Effingham IL to E St Louis IL	37.3	28.3	0.0	938.2	133.1	0.0	1,136.8
Nashville TN to Woodland Jct IL (UP)	62.5	0.0	0.0	363.1	130.1	0.0	555.6
TOTAL ACRES	**196.5**	**142.1**	**10.7**	**1,920.5**	**378.8**	**51.4**	**2,700.0**
PERCENT OF TOTAL	***7%***	***5%***	***0%***	***71%***	***14%***	***2%***	
Acres in above table are based on land areas valued, excluding route over water of 0 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Illinois is agricultural at 71%, with rural town land uses accounting for another 14% of the adjacent land uses in Illinois.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Illinois, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) ILLINOIS							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Chicago IL	$475,000	$220,000	$1,300,000			$1,000	$311,489
Marion OH to Effingham IL				$4,318	$10,000		$5,212
Effingham IL to E St Louis IL	$45,000	$32,000		$5,141	$10,536		$7,748
Nashville TN to Woodland Jct IL (UP)	$10,000			$4,650	$10,000		$6,504

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE ILLINOIS							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Chicago IL	$45,945,455	$25,040,000	$13,886,364	$0	$0	$51,409	$84,923,227
Marion OH to Effingham IL	$0	$0	$0	$2,673,636	$1,156,970	$0	$3,830,606
Effingham IL to E St Louis IL	$1,677,273	$905,697	$0	$4,823,455	$1,402,182	$0	$8,808,606
Nashville TN to Woodland Jct IL (UP)	$624,848	$0	$0	$1,688,373	$1,300,606	$0	$3,613,827
TOTAL LAND VALUE	**$48,247,576**	**$25,945,697**	**$13,886,364**	**$9,185,464**	**$3,859,758**	**$51,409**	**$101,176,267**
PERCENT OF TOTAL	***47.7%***	***25.6%***	***13.7%***	***9.1%***	***3.8%***	***0.1%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 71% of the total acreage in Illinois (see table on a previous page), accounts for only 9.1% of the total land value in the state. By contrast, industrial land accounts for 25.6% of market value, but only 5% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Illinois, the estimate of value for the land to support communication facilities is $928,146.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES ILLINOIS						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Chicago IL	29.99	272.64	$311,489	1.20	2.40	$747,574
Marion OH to Effingham IL	60.63	734.91	$5,212	2.43	4.86	$25,332
Effingham IL to E St Louis IL	93.79	1,136.85	$7,748	3.75	7.50	$58,112
Nashville TN to Woodland Jct IL (UP)	45.84	555.64	$6,504	1.83	3.66	$23,804
TOTAL STATE				**9.21**	**18.42**	**$854,822**
TOTAL STATE (Round Up for # of Towers)				**10.00**	**20.00**	**$928,146**

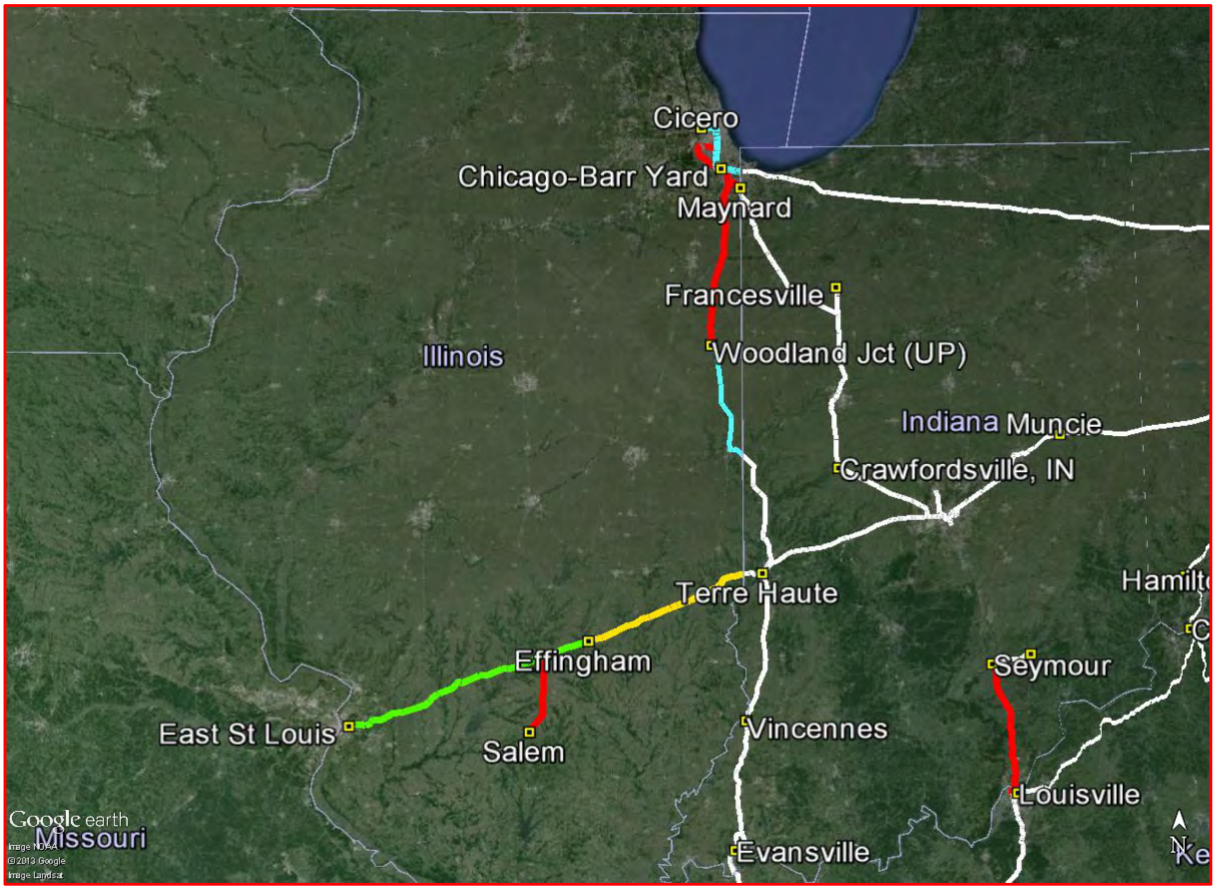
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Illinois, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Illinois. The total valuation of the 230.3 route miles, in the state of Illinois, as of July 1, 2010 is:

One-Hundred One Million, Two-Hundred Thousand Dollars

$101,200,000 (rounded)

ILLINOIS

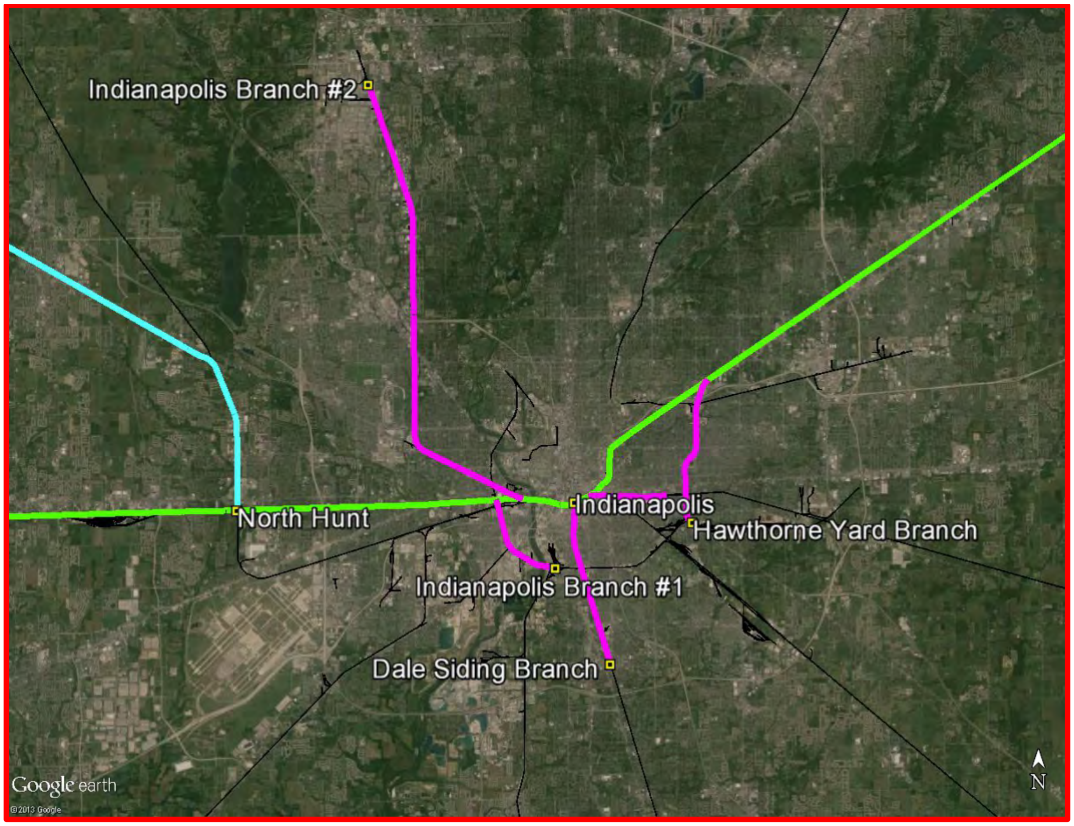


Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
	Chicago IL	30.0	272.6	INDUS	42%	RESID	35%	$311,489	$84,923,227
	Marion OH to Effingham IL	60.6	734.9	AGRIC	84%	R-TOWN	16%	$5,212	$3,830,606
	Effingham IL to E St Louis IL	93.8	1,136.8	AGRIC	83%	R-TOWN	12%	$7,748	$8,808,606
	Nashville TN to Woodland Jct IL (UP)	45.8	555.6	AGRIC	65%	R-TOWN	23%	$6,504	$3,613,827
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR ILLINOIS	**230.3**	**2,700.0**	**AGRIC**	**71%**	**R-TOWN**	**14%**	**$37,472**	**$101,176,267**
								(rounded)	**$101,200,000**

Indiana

The length of the TPI SAR within Indiana is 693.0 miles and consists of nine routes, delineated as follows:

- Indianapolis, IN: This 31.8-mile route (GREEN line) begins at the Marion/Hancock county line in the east, passes through mainly older residential and industrial areas, before passing to the south of the CBD. The route then continues west through additional industrial and older residential areas, passing the existing CSX Avon Yard, and ending near Danville, IN. The map shown on the next page illustrates the Indianapolis route in more detail.



- Indianapolis, IN Branch Lines: The Indianapolis metropolitan area also includes four branch lines, totaling 22.9 miles. These four branch lines are shown as PURPLE lines above (the Indianapolis, IN route is GREEN).
- Chicago Area (Indiana Only): This 16.1-mile route (GOLD line) begins at State Line Tower, at the Indiana/Illinois state line and continues east through Gary, IN to the Lake/Porter county line. Land uses along this route include 45% restricted (wetlands, etc.) and 38% industrial.
- Chicago, IL to Fostoria, OH: This 128.4-mile route (GREEN line) runs east/west from the Lake/Porter county line in the west to the Indiana/Ohio state line to the east. This route is 84% agricultural and 7% rural town.
- Marion, OH to Effingham, IL: This 133.9-mile route (GOLD line) runs from the Indiana/Ohio state line near Union City, IN to the

Indiana/Illinois state line, near Terre Haute, IN. Other than the Muncie, IN and Terre Haute, IN areas, this route passes through rural areas. This route passes through the Indianapolis area, but the Indianapolis metro area is included in the first two routes shown above.

- Nashville, TN to Woodland Junction, IL (UP): This 168.1-mile route begins at the Indiana/Kentucky state line at Evansville, IN. The route runs north through mainly rural areas (66% agricultural), passing through Vincennes and Terre Haute. The route ends at the Indiana/Illinois state line.

- North Hunt, IN to Maynard, IN: This 170.5-mile route (BLUE line) runs north/south through mainly rural areas. On the south, the route begins at North Hunt, located between Indianapolis and Terre Haute. This route ends in the north at Maynard/Munster, IN, where the SAR utilizes Canadian National trackage rights 5.9 miles to the Chicago area. The land value for the Canadian National trackage rights is NOT included in this analysis. Also included in this route is a spur from Monon, IN to Francesville, IN.

- Louisville, KY to North Vernon, IN: This route begins in Louisville, KY. From Louisville to Seymour, IN, the route utilizes trackage rights over the Louisville & Indiana Railroad. Land values for trackage rights routes are NOT included in this analysis. Land values are included from Seymour, IN to North Vernon, IN (GOLD line), a distance of 14.8 miles.

- Evansville, IN Branch Lines: The Evansville, IN area includes two branch lines, totaling 6.6 miles. These two branch lines are shown below in PURPLE (the Nashville-Woodland Jct. line is shown in green).

The 693.0 route miles in the state of Indiana were divided into 417 line segments, with an overall average line segment length of 1.66 miles for the SAR right of way in the state of Indiana:

AVERAGE LENGTH OF LINE SEGMENTS INDIANA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Indianapolis IN	31.8	43	0.74
Indianapolis IN (Branch Lines)	22.9	34	0.67
Chicago Area (Indiana Only)	16.1	25	0.65
Chicago IL to Fostoria OH	128.4	48	2.68
Marion OH to Effingham IL	133.9	91	1.47
Nashville TN to Woodland Jct IL (UP)	168.1	59	2.85
North Hunt IN to Maynard IN (Chicago)	170.5	104	1.64
Louisville KY to North Vernon IN	14.8	9	1.64
Evansville IN (Branch Lines)	6.6	4	1.65
TOTAL STATE	**693.0**	**417**	**1.66**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE INDIANA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Indianapolis IN	145.4	150.6	35.3	0.0	0.0	0.0	331.2
Indianapolis IN (Branch Lines)	60.0	140.6	5.3	0.0	0.0	1.8	207.7
Chicago Area (Indiana Only)	18.0	56.2	6.4	0.0	0.0	65.5	146.2
Chicago IL to Fostoria OH	112.1	8.7	0.0	1,303.6	116.2	15.9	1,556.5
Marion OH to Effingham IL	195.0	169.1	8.3	874.9	207.0	156.5	1,610.9
Nashville TN to Woodland Jct IL (UP)	253.3	113.9	0.0	1,341.9	180.1	146.5	2,035.9
North Hunt IN to Maynard IN (Chicago)	137.4	143.8	10.2	1,556.8	134.5	82.1	2,064.8
Louisville KY to North Vernon IN	0.0	0.0	0.0	94.2	82.5	2.2	178.9
Evansville IN (Branch Lines)	30.7	49.1	0.0	0.0	0.0	0.0	79.8
TOTAL ACRES	**951.9**	**832.1**	**65.5**	**5,171.4**	**720.4**	**470.7**	**8,212.0**
PERCENT OF TOTAL	***12%***	***10%***	***1%***	***63%***	***9%***	***6%***	
Acres in above table are based on land areas valued, excluding route over water of 4.58 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Indiana is agricultural at 63%, with residential land uses accounting for another 12% of the adjacent land uses in Indiana.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Indiana, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type)
INDIANA

Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Indianapolis IN	$65,647	$94,456	$289,013				$102,549
Indianapolis IN (Branch Lines)	$70,000	$100,000	$450,000			$1,000	$99,435
Chicago Area (Indiana Only)	$50,000	$125,000	$250,000			$500	$65,398
Chicago IL to Fostoria OH	$65,000	$95,000		$5,296	$10,000	$200	$10,399
Marion OH to Effingham IL	$24,659	$57,238	$73,285	$4,705	$10,000	$200	$13,232
Nashville TN to Woodland Jct IL (UP)	$20,937	$63,136		$4,544	$9,803	$200	$10,016
North Hunt IN to Maynard IN (Chicago)	$57,567	$90,647	$178,542	$5,237	$11,305	$200	$15,718
Louisville KY to North Vernon IN				$4,500	$8,000	$200	$6,060
Evansville IN (Branch Lines)	$2,000	$60,000					$37,699

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE INDIANA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Indianapolis IN	$9,542,727	$14,222,727	$10,203,030	$0	$0	$0	$33,968,485
Indianapolis IN (Branch Lines)	$4,196,818	$14,063,636	$2,393,182	$0	$0	$1,818	$20,655,455
Chicago Area (Indiana Only)	$902,273	$7,022,727	$1,602,273	$0	$0	$32,773	$9,560,045
Chicago IL to Fostoria OH	$7,287,879	$829,091	$0	$6,903,333	$1,162,424	$3,176	$16,185,903
Marion OH to Effingham IL	$4,808,788	$9,679,318	$608,485	$4,116,394	$2,070,303	$31,309	$21,314,597
Nashville TN to Woodland Jct IL (UP)	$5,303,939	$7,193,636	$0	$6,097,909	$1,765,818	$29,309	$20,390,612
North Hunt IN to Maynard IN (Chicago)	$7,909,394	$13,036,667	$1,817,879	$8,153,182	$1,520,970	$16,424	$32,454,515
Louisville KY to North Vernon IN	$0	$0	$0	$423,818	$659,879	$448	$1,084,145
Evansville IN (Branch Lines)	$61,333	$2,945,455	$0	$0	$0	$0	$3,006,788
TOTAL LAND VALUE	**$40,013,152**	**$68,993,258**	**$16,624,848**	**$25,694,636**	**$7,179,394**	**$115,258**	**$158,620,545**
PERCENT OF TOTAL	***25.2%***	***43.5%***	***10.5%***	***16.2%***	***4.5%***	***0.1%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 63% of the total acreage in Indiana (see table on a previous page), accounts for only 16.2% of the total land value in the state. By contrast, industrial land accounts for 43.5% of market value, but only 10% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Indiana, the estimate of value for the land to support communication facilities is $1,162,583.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES INDIANA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Indianapolis IN	31.78	331.24	$102,549	1.27	2.54	$260,474
Indianapolis IN (Branch Lines)	22.85	207.73	$99,435	0.91	1.82	$180,973
Chicago Area (Indiana Only)	16.13	146.18	$65,398	0.65	1.30	$85,018
Chicago IL to Fostoria OH	128.42	1,556.55	$10,399	5.14	10.28	$106,898
Marion OH to Effingham IL	133.90	1,610.88	$13,232	5.36	10.72	$141,843
Nashville TN to Woodland Jct IL (UP)	168.06	2,035.88	$10,016	6.72	13.44	$134,610
North Hunt IN to Maynard IN (Chicago)	170.50	2,064.85	$15,718	6.82	13.64	$214,388
Louisville KY to North Vernon IN	14.76	178.91	$6,060	0.59	1.18	$7,151
Evansville IN (Branch Lines)	6.58	79.76	$37,699	0.26	0.52	$19,604
TOTAL STATE				**27.72**	**55.44**	**$1,150,958**
TAL STATE (Round Up for # of Towers)				**28.00**	**56.00**	**$1,162,583**

This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Indiana, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Indiana. The total valuation of the 693.0 route miles, in the state of Indiana, as of July 1, 2010 is:

One-Hundred Fifty-Eight Million, Six-Hundred Thousand Dollars

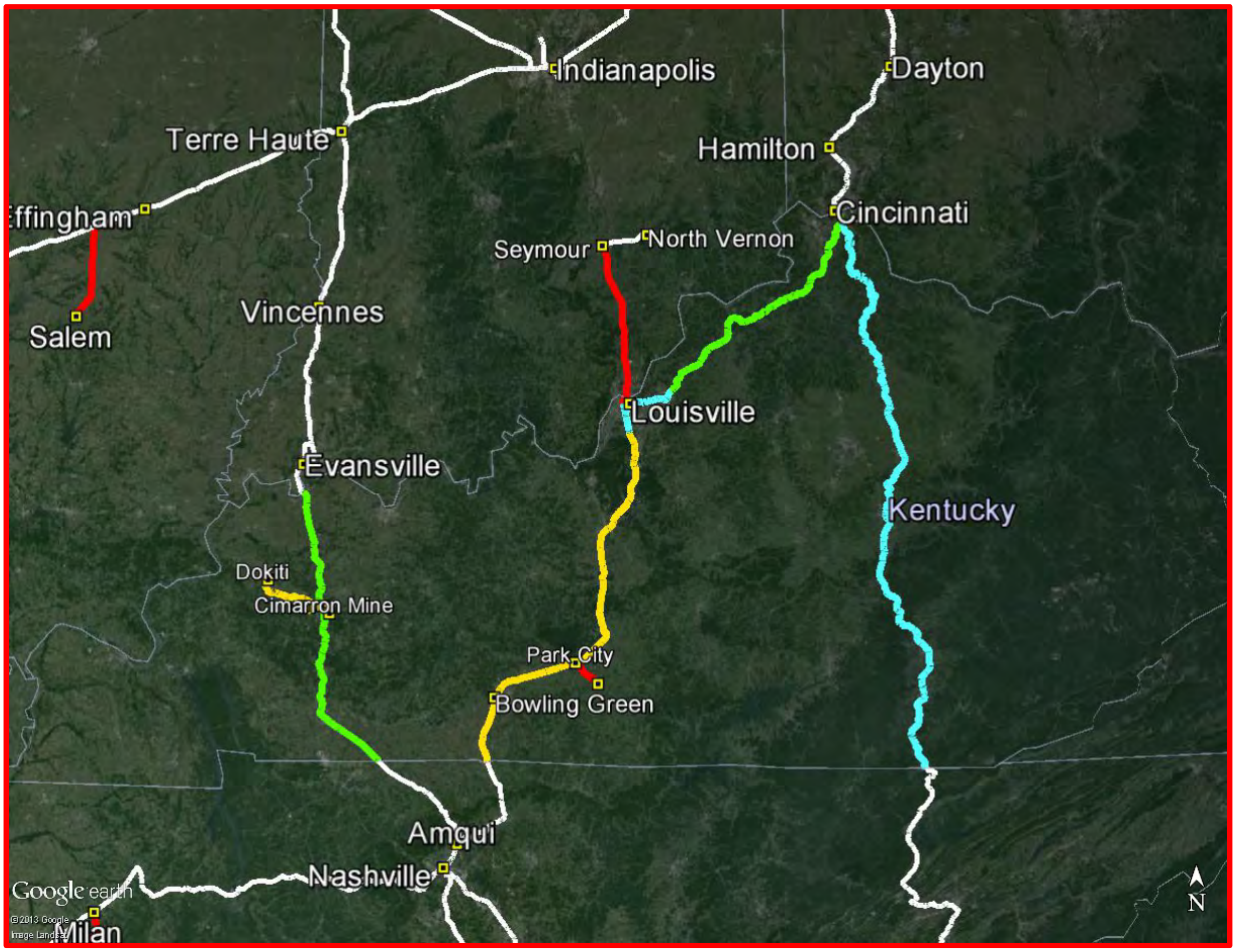
$158,600,000 (rounded)

INDIANA

Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
	Indianapolis IN	31.8	331.2	INDUS	45%	RESID	44%	$102,549	$33,968,485
	Indianapolis IN (Branch Lines)	22.9	207.7	INDUS	68%	RESID	29%	$99,435	$20,655,455
	Chicago Area (Indiana Only)	16.1	146.2	RES (X)	45%	INDUS	38%	$65,398	$9,560,045
	Chicago IL to Fostoria OH	128.4	1,556.5	AGRIC	84%	R-TOWN	7%	$10,399	$16,185,903
	Marion OH to Effingham IL	133.9	1,610.9	AGRIC	54%	R-TOWN	13%	$13,232	$21,314,597
	Nashville TN to Woodland Jct IL (UP)	168.1	2,035.9	AGRIC	66%	RESID	12%	$10,016	$20,390,612
	North Hunt IN to Maynard IN (Chicago)	170.5	2,064.8	AGRIC	75%	INDUS	7%	$15,718	$32,454,515
	Louisville KY to North Vernon IN	14.8	178.9	AGRIC	53%	R-TOWN	46%	$6,060	$1,084,145
	Evansville IN (Branch Lines)	6.6	79.8	INDUS	62%	RESID	38%	$37,699	$3,006,788
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR INDIANA	**693.0**	**8,212.0**	**AGRIC**	**63%**	**RESID**	**12%**	**$19,316**	**$158,620,545**
								(rounded)	**$158,600,000**

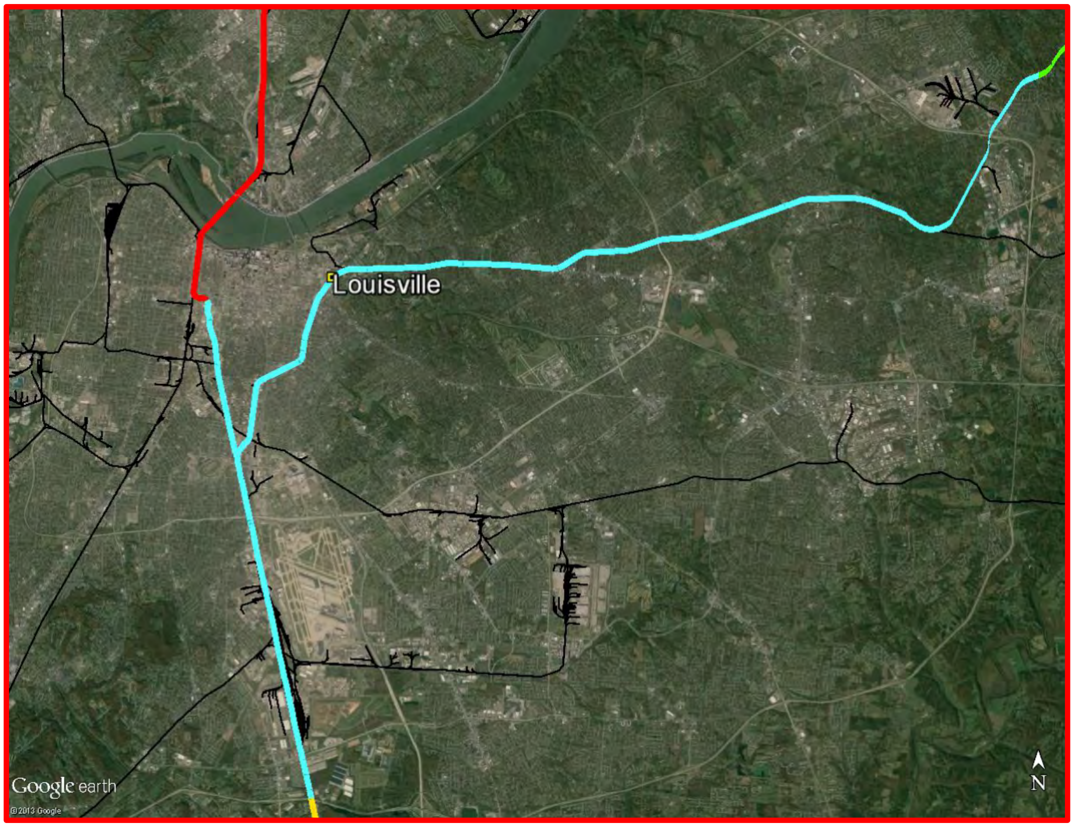
Kentucky

The length of the TPI SAR within Kentucky is 593.6 miles and consists of six routes, delineated as follows:



- Louisville, KY: This 27.4 mile route (BLUE line on above map) begins south of CSX's Osborn Yard and runs north through mainly industrial areas. The route passes through the center of the University of Louisville campus, and then bypasses the CBD to the south and east of the CBD. The route continues northeast through older residential and industrial areas, ending at the Jefferson/Oldham county line. A second line in Louisville goes north up to the site of the former Union Station, where a connection is made with the Louisville & Indiana Railroad (RED line). The map on the next page illustrates the

TPI SAR route in the Louisville, KY in more detail.



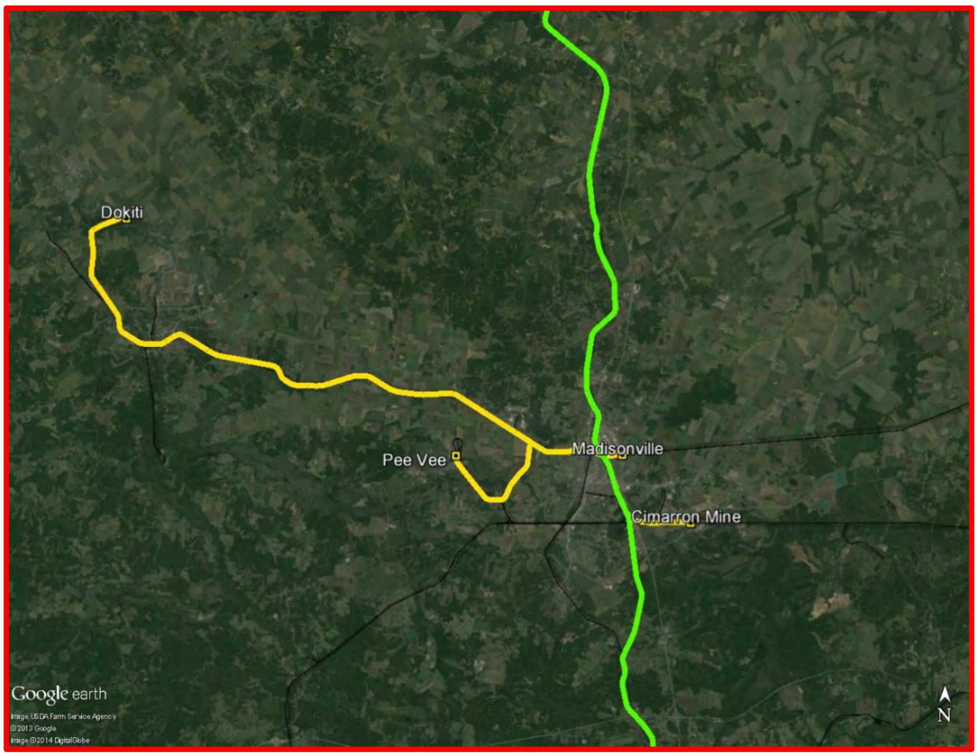
(RED route is trackage rights over the Louisville & Indiana RR)

- Louisville, KY to Cincinnati, OH: This 93.0-mile route (GREEN line) begins at the Jefferson/Oldham county line, northeast of Louisville and runs northeast to Cincinnati, OH. The majority of this route is in rural areas.
- Memphis, TN to Louisville, KY: This 131.7-mile route (YELLOW line) begins at the Kentucky/Tennessee state line and runs north through Bowling Green, ending in the southern portion of Louisville, just south of CSX's Osborn Yard. This route is 61% agricultural.
- Nashville, TN to Woodland Junction, IL (UP): This 97.6-mile north/south route (GREEN line) runs from the Kentucky/Tennessee state line to the Kentucky/Indiana state line. This route is

78% agricultural, and passes through Hopkinsville, KY and Madisonville, KY.

- Latonia, KY to Junta, GA: This route begins in Latonia, KY, which is located just south of Cincinnati, OH. This 213.1-mile route (BLUE line) is a rural route (Agriculture = 80% of land uses).

- Kentucky Branch Lines: There are four branch lines in Kentucky, near Madisonville, which total 30.9 total miles. These branch lines are shown below as YELLOW lines (the green line is Nashville to Woodland Jct.):



The 593.6 route miles in the state of Kentucky were divided into 281 line segments, with an overall average line segment length of 2.11 miles for the SAR right of way in the state of Kentucky:

AVERAGE LENGTH OF LINE SEGMENTS KENTUCKY			
Route Name	Total Miles	Number of Line Segments	Average Segment Length (Miles)
Louisville KY	27.4	41	0.67
Louisville KY to Cincinnati OH	93.0	37	2.51
Memphis TN to Louisville KY	131.7	52	2.53
Nashville TN to Woodland Jct IL (UP)	97.6	29	3.36
Latonia KY to Junta GA	213.1	99	2.15
Kentucky Branch Lines (4)	30.9	23	1.34
TOTAL STATE	**593.6**	**281**	**2.11**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE KENTUCKY							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Louisville KY	84.1	124.4	40.3	0.0	0.0	0.7	249.5
Louisville KY to Cincinnati OH	189.7	55.9	3.0	635.2	230.9	0.0	1,114.7
Memphis TN to Louisville KY	242.8	153.7	6.7	979.3	206.7	7.4	1,596.6
Nashville TN to Woodland Jct IL (UP)	31.5	125.8	16.3	916.9	86.7	0.0	1,177.2
Latonia KY to Junta GA	215.3	177.0	65.7	2,076.9	47.9	0.0	2,582.8
Kentucky Branch Lines (4)	23.2	25.3	0.0	325.4	0.0	0.0	373.9
TOTAL ACRES	**786.7**	**662.1**	**131.9**	**4,933.7**	**572.2**	**8.1**	**7,094.7**
PERCENT OF TOTAL	***11%***	***9%***	***2%***	***70%***	***8%***	***0%***	
Acres in above table are based on land areas valued, excluding route over water of 8.48 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Kentucky is agricultural at 70%, with residential land uses accounting for another 11% of the adjacent land uses in Kentucky.

The market values applied to each line segment can be found in the valuation workbooks in <u>Section III-F-1</u> in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Kentucky, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) KENTUCKY							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Louisville KY	$75,000	$140,000	$155,000			$750	$120,130
Louisville KY to Cincinnati OH	$44,298	$72,996	$100,000	$2,224	$7,500		$14,293
Memphis TN to Louisville KY	$31,325	$73,683	$160,000	$1,756	$6,464	$350	$14,440
Nashville TN to Woodland Jct IL (UP)	$8,500	$42,212	$65,000	$2,413	$7,000		$8,032
Latonia KY to Junta GA	$36,161	$45,671	$51,887	$2,075	$6,510		$9,254
Kentucky Branch Lines (4)	$8,500	$40,000		$2,151			$5,110

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE KENTUCKY							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Louisville KY	$6,306,818	$17,417,273	$6,242,273	$0	$0	$511	$29,966,875
Louisville KY to Cincinnati OH	$8,404,545	$4,083,333	$300,000	$1,412,727	$1,731,818	$0	$15,932,424
Memphis TN to Louisville KY	$7,605,303	$11,324,848	$1,066,667	$1,719,727	$1,336,364	$2,588	$23,055,497
Nashville TN to Woodland Jct IL (UP)	$267,879	$5,308,485	$1,059,697	$2,212,661	$607,091	$0	$9,455,812
Latonia KY to Junta GA	$7,786,636	$8,082,424	$3,408,788	$4,310,580	$311,697	$0	$23,900,126
Kentucky Branch Lines (4)	$197,303	$1,013,333	$0	$700,030	$0	$0	$1,910,667
TOTAL LAND VALUE	**$30,568,485**	**$47,229,697**	**$12,077,424**	**$10,355,726**	**$3,986,970**	**$3,099**	**$104,221,401**
PERCENT OF TOTAL	***29.3%***	***45.3%***	***11.6%***	***9.9%***	***3.8%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 70% of the total acreage in Kentucky (see table on a previous page), accounts for only 9.9% of the total land value in the state. By contrast, industrial land accounts for 45.3% of market value, but only 9% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Kentucky, the estimate of value for the land to support communication facilities is $764,004.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES KENTUCKY						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Louisville KY	27.44	249.45	$120,130	1.10	2.20	$264,285
Louisville KY to Cincinnati OH	92.97	1,114.73	$14,293	3.72	7.44	$106,337
Memphis TN to Louisville KY	131.72	1,596.61	$14,440	5.27	10.54	$152,201
Nashville TN to Woodland Jct IL (UP)	97.58	1,177.21	$8,032	3.90	7.80	$62,653
Latonia KY to Junta GA	213.08	2,582.79	$9,254	8.52	17.04	$157,682
Kentucky Branch Lines (4)	30.85	373.94	$5,110	1.23	2.46	$12,570
TOTAL STATE				**23.74**	**47.48**	**$755,727**
TOTAL STATE (Round Up for # of Towers)				**24.00**	**48.00**	**$764,004**

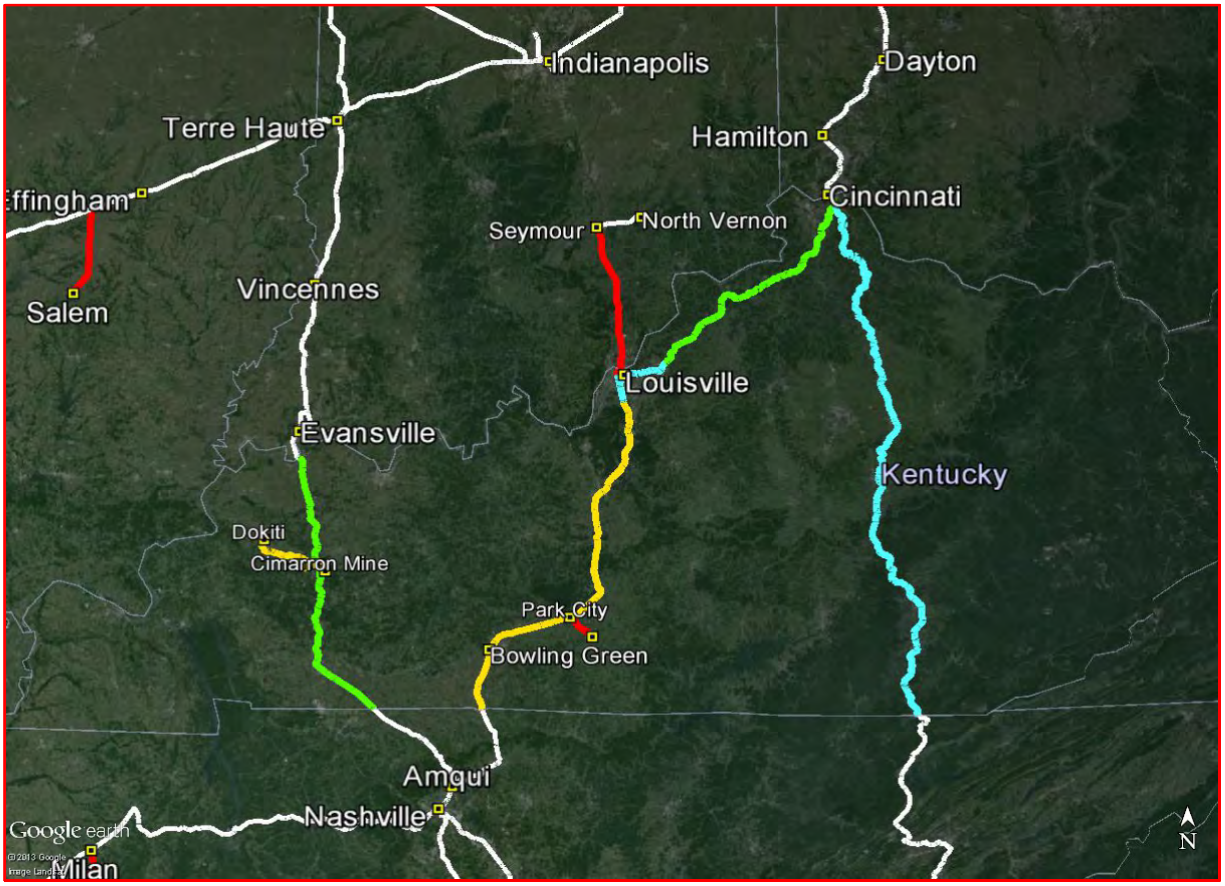
This additional land value needed to support communication facilities is <u>not</u> included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Kentucky, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Kentucky. The total valuation of the 593.6 route miles, in the state of Kentucky, as of July 1, 2010 is:

One-Hundred Four Million, Two-Hundred Thousand Dollars

$104,200,000 (rounded)

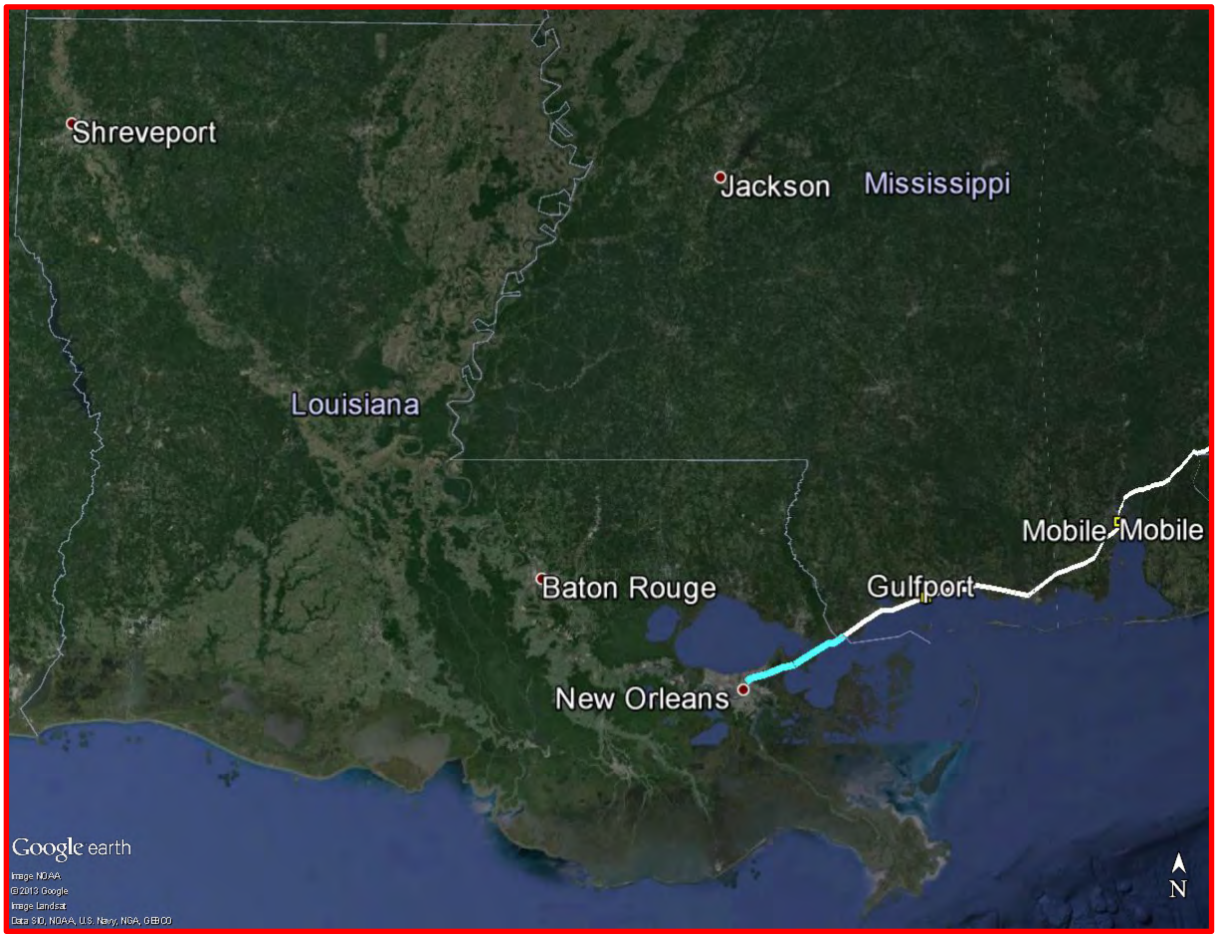
KENTUCKY



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
(cyan)	**Louisville KY**	27.4	249.5	INDUS	50%	RESID	34%	$120,130	$29,966,875
(green)	**Louisville KY to Cincinnati OH**	93.0	1,114.7	AGRIC	57%	R-TOWN	21%	$14,293	$15,932,424
(yellow)	**Memphis TN to Louisville KY**	131.7	1,596.6	AGRIC	61%	RESID	15%	$14,440	$23,055,497
(green)	**Nashville TN to Woodland Jct IL (UP)**	97.6	1,177.2	AGRIC	78%	INDUS	11%	$8,032	$9,455,812
(cyan)	**Latonia KY to Junta GA**	213.1	2,582.8	AGRIC	80%	RESID	8%	$9,254	$23,900,126
(yellow)	**Kentucky Branch Lines (4)**	30.9	373.9	AGRIC	87%	INDUS	7%	$5,110	$1,910,667
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR KENTUCKY	**593.6**	**7,094.7**	**AGRIC**	**70%**	**RESID**	**11%**	**$14,690**	**$104,221,401**
								(rounded)	**$104,200,000**

Louisiana

The length of the TPI SAR within Louisiana is 34.9 miles and consists of one route, delineated as follows:



- New Orleans, LA: This 34.9-mile route (BLUE line on above map) begins west of the existing CSX Gentilly Yard. The route proceeds east through older commercial and residential areas, generally following Chef Menteur Highway (U.S. Route 90) to Michoud, LA. From Michoud east to the Louisiana/Mississippi state line, the route is located in marshlands/wetlands along the Gulf coast. About 75% of the route is defined as restricted (wetlands, etc.).

The 34.9 route miles in the state of Louisiana were divided into 14 line segments, with an overall average line segment length of 2.49 miles for the SAR right of way in the state of Louisiana:

AVERAGE LENGTH OF LINE SEGMENTS LOUISIANA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
New Orleans LA	34.9	14	2.49
TOTAL STATE	**34.9**	**14**	**2.49**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE LOUISIANA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
New Orleans LA	12.9	49.5	33.4	0.0	0.0	281.1	376.8
TOTAL ACRES	**12.9**	**49.5**	**33.4**	**0.0**	**0.0**	**281.1**	**376.8**
PERCENT OF TOTAL	***3%***	***13%***	***9%***	***0%***	***0%***	***75%***	
Acres in above table are based on land areas valued, excluding route over water of 13.39 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Louisiana is restricted (wetlands, etc.) at 75%, with industrial land uses accounting for another 13% of the adjacent land uses in Louisiana.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for the route in Louisiana, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) LOUISIANA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
New Orleans LA	$235,000	$100,000	$110,000			$1,000	$31,645

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

LOUISIANA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
New Orleans LA	$3,022,955	$4,945,455	$3,675,000	$0	$0	$281,091	$11,924,500
TOTAL LAND VALUE	**$3,022,955**	**$4,945,455**	**$3,675,000**	**$0**	**$0**	**$281,091**	**$11,924,500**
PERCENT OF TOTAL	***25.4%***	***41.5%***	***30.8%***	***0.0%***	***0.0%***	***2.4%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that restricted land, which accounts for 75% of the total acreage in Louisiana (see table on a previous page), accounts for only 2.4% of the total land value in the state. By contrast, industrial land accounts for 41.5% of market value, but only 13% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Louisiana, the estimate of value for the land to support communication facilities is $126,581.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES LOUISIANA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
New Orleans LA	34.85	376.82	$31,645	1.39	2.78	$87,974
TOTAL STATE				**1.39**	**2.78**	**$87,974**
TOTAL STATE (Round Up for # of Towers)				**2.00**	**4.00**	**$126,581**

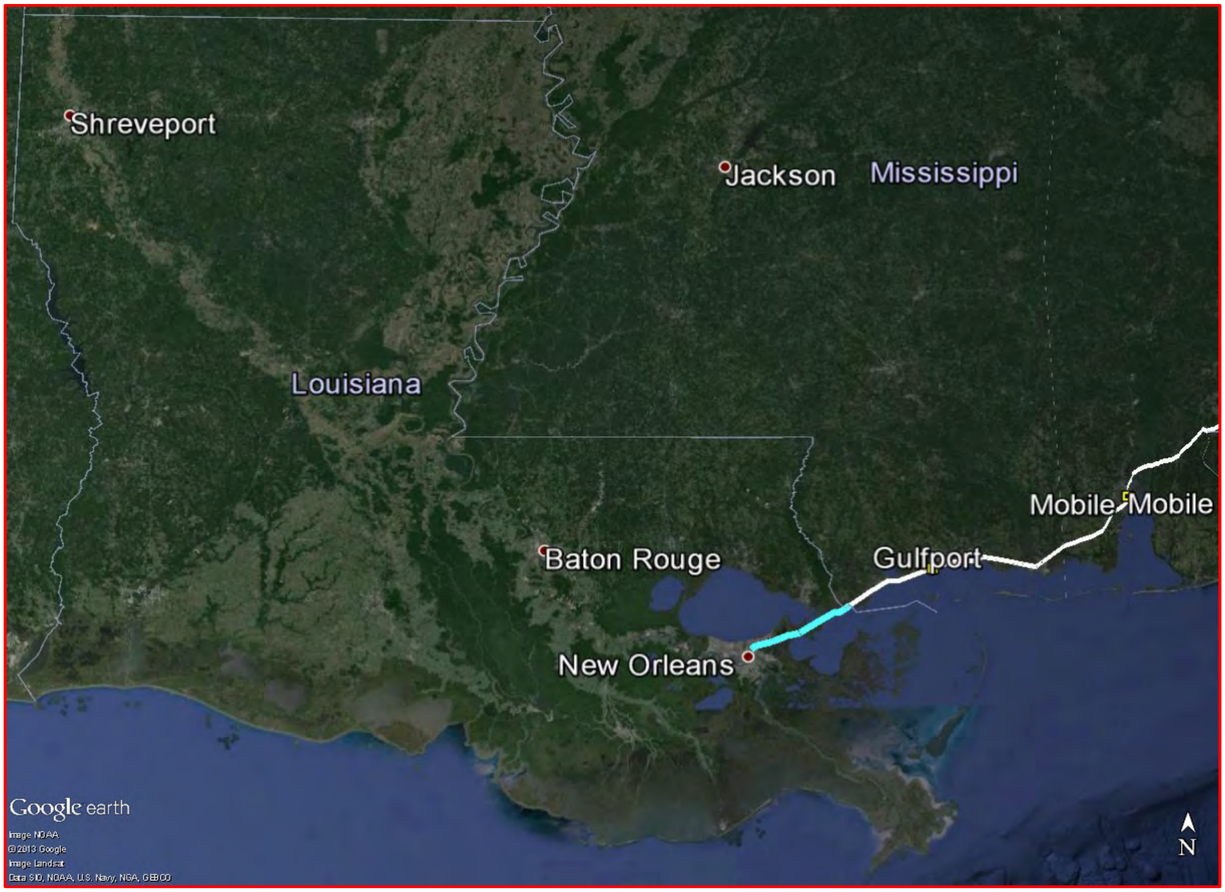
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Louisiana, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Louisiana. The total valuation of the 34.9 route miles, in the state of Louisiana, as of July 1, 2010 is:

Eleven Million, Nine-Hundred Thousand Dollars

$11,900,000 (rounded)

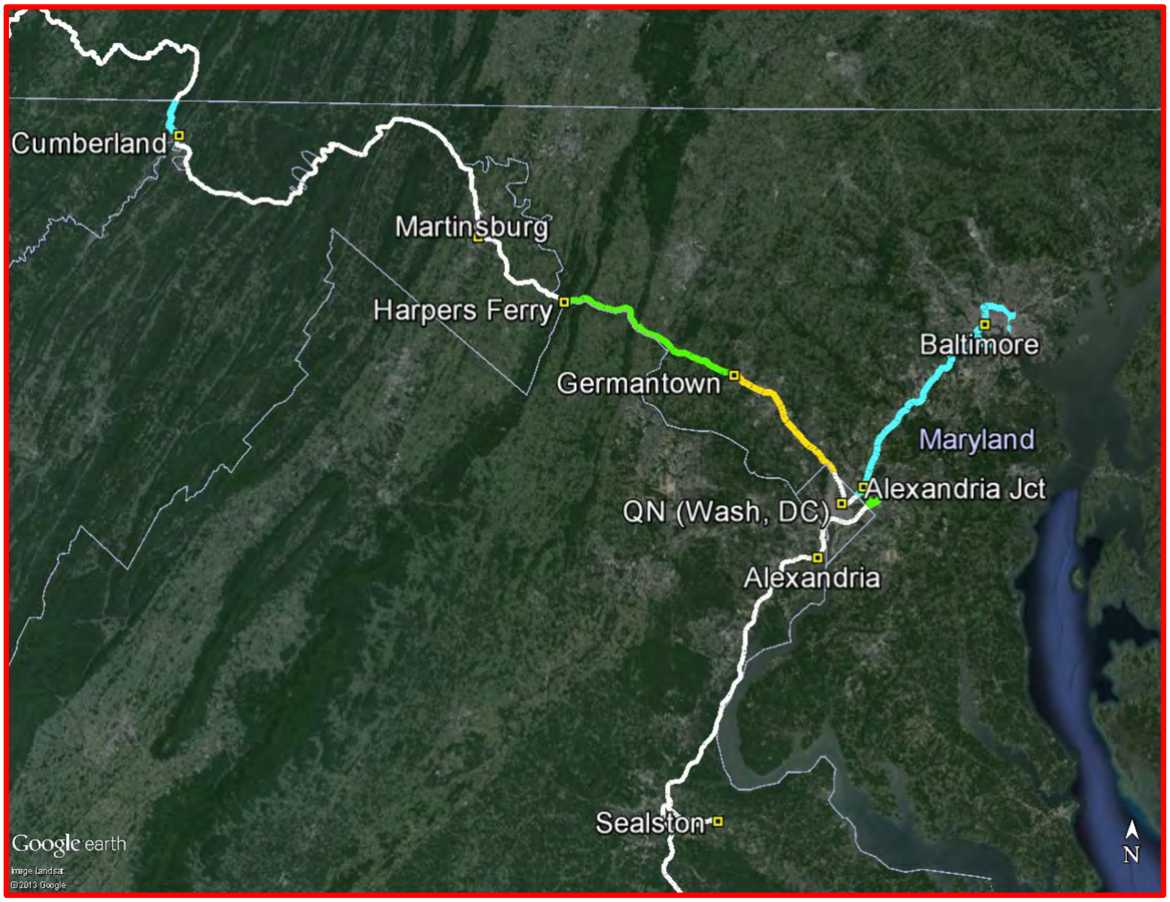
LOUISIANA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres Most Prominent		Percent of Total Acres Second Most		Avg. Value per Acre	Total Value for Route
	New Orleans LA	34.9	376.8	RES (X)	75%	INDUS	13%	$31,645	$11,924,500
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR LOUISIANA	**34.9**	**376.8**	**RES (X)**	**75%**	**INDUS**	**13%**	**$31,645**	**$11,924,500**
								(rounded)	**$11,900,000**

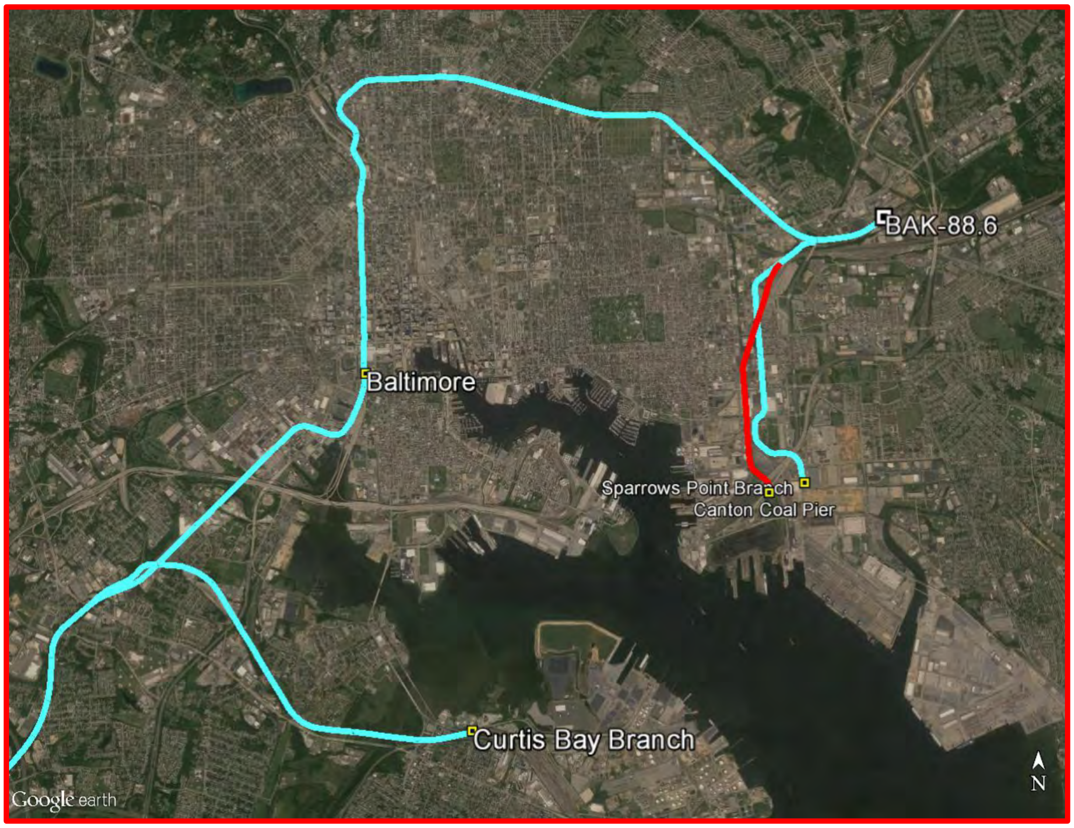
Maryland

The length of the TPI SAR within Maryland is 107.3 miles and consists of five routes, delineated as follows:



- Washington, DC (QN) to Baltimore, MD: This 47.1-mile route (BLUE line on above map) begins at the District of Columbia/Maryland state line and runs through suburban development northeast to the city of Baltimore. Entering Baltimore, the route passes through older industrial areas, passes the two Baltimore sports stadiums and the Convention Center, and proceeds north up Howard Street. The CSX route in this area is actually in a tunnel from a point near the Ravens Stadium on the south, to a point just north of the Mount Royal area, a distance of approximately 2 miles. For this analysis, fee simple land values are provided for the portions of the route that are currently underground. The route up Howard

Street passes through older commercial and residential areas. From the Mount Royal area, the SAR route passes through older residential and industrial areas, ending at Milepost BAK-88.6, as shown on the map below. In the City of Baltimore, this route also includes two branch lines: the Curtis Bay Branch, and the Sparrows Point Branch (both branches shown in BLUE below). In addition, there is a 2.0-mile trackage rights segment over the Norfolk Southern (RED line below), which provides access to the Canton Coal Pier. The land underlying trackage rights routes is NOT included in this analysis. The map below shows the Baltimore area in greater detail.

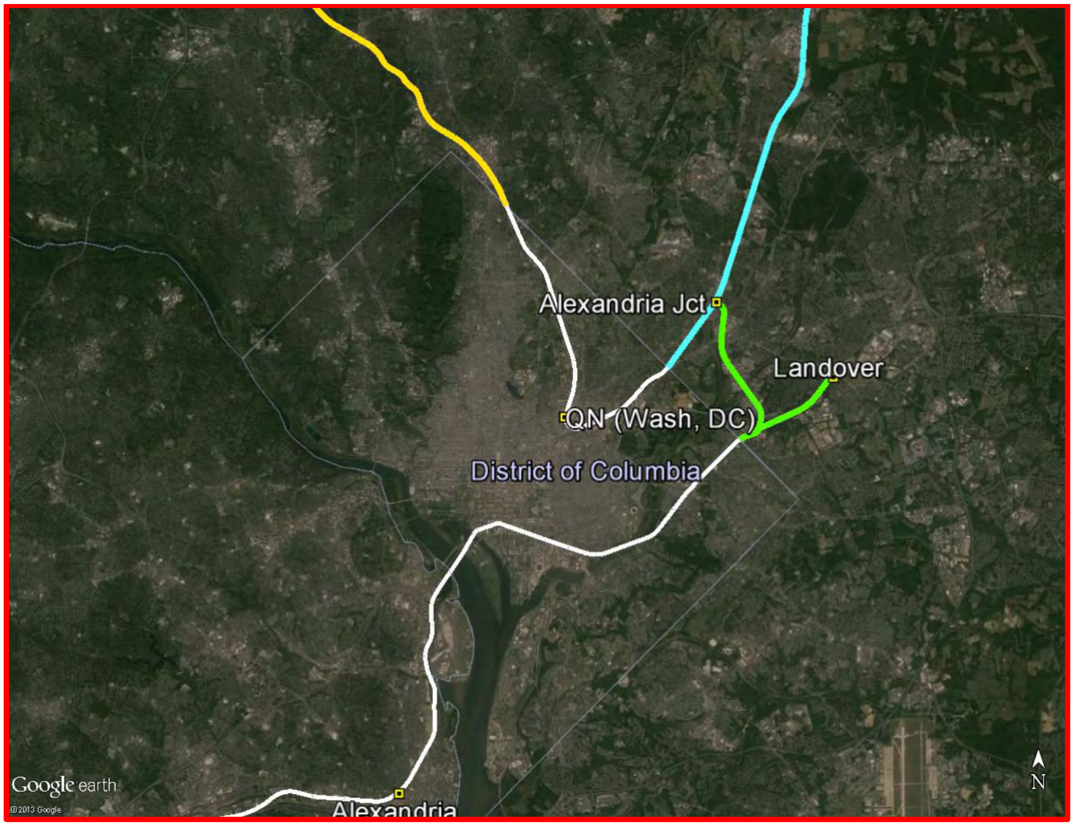


- <u>Germantown, MD to Washington, DC (QN)</u>: This 20.5-mile route (GOLD line) begins in Germantown, MD and runs through increasingly-higher density suburban development, ending at the Maryland/District of Columbia line near Takoma, DC. This route is 45% residential and 32% industrial.

- Cumberland, MD to Germantown, MD: This 28.2-mile route (GREEN line) consists of two non-contiguous sections. The first section begins in Cumberland, MD at the location known as Viaduct Junction, and ends at the Maryland/West Virginia state line as the route crosses the North Branch of the Potomac River. The SAR route then continues along the Potomac River in West Virginia, eventually crossing back into Maryland at Harpers Ferry, WV. (The line from Cumberland to Germantown actually crosses briefly back into Maryland at points such as Magnolia, but for purposes of this analysis, the entire route from the North Branch of the Potomac River to Harpers Ferry is considered in the state of West Virginia). The second section of this SAR route begins at Harpers Ferry and runs through basically rural areas to the town of Boyds, MD, just west of Germantown. Germantown is the beginning of the Washington greater metro area.

- Pittsburgh, PA to Cumberland, MD: This 5.7-mile route (BLUE line) begins at the Pennsylvania/Maryland state line and ends in Cumberland, MD at the point known as Viaduct Junction. This route is 49% residential and 41% restricted (wetlands, slopes, etc.).

- Alexandria Junction, MD (JD) to Alexandria, VA: This 5.7-mile route (GREEN line) begins at a point near Hyattsville, MD (designated JD for the interlocking tower that once controlled this area) and runs through older industrial areas, ending at the Maryland/District of Columbia line near Fairmount Heights, MD. This route is 80% industrial. This route includes a branch in Landover connecting the SAR to the Northeast Corridor. The map below illustrates this route in greater detail.



The 107.3 route miles in the state of Maryland were divided into 159 line segments, with an overall average line segment length of 0.67 miles for the SAR right of way in the state of Maryland:

AVERAGE LENGTH OF LINE SEGMENTS MARYLAND			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Wash DC (QN) to Baltimore MD	47.1	78	0.60
Germantown MD to Wash DC (QN)	20.5	40	0.51
Cumberland MD to Germantown MD	28.2	27	1.05
Pittsburgh PA to Cumberland MD	5.7	6	0.96
Alex Jct MD (JD) to Alexandria VA	5.7	8	0.72
TOTAL STATE	**107.3**	**159**	**0.67**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE MARYLAND							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	135.8	298.7	37.0	0.0	0.0	42.2	513.6
Germantown MD to Wash DC (QN)	97.1	68.1	48.7	0.0	0.0	2.1	216.0
Cumberland MD to Germantown MD	36.1	8.3	1.8	202.1	0.0	93.8	342.1
Pittsburgh PA to Cumberland MD	33.7	7.3	0.0	0.0	0.0	28.4	69.5
Alex Jct MD (JD) to Alexandria VA	13.3	54.8	0.0	0.0	0.0	0.0	68.1
TOTAL ACRES	**316.0**	**437.2**	**87.4**	**202.1**	**0.0**	**166.5**	**1,209.3**
PERCENT OF TOTAL	***26%***	***36%***	***7%***	***17%***	***0%***	***14%***	
Acres in above table are based on land areas valued, excluding route over water of 1.91 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Maryland is industrial at 36%, with residential land uses accounting for another 26% of the adjacent land uses in Maryland.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Maryland, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) MARYLAND							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	$224,240	$199,413	$858,705			$540	$237,101
Germantown MD to Wash DC (QN)	$332,962	$600,000	$600,000			$5,000	$474,253
Cumberland MD to Germantown MD	$79,807	$110,000	$110,000	$15,828		$200	$21,056
Pittsburgh PA to Cumberland MD	$5,000	$50,000				$200	$7,787
Alex Jct MD (JD) to Alexandria VA	$170,000	$245,000					$230,320

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE MARYLAND							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Wash DC (QN) to Baltimore MD	$30,452,424	$59,555,000	$31,746,061	$0	$0	$22,773	$121,776,258
Germantown MD to Wash DC (QN)	$32,342,727	$40,872,727	$29,227,273	$0	$0	$10,303	$102,453,030
Cumberland MD to Germantown MD	$2,877,879	$913,333	$193,333	$3,199,091	$0	$18,764	$7,202,400
Pittsburgh PA to Cumberland MD	$168,485	$366,667	$0	$0	$0	$5,685	$540,836
Alex Jct MD (JD) to Alexandria VA	$2,266,667	$13,423,030	$0	$0	$0	$0	$15,689,697
TOTAL LAND VALUE	**$68,108,182**	**$115,130,758**	**$61,166,667**	**$3,199,091**	**$0**	**$57,524**	**$247,662,221**
PERCENT OF TOTAL	***27.5%***	***46.5%***	***24.7%***	***1.3%***	***0.0%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 17% of the total acreage in Maryland (see table on a previous page), accounts for only 1.3% of the total land value in the state. By contrast, commercial land accounts for 24.7% of market value, but only 7% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Maryland, the estimate of value for the land to support communication facilities is $2,128,658.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES MARYLAND						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Wash DC (QN) to Baltimore MD	47.07	513.61	$237,101	1.88	3.76	$891,498
Germantown MD to Wash DC (QN)	20.52	216.03	$474,253	0.82	1.64	$777,775
Cumberland MD to Germantown MD	28.22	342.06	$21,056	1.13	2.26	$47,586
Pittsburgh PA to Cumberland MD	5.73	69.45	$7,787	0.23	0.46	$3,582
Alex Jct MD (JD) to Alexandria VA	5.74	68.12	$230,320	0.23	0.46	$105,947
TOTAL STATE				**4.29**	**8.58**	**$1,826,389**
TOTAL STATE (Round Up for # of Towers)				**5.00**	**10.00**	**$2,128,658**

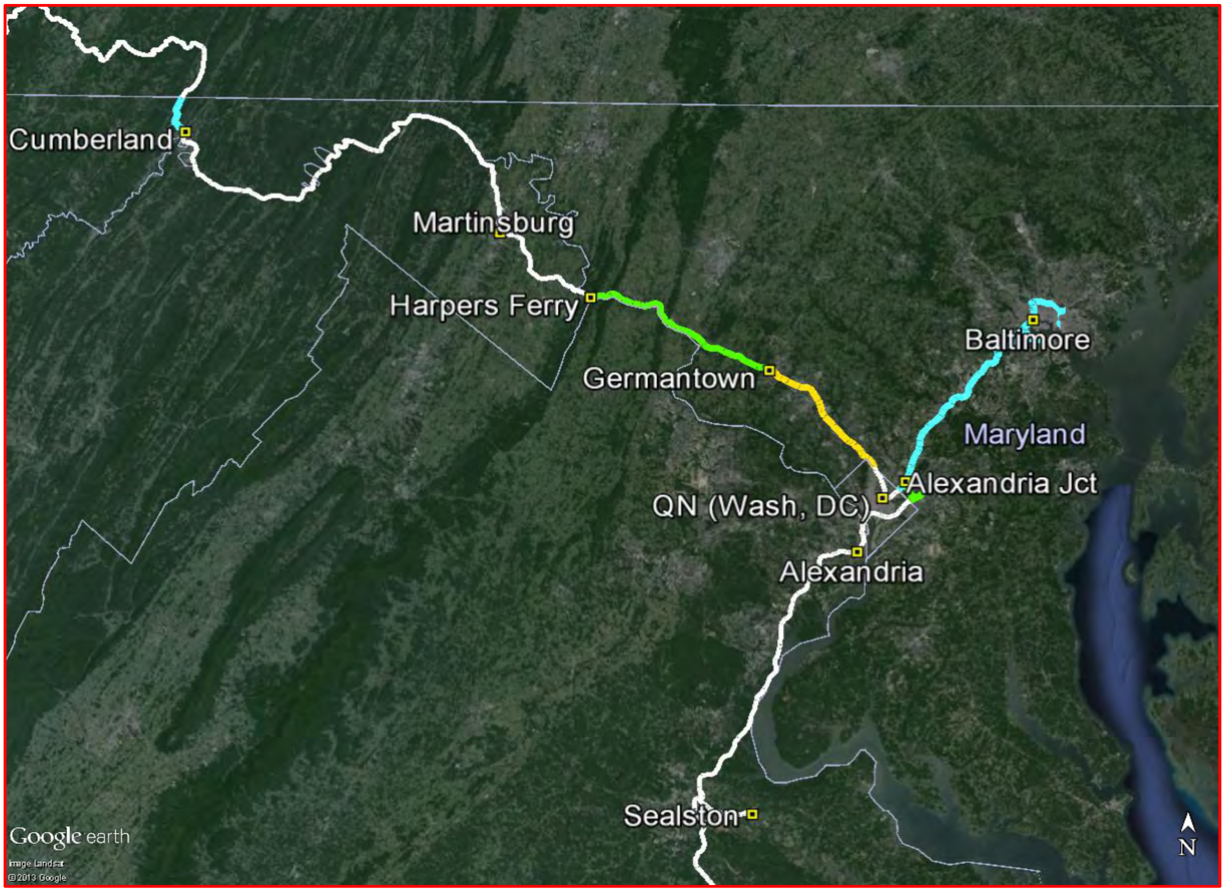
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Maryland, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Maryland. The total valuation of the 107.3 route miles, in the state of Maryland, as of July 1, 2010 is:

Two-Hundred Forty-Seven Million, Seven-Hundred Thousand Dollars

$247,700,000 (rounded)

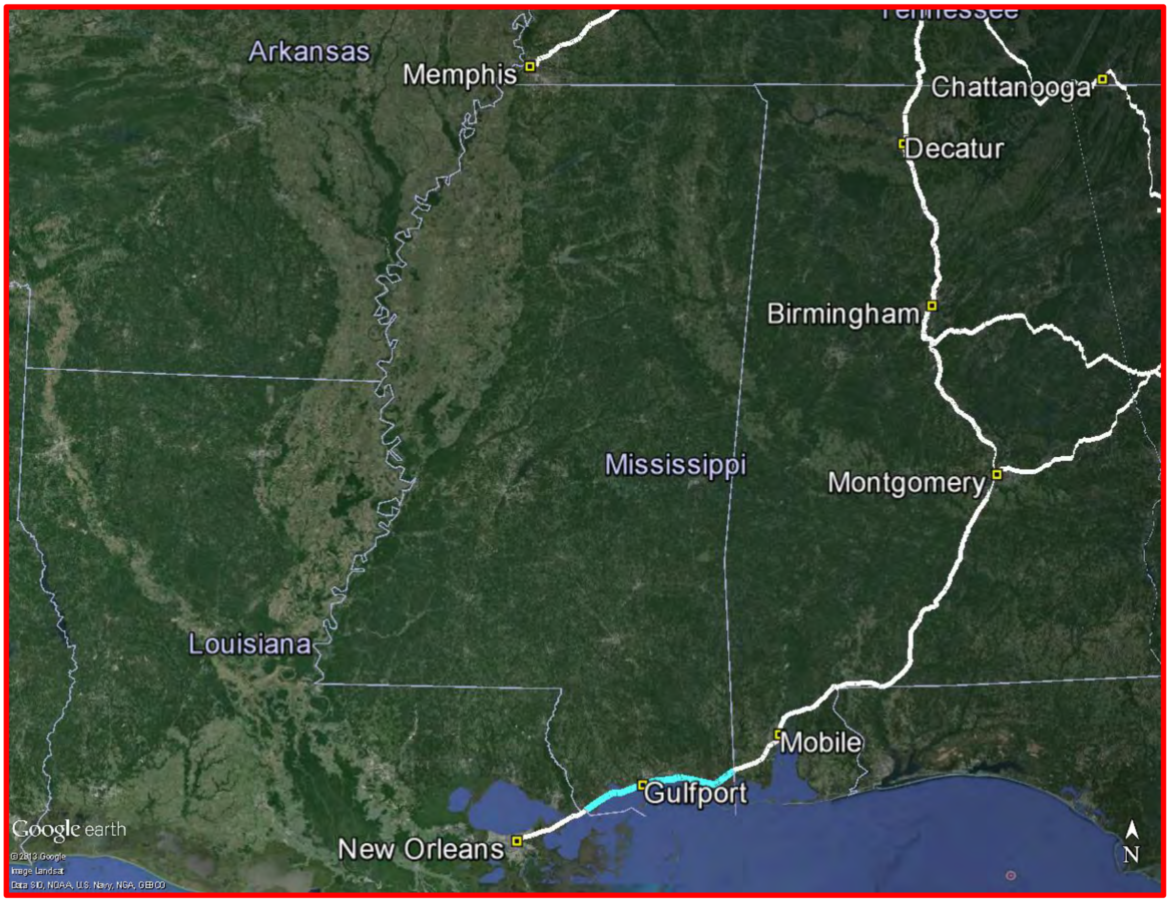
MARYLAND



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
	Wash DC (QN) to Baltimore MD	47.1	513.6	INDUS	58%	RESID	26%	$237,101	$121,776,258
	Germantown MD to Wash DC (QN)	20.5	216.0	RESID	45%	INDUS	32%	$474,253	$102,453,030
	Cumberland MD to Germantown MD	28.2	342.1	AGRIC	59%	RES (X)	27%	$21,056	$7,202,400
	Pittsburgh PA to Cumberland MD	5.7	69.5	RESID	49%	RES (X)	41%	$7,787	$540,836
	Alex Jct MD (JD) to Alexandria VA	5.7	68.1	INDUS	80%	RESID	20%	$230,320	$15,689,697
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR MARYLAND	**107.3**	**1,209.3**	**INDUS**	**36%**	**RESID**	**26%**	**$204,803**	**$247,662,221**
								(rounded)	**$247,700,000**

Mississippi

The length of the TPI SAR within Mississippi is 74.3 miles and consists of one route, delineated as follows:



- New Orleans, LA to Atlanta, GA: This 74.3-mile route (BLUE line on map above) begins at the Louisiana/Mississippi state line and runs east along the Gulf coast, through small communities such as Waveland, Bay St. Louis and Pass Christian. These areas were significantly damaged by Hurricane Katrina in August 2005. Continuing east, the route passes through the more urbanized areas of Gulfport and Biloxi, before ending at the Mississippi/Alabama state line. This route includes 6.9% of its acreage over water, which is not valued in this analysis.

The 74.3 route miles in the state of Mississippi were divided into 59 line segments, with an overall average line segment length of 1.26 miles for the SAR right of way in the state of Mississippi:

AVERAGE LENGTH OF LINE SEGMENTS MISSISSIPPI			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
New Orleans LA to Atlanta GA	74.3	59	1.26
TOTAL STATE	**74.3**	**59**	**1.26**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE MISSISSIPPI							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
New Orleans LA to Atlanta GA	157.8	79.5	54.4	0.0	100.2	344.5	736.2
TOTAL ACRES	**157.8**	**79.5**	**54.4**	**0.0**	**100.2**	**344.5**	**736.2**
PERCENT OF TOTAL	***21%***	***11%***	***7%***	***0%***	***14%***	***47%***	
Acres in above table are based on land areas valued, excluding route over water of 54.67 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Mississippi is restricted (wetlands, etc.) at 47%, with residential land uses accounting for another 21% of the adjacent land uses in Mississippi.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for the route in Mississippi, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) MISSISSIPPI							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
New Orleans LA to Atlanta GA	$50,090	$78,673	$140,067		$35,961	$3,000	$35,863

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE MISSISSIPPI							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
New Orleans LA to Atlanta GA	$7,903,636	$6,250,909	$7,614,545	$0	$3,601,515	$1,033,455	$26,404,061
TOTAL LAND VALUE	**$7,903,636**	**$6,250,909**	**$7,614,545**	**$0**	**$3,601,515**	**$1,033,455**	**$26,404,061**
PERCENT OF TOTAL	***29.9%***	***23.7%***	***28.8%***	***0.0%***	***13.6%***	***3.9%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that restricted land (wetlands, etc.), which accounts for 47% of the total acreage in Mississippi (see table on a previous page), accounts for only 3.9% of the total land value in the state. By contrast, industrial land accounts for 23.7% of market value, but only 11% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Mississippi, the estimate of value for the land to support communication facilities is $215,180.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES MISSISSIPPI						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
New Orleans LA to Atlanta GA	74.25	736.24	$35,863	2.97	5.94	$213,028
TOTAL STATE				**2.97**	**5.94**	**$213,028**
TOTAL STATE (Round Up for # of Towers)				**3.00**	**6.00**	**$215,180**

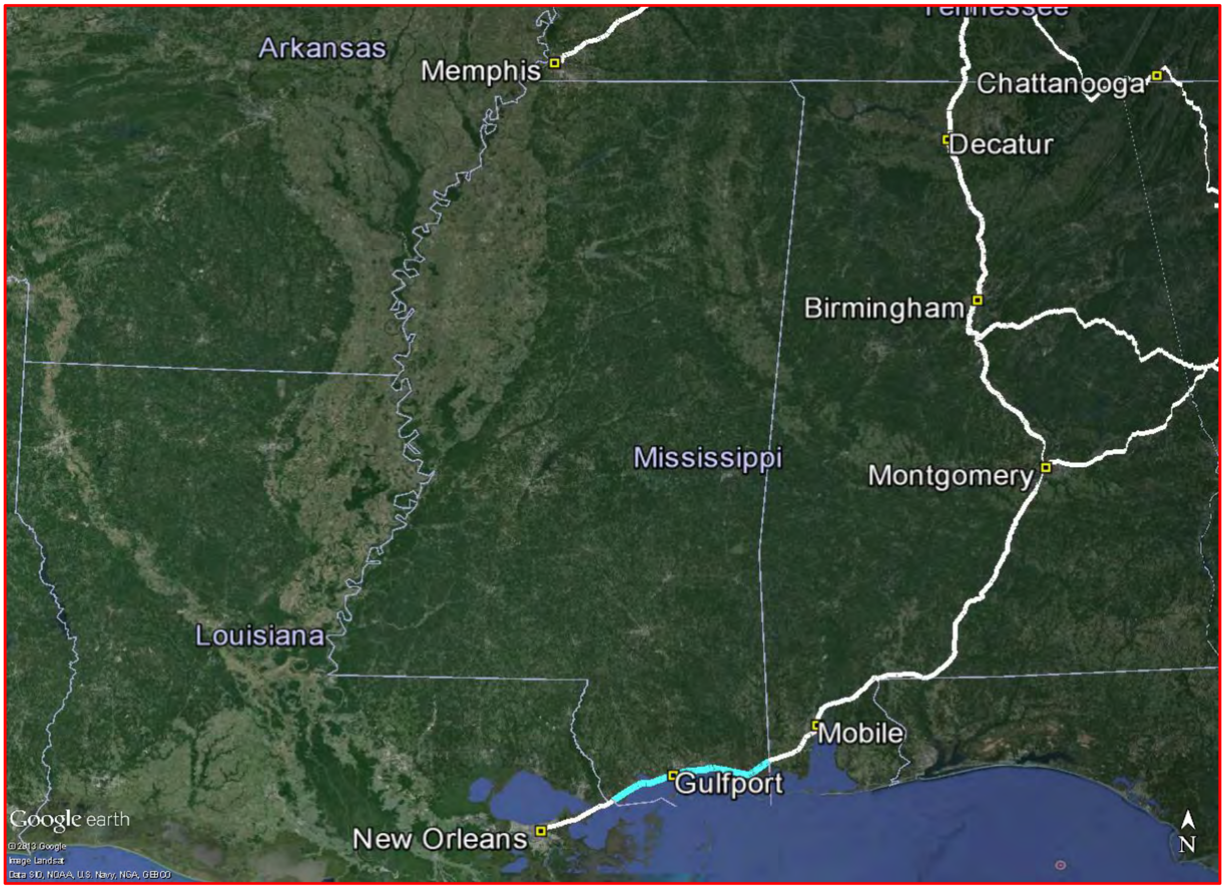
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Mississippi, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR route in the state of Mississippi. The total valuation of the 74.3 route miles, in the state of Mississippi, as of July 1, 2010 is:

Twenty-Six Million, Four-Hundred Thousand Dollars

$26,400,000 (rounded)

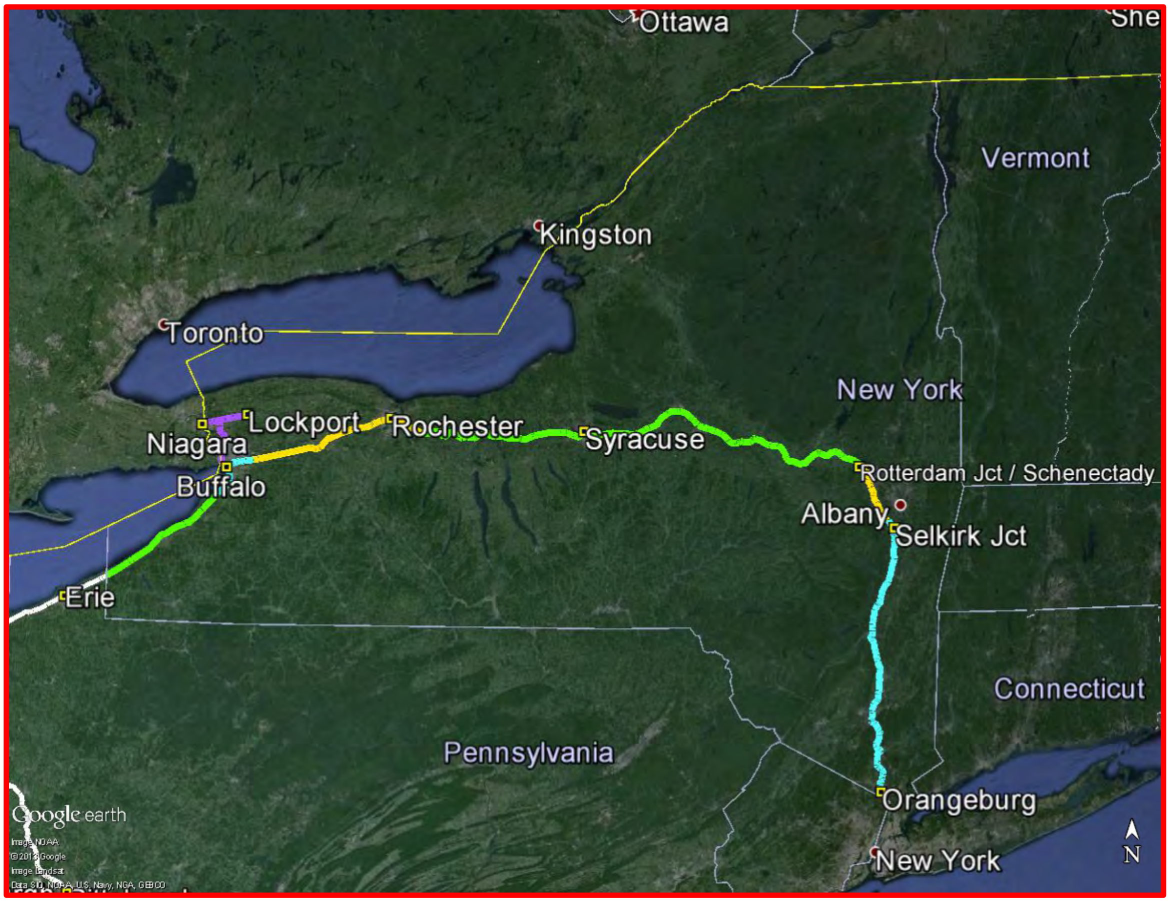
MISSISSIPPI



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres: Most Prominent		Percent of Total Acres: Second Most		Avg. Value per Acre	Total Value for Route
(cyan)	**New Orleans LA to Atlanta GA**	74.3	736.2	RES (X)	47%	RESID	21%	$35,863	$26,404,061
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR MISSISSIPPI	**74.3**	**736.2**	**RES (X)**	**47%**	**RESID**	**21%**	**$35,863**	**$26,404,061**
								(rounded)	**$26,400,000**

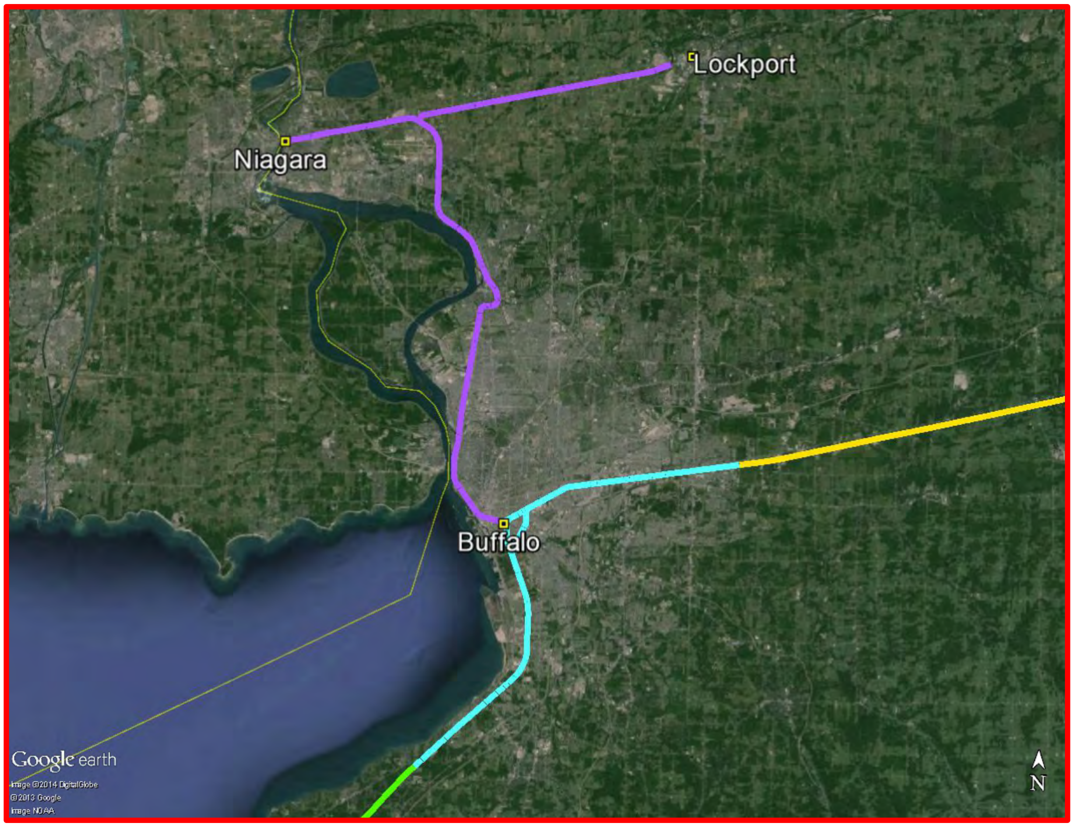
New York

The length of the TPI SAR within New York is 517.6 miles and consists of seven routes, delineated as follows:



- <u>Conneaut, OH to Buffalo, NY</u>: This 54.8-mile route (GREEN line in above map) begins at the Ohio/New York state line and ends west of Buffalo near Weyer, NY. Land uses along this route are 72% agricultural.
- <u>Buffalo, NY</u>: This 24.9-mile route (BLUE line) begins west of Buffalo, near Weyer, NY and runs through older industrial and residential areas south of Buffalo. This route turns to the east, missing the Buffalo CBD, and continues through older industrial and residential areas, ending east of Buffalo, near Depew. The predominant land uses on this route are industrial at 47% and residential at 26%. The map on the next page

illustrates the TPI SAR routes in the Buffalo area in more detail:



- Buffalo, NY to Lockport, NY: This 38.0-mile route (PURPLE line) begins in the south part of Buffalo, running to the south and west of the Buffalo CBD. This route then runs north through older industrial and residential areas, and then rural areas, ending at Lockport. This route also includes a branch to Niagara, NY. Industrial uses account for 41% of the land uses on this route, and agriculture accounts for an additional 27% of land uses.

- Rochester, NY to Buffalo, NY: This 71.0-mile route (GOLD line) begins east of Rochester and ends west of Buffalo, near Depew. Agriculture accounts for 54% of the land uses on this route.

- Schenectady, NY to Rochester, NY: This 190.1-mile route (GREEN line) begins at Rotterdam Junction, located northwest of Schenectady. The route runs through mainly rural areas, and passes through Utica and Syracuse. This route ends just east of Rochester. The predominant land uses on this route are agricultural at 68% and industrial at 14%.

- Schenectady, NY to Selkirk Junction, NY: This 24.6-mile route (GOLD line) begins at Rotterdam Junction (northwest of Schenectady), and runs southeast to CSX's Selkirk Yard. Agricultural uses account for 54% of the land uses on this route.
- Selkirk Junction, NY to Orangeburg, NY: This 114.2-mile route (BLUE line) begins at CSX's Selkirk Yard, and runs south along the west shore of the Hudson River. This route goes through Kingston and West Point, and ends at Orangeburg. This route is 33% agricultural and 27% residential.

The 517.6 route miles in the state of New York were divided into 485 line segments, with an overall average line segment length of 1.07 miles for the SAR right of way in the state of New York:

AVERAGE LENGTH OF LINE SEGMENTS NEW YORK			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Conneaut OH to Buffalo NY	54.8	17	3.23
Buffalo NY	24.9	47	0.53
Buffalo NY to Lockport NY	38.0	52	0.73
Rochester NY to Buffalo NY	71.0	48	1.48
Schenectady NY to Rochester NY	190.1	148	1.28
Schenectady NY to Selkirk Jct NY	24.6	26	0.95
Selkirk Jct NY to Orangeburg NY	114.2	147	0.78
TOTAL STATE	**517.6**	**485**	**1.07**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE NEW YORK							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	69.0	48.8	0.0	479.5	50.8	14.1	662.3
Buffalo NY	60.9	107.7	8.8	3.0	0.0	50.1	230.7
Buffalo NY to Lockport NY	87.6	167.9	0.0	109.4	0.0	46.7	411.5
Rochester NY to Buffalo NY	63.9	216.0	18.2	450.8	18.8	69.0	836.7
Schenectady NY to Rochester NY	169.4	315.5	53.6	1,566.9	4.6	194.2	2,304.2
Schenectady NY to Selkirk Jct NY	52.4	66.0	4.1	161.8	0.0	13.9	298.2
Selkirk Jct NY to Orangeburg NY	375.6	171.3	54.2	456.6	0.0	317.3	1,374.9
TOTAL ACRES	**878.7**	**1,093.2**	**138.9**	**3,228.1**	**74.2**	**705.2**	**6,118.4**
PERCENT OF TOTAL	***14%***	***18%***	***2%***	***53%***	***1%***	***12%***	
Acres in above table are based on land areas valued, excluding route over water of 7.64 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in New York is agricultural at 53%, with industrial land uses accounting for another 18% of the adjacent land uses in New York.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in New York, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) NEW YORK							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	$29,961	$25,000		$2,131	$4,501	$400	$6,863
Buffalo NY	$69,494	$54,840	$185,000	$2,600		$500	$51,183
Buffalo NY to Lockport NY	$28,121	$53,011		$5,000		$500	$28,996
Rochester NY to Buffalo NY	$19,443	$43,863	$82,446	$2,012	$2,500	$514	$15,784
Schenectady NY to Rochester NY	$7,804	$19,985	$77,879	$1,967	$5,000	$542	$6,514
Schenectady NY to Selkirk Jct NY	$15,120	$15,000	$100,000	$1,300		$500	$8,086
Selkirk Jct NY to Orangeburg NY	$24,975	$71,962	$117,359	$2,435		$500	$21,334

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE NEW YORK							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	$2,068,212	$1,221,212	$0	$1,021,794	$228,848	$5,624	$4,545,691
Buffalo NY	$4,233,864	$5,907,477	$1,631,364	$7,918	$0	$25,073	$11,805,696
Buffalo NY to Lockport NY	$2,462,758	$8,899,394	$0	$546,970	$0	$23,333	$11,932,455
Rochester NY to Buffalo NY	$1,242,288	$9,472,500	$1,501,515	$907,297	$46,970	$35,485	$13,206,055
Schenectady NY to Rochester NY	$1,321,879	$6,305,455	$4,172,424	$3,081,894	$23,030	$105,345	$15,010,027
Schenectady NY to Selkirk Jct NY	$791,758	$990,000	$412,121	$210,364	$0	$6,939	$2,411,182
Selkirk Jct NY to Orangeburg NY	$9,379,576	$12,325,152	$6,356,970	$1,111,673	$0	$158,636	$29,332,006
TOTAL LAND VALUE	**$21,500,333**	**$45,121,189**	**$14,074,394**	**$6,887,909**	**$298,848**	**$360,437**	**$88,243,111**
PERCENT OF TOTAL	***24.4%***	***51.1%***	***15.9%***	***7.8%***	***0.3%***	***0.4%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 53% of the total acreage in New York (see table on a previous page), accounts for only 7.8% of the total land value in the state. By contrast, industrial land accounts for 51.1% of market value, but only 18% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of New York, the estimate of value for the land to support communication facilities is $628,340.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES NEW YORK						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Conneaut OH to Buffalo NY	54.84	662.30	$6,863	2.19	4.38	$30,062
Buffalo NY	24.87	230.66	$51,183	0.99	1.98	$101,342
Buffalo NY to Lockport NY	38.03	411.52	$28,996	1.52	3.04	$88,149
Rochester NY to Buffalo NY	70.96	836.67	$15,784	2.84	5.68	$89,654
Schenectady NY to Rochester NY	190.10	2,304.24	$6,514	7.60	15.20	$99,014
Schenectady NY to Selkirk Jct NY	24.60	298.18	$8,086	0.98	1.96	$15,849
Selkirk Jct NY to Orangeburg NY	114.19	1,374.88	$21,334	4.57	9.14	$194,995
TOTAL STATE				**20.69**	**41.38**	**$619,065**
TOTAL STATE (Round Up for # of Towers)				**21.00**	**42.00**	**$628,340**

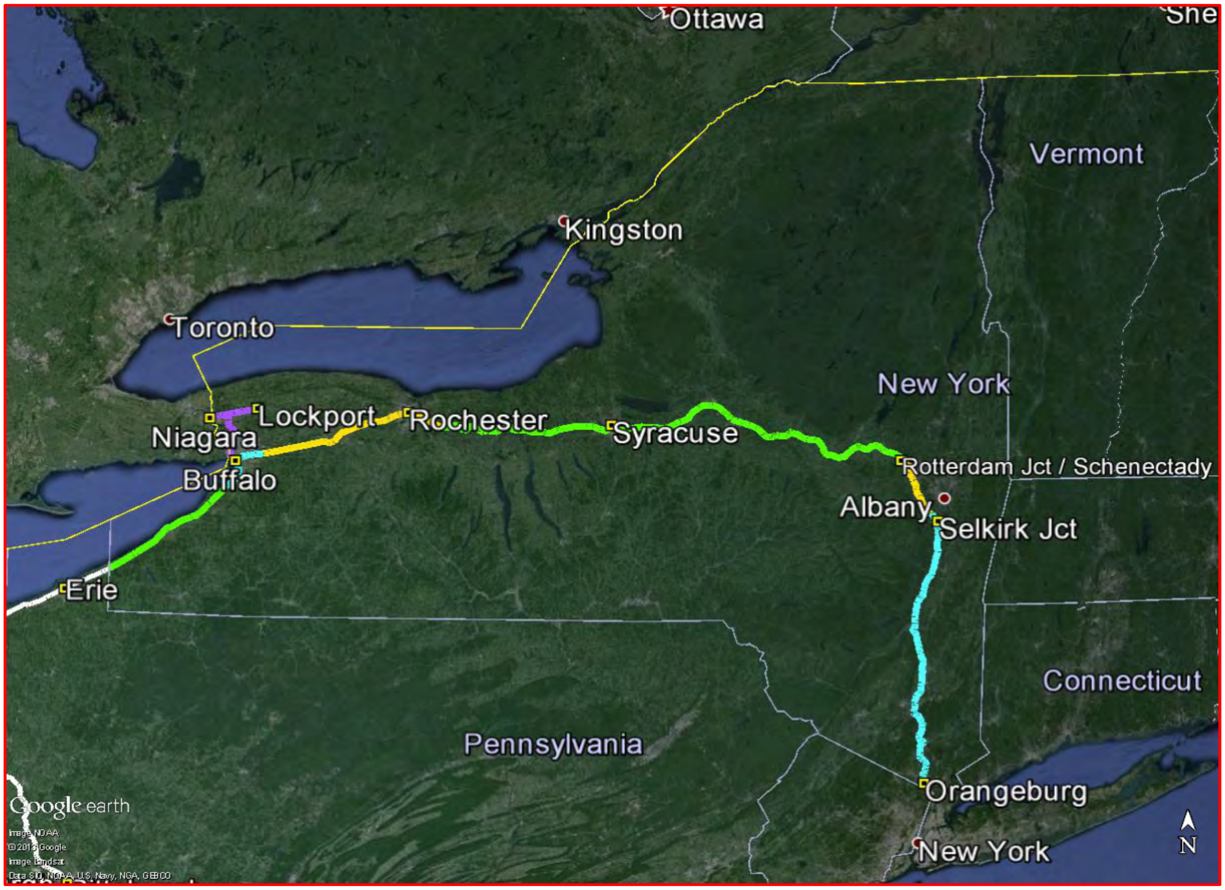
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of New York, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of New York. The total valuation of the 517.6 route miles, in the state of New York, as of July 1, 2010 is:

Eighty-Eight Million, Two-Hundred Thousand Dollars

$88,200,000 (rounded)

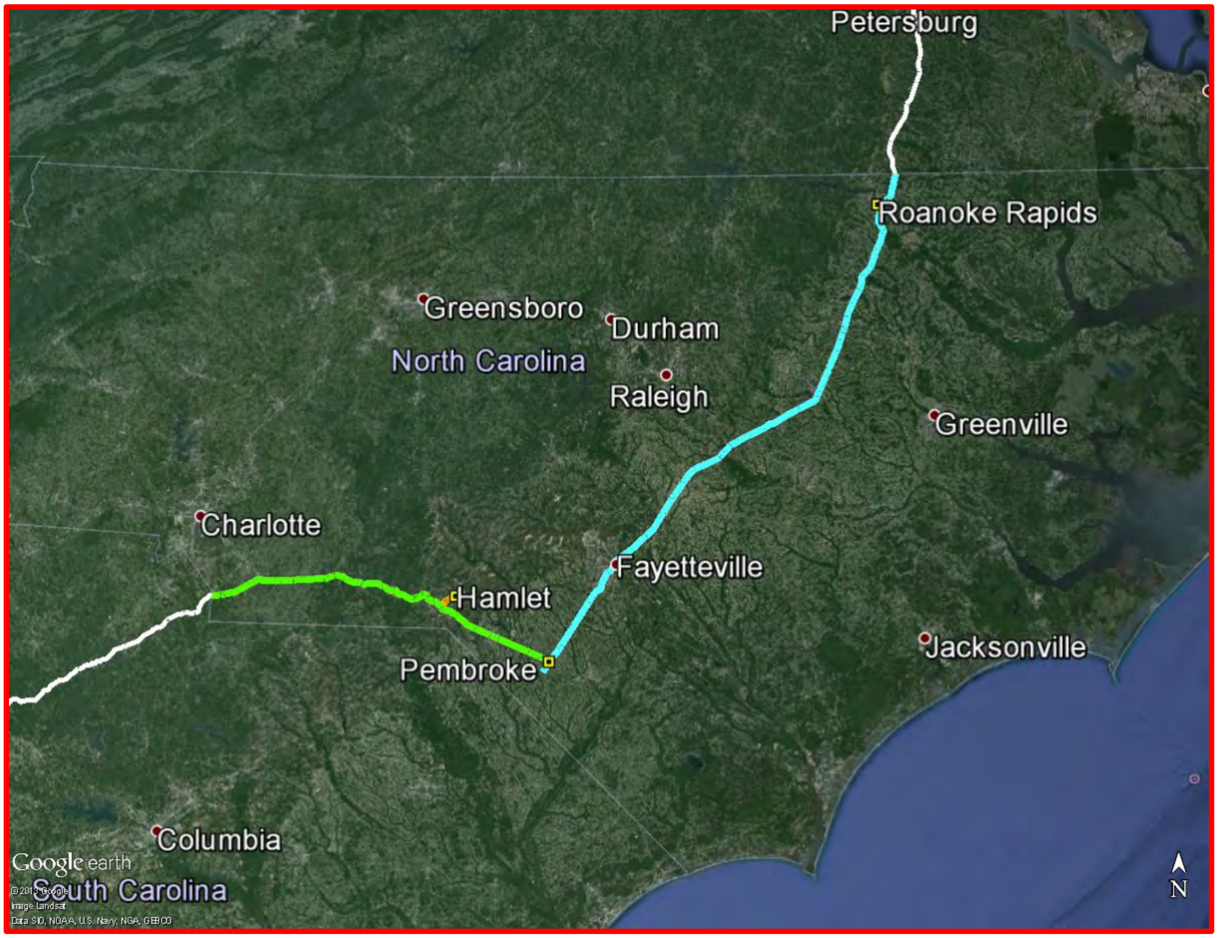
NEW YORK



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
	Conneaut OH to Buffalo NY	54.8	662.3	AGRIC	72%	RESID	10%	$6,863	$4,545,691
	Buffalo NY	24.9	230.7	INDUS	47%	RESID	26%	$51,183	$11,805,696
	Buffalo NY to Lockport NY	38.0	411.5	INDUS	41%	AGRIC	27%	$28,996	$11,932,455
	Rochester NY to Buffalo NY	71.0	836.7	AGRIC	54%	INDUS	26%	$15,784	$13,206,055
	Schenectady NY to Rochester NY	190.1	2,304.2	AGRIC	68%	INDUS	14%	$6,514	$15,010,027
	Schenectady NY to Selkirk Jct NY	24.6	298.2	AGRIC	54%	INDUS	22%	$8,086	$2,411,182
	Selkirk Jct NY to Orangeburg NY	114.2	1,374.9	AGRIC	33%	RESID	27%	$21,334	$29,332,006
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR NEW YORK	**517.6**	**6,118.4**	**AGRIC**	**53%**	**INDUS**	**18%**	**$14,422**	**$88,243,111**
								(rounded)	**$88,200,000**

North Carolina

The length of the TPI SAR within North Carolina is 280.6 miles and consists of three routes, delineated as follows:



- Alexandria, VA to Pembroke, NC: This 171.5-mile route (BLUE line on above map) begins at the Virginia/North Carolina state line and passes through rural areas to Pembroke, while passing through Rocky Mount, Wilson and Fayetteville. The predominant land use along this route is agricultural, with 59% of the adjacent land uses.

- Pembroke, NC to Atlanta, GA: This 99.6-mile route (GREEN line) runs west from Pembroke, passing through Laurinburg, Hamlet and Monroe, and ending at the North Carolina/South Carolina state line. Land uses along this route include 54% agricultural and 20% industrial.

- Hamlet & Roanoke Rapids, NC Branches: These two North Carolina branch lines (GOLD lines) total 9.5 miles. The Roanoke Rapids branch is located just south of the North Carolina/Virginia state line, while the Hamlet branch is located just northwest of Pembroke. The two predominant land uses along these branch lines are rural town at 35% and industrial at 23%.

The 280.6 route miles in the state of North Carolina were divided into 229 line segments, with an overall average line segment length of 1.23 miles for the SAR right of way in the state of North Carolina:

AVERAGE LENGTH OF LINE SEGMENTS NORTH CAROLINA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Alexandria VA to Pembroke NC	171.5	122	1.41
Pembroke NC to Atlanta GA	99.6	100	1.00
Hamlet & Roanoke Rapids Branches	9.5	7	1.35
TOTAL STATE	**280.6**	**229**	**1.23**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE NORTH CAROLINA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Alexandria VA to Pembroke NC	267.0	232.0	60.4	1,216.2	226.5	74.5	2,076.6
Pembroke NC to Atlanta GA	179.3	239.0	85.3	653.9	25.6	23.9	1,207.0
Hamlet & Roanoke Rapids Branches	23.2	26.6	0.0	24.9	40.1	0.0	114.8
TOTAL ACRES	**469.5**	**497.6**	**145.7**	**1,895.0**	**292.2**	**98.4**	**3,398.4**
PERCENT OF TOTAL	***14%***	***15%***	***4%***	***56%***	***9%***	***3%***	
Acres in above table are based on land areas valued, excluding route over water of 2.55 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the

fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in North Carolina is agricultural at 56%, with industrial land uses accounting for another 15% of the adjacent land uses in North Carolina.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in North Carolina, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) NORTH CAROLINA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Alexandria VA to Pembroke NC	$26,919	$47,670	$146,536	$3,527	$27,078	$200	$18,072
Pembroke NC to Atlanta GA	$47,056	$70,289	$68,567	$3,163	$45,000	$500	$28,435
Hamlet & Roanoke Rapids Branches	$50,000	$61,150		$3,402	$20,000		$31,987

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE NORTH CAROLINA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Alexandria VA to Pembroke NC	$7,186,485	$11,059,394	$8,845,455	$4,290,139	$6,132,727	$14,909	$37,529,109
Pembroke NC to Atlanta GA	$8,438,667	$16,801,212	$5,851,030	$2,068,345	$1,150,909	$11,939	$34,322,103
Hamlet & Roanoke Rapids Branches	$1,157,576	$1,626,970	$0	$84,745	$802,424	$0	$3,671,715
TOTAL LAND VALUE	**$16,782,727**	**$29,487,576**	**$14,696,485**	**$6,443,230**	**$8,086,061**	**$26,848**	**$75,522,927**
PERCENT OF TOTAL	***22.2%***	***39.0%***	***19.5%***	***8.5%***	***10.7%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 56% of the total acreage

in North Carolina (see table on a previous page), accounts for only 8.5% of the total land value in the state. By contrast, industrial land accounts for 39.0% of market value, but only 15% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of North Carolina, the estimate of value for the land to support communication facilities is $533,269.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES
NORTH CAROLINA

Route Name	Before Communications Facilities			Additional Needed for Communications Facilities		
	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Alexandria VA to Pembroke NC	171.53	2,076.61	$18,072	6.86	13.72	$247,952
Pembroke NC to Atlanta GA	99.58	1,207.03	$28,435	3.98	7.96	$226,344
Hamlet & Roanoke Rapids Branches	9.47	114.79	$31,987	0.38	0.76	$24,310
TOTAL STATE				**11.22**	**22.44**	**$498,606**
TOTAL STATE (Round Up for # of Towers)				**12.00**	**24.00**	**$533,269**

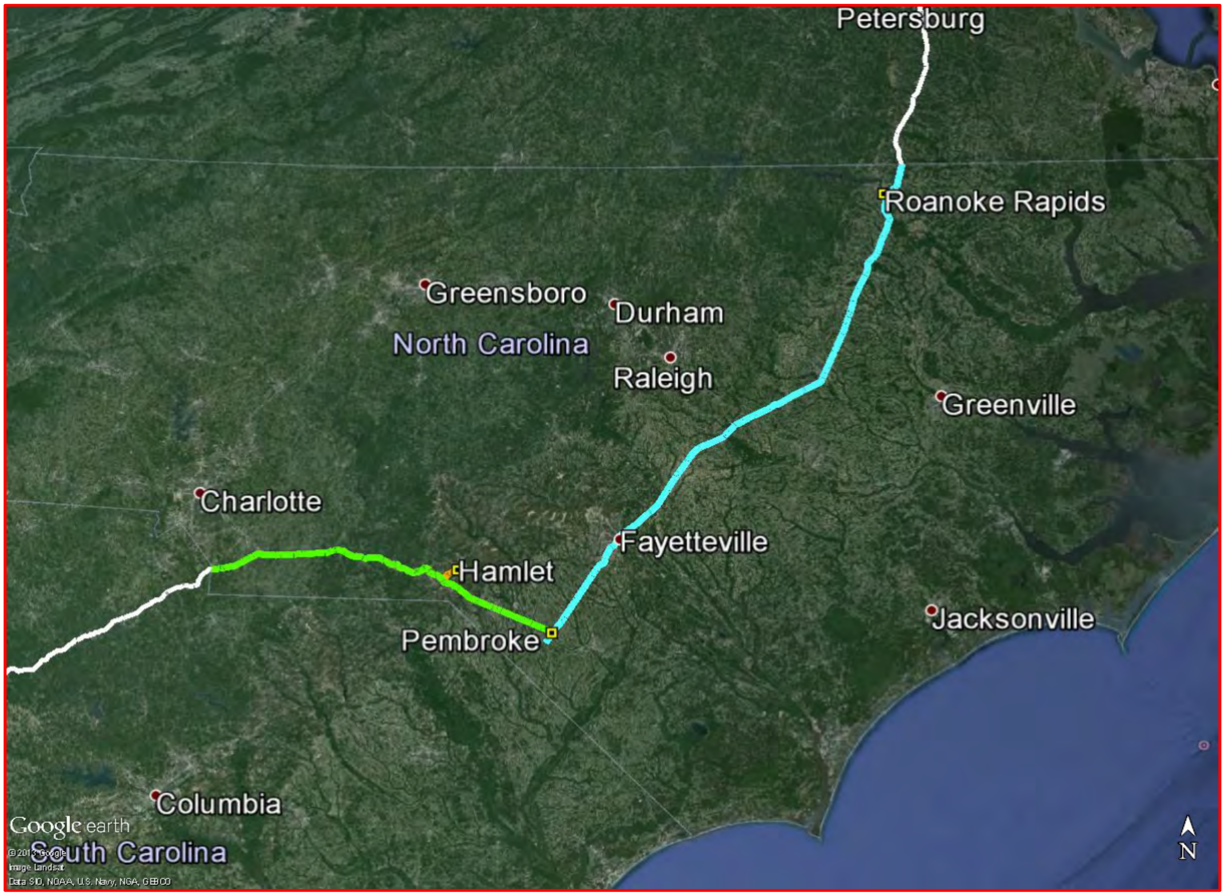
This additional land value needed to support communication facilities is <u>not</u> included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of North Carolina, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of North Carolina. The total valuation of the 280.6 route miles, in the state of North Carolina, as of July 1, 2010 is:

Seventy-Five Million, Five-Hundred Thousand Dollars

$75,500,000 (rounded)

NORTH CAROLINA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
(cyan)	**Alexandria VA to Pembroke NC**	171.5	2,076.6	AGRIC	59%	RESID	13%	$18,072	$37,529,109
(green)	**Pembroke NC to Atlanta GA**	99.6	1,207.0	AGRIC	54%	INDUS	20%	$28,435	$34,322,103
(orange)	**Hamlet & Roanoke Rapids Branches**	9.5	114.8	R-TOWN	35%	INDUS	23%	$31,987	$3,671,715
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR NORTH CAROLINA	**280.6**	**3,398.4**	**AGRIC**	**56%**	**INDUS**	**15%**	**$22,223**	**$75,522,927**
								(rounded)	**$75,500,000**

Ohio

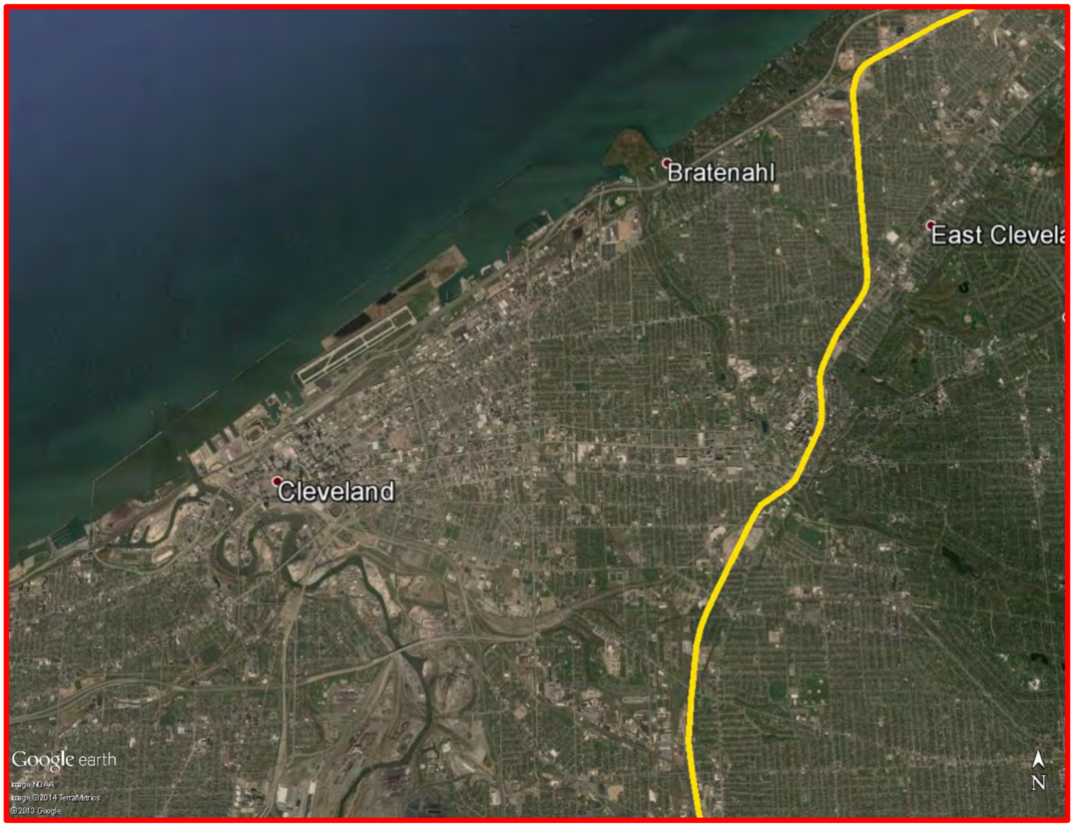
The length of the TPI SAR within Ohio is 716.3 miles and consists of eight routes, delineated as follows:

- Chicago, IL to Fostoria, OH: This 73.0-mile route (BLUE line on above map) is located in rural areas. Agricultural land uses account for 82% of the adjacent land uses on this route.
- Fostoria, OH to Pittsburgh, PA: This route (Green line) includes 172.9 miles in the state of Ohio, and is mainly rural. This route also passes through the cities of Akron and Youngstown, which were formerly major industrial areas. Much of the heavy industry in these areas has been closed.
- Cincinnati, OH to Hamilton, OH: This 46.4-mile route (PURPLE line) passes through the industrial areas of Hamilton, OH and follows the Mill Creek

valley down to Cincinnati. This route passes to the west of the Cincinnati CBD, and terminates at the Ohio River. The map below illustrates the location of this route in the Cincinnati area:

- Hamilton, OH to Deshler, OH: This 116.2-mile route (GOLD line) runs north/south through Ohio, from the Hamilton, OH area, to Deshler, on the Chicago to Fostoria route. This route is mainly rural, although it does pass through Dayton.

- Conneaut, OH to Galion, OH: This 148.0-mile route (GOLD line) begins at the Ohio/Pennsylvania state line in the northeast corner of Ohio. The route runs along Lake Erie, passing through small cities such as Conneaut and Ashtabula, and their related lake boat dock facilities. The route passes to the east and south of Cleveland, through mostly industrial and older residential areas, bypassing the CBD of the city. The map on the next page illustrates this route in the Cleveland, OH area:



- Marion, OH to Galion, OH: This 21.4-mile route (BLUE line) connects two longer routes, and goes through rural areas.
- Marion, OH to Fostoria, OH: This is another short route (PURPLE line) in a rural area, with agricultural land uses accounting for 94% of the adjacent land uses on this route.
- Marion, OH to Effingham, IL: This 96.1-mile route (GREEN line) runs entirely through rural areas from Marion, OH to the Ohio/Indiana state line.

The 716.3 route miles in the state of Ohio were divided into 436 line segments, with an overall average line segment length of 1.64 miles for the SAR right of way in the state of Ohio:

AVERAGE LENGTH OF LINE SEGMENTS OHIO			
Route Name	Total Miles	Number of Line Segments	Average Segment Length (Miles)
Chicago IL to Fostoria OH	73.0	46	1.59
Fostoria OH to Pittsburgh PA	172.9	48	3.60
Cincinnati OH to Hamilton OH	46.4	75	0.62
Hamilton OH to Deshler OH	116.2	84	1.38
Conneaut OH to Galion OH	148.0	131	1.13
Marion OH to Galion OH	21.4	8	2.67
Marion OH to Fostoria OH	42.5	7	6.07
Marion OH to Effingham IL	96.1	37	2.60
TOTAL STATE	**716.3**	**436**	**1.64**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE OHIO							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Chicago IL to Fostoria OH	56.5	98.6	0.0	727.2	0.0	2.9	885.2
Fostoria OH to Pittsburgh PA	261.9	419.9	21.5	1,115.3	172.4	104.2	2,095.2
Cincinnati OH to Hamilton OH	110.6	195.9	15.7	61.8	15.8	78.8	478.6
Hamilton OH to Deshler OH	193.5	247.8	3.1	760.2	135.0	49.1	1,388.6
Conneaut OH to Galion OH	357.0	555.5	13.2	738.5	0.0	98.6	1,762.8
Marion OH to Galion OH	48.9	48.9	0.0	143.3	17.9	0.0	259.0
Marion OH to Fostoria OH	0.0	0.0	0.0	484.0	30.7	0.0	514.7
Marion OH to Effingham IL	8.5	40.7	0.0	975.5	129.5	10.8	1,165.0
TOTAL ACRES	**1,036.9**	**1,607.3**	**53.5**	**5,005.8**	**501.2**	**344.3**	**8,549.1**
PERCENT OF TOTAL	***12%***	***19%***	***1%***	***59%***	***6%***	***4%***	
Acres in above table are based on land areas valued, excluding route over water of 0 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Ohio is agricultural at 59%, with industrial land uses accounting for another 19% of the adjacent land uses in Ohio.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Ohio, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) **OHIO**							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Chicago IL to Fostoria OH	$4,741	$10,699		$3,771		$200	$4,593
Fostoria OH to Pittsburgh PA	$14,181	$30,569	$60,000	$3,900	$15,000	$570	$11,854
Cincinnati OH to Hamilton OH	$84,391	$77,455	$281,375	$8,800	$25,000	$200	$62,409
Hamilton OH to Deshler OH	$30,000	$53,704	$125,000	$4,044	$6,000	$200	$16,844
Conneaut OH to Galion OH	$53,448	$73,356	$381,757	$3,500		$574	$38,297
Marion OH to Galion OH	$15,000	$33,789		$3,000	$7,000		$11,356
Marion OH to Fostoria OH				$3,495	$10,000		$3,882
Marion OH to Effingham IL	$15,000	$30,000		$3,794	$15,000	$200	$6,003

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE OHIO							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Chicago IL to Fostoria OH	$268,091	$1,054,970	$0	$2,742,273	$0	$582	$4,065,915
Fostoria OH to Pittsburgh PA	$3,713,697	$12,837,212	$1,290,909	$4,349,564	$2,585,455	$59,364	$24,836,200
Cincinnati OH to Hamilton OH	$9,334,167	$15,175,303	$4,403,939	$544,267	$393,939	$15,758	$29,867,373
Hamilton OH to Deshler OH	$5,803,636	$13,306,364	$386,364	$3,074,182	$810,182	$9,821	$23,390,548
Conneaut OH to Galion OH	$19,080,824	$40,750,121	$5,038,030	$2,584,909	$0	$56,621	$67,510,506
Marion OH to Galion OH	$733,636	$1,652,606	$0	$429,818	$125,576	$0	$2,941,636
Marion OH to Fostoria OH	$0	$0	$0	$1,691,358	$306,667	$0	$1,998,024
Marion OH to Effingham IL	$128,182	$1,220,000	$0	$3,701,152	$1,941,818	$2,158	$6,993,309
TOTAL LAND VALUE	**$39,062,233**	**$85,996,576**	**$11,119,242**	**$19,117,521**	**$6,163,636**	**$144,303**	**$161,603,512**
PERCENT OF TOTAL	***24.2%***	***53.2%***	***6.9%***	***11.8%***	***3.8%***	***0.1%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 59% of the total acreage in Ohio (see table on a previous page), accounts for only 11.8% of the total land value in the state. By contrast, industrial land accounts for 53.2% of market value, but only 19% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Ohio, the estimate of value for the land to support communication facilities is $1,124,212.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES OHIO						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Chicago IL to Fostoria OH	73.03	885.21	$4,593	2.92	5.84	$26,824
Fostoria OH to Pittsburgh PA	172.85	2,095.15	$11,854	6.91	13.82	$163,824
Cincinnati OH to Hamilton OH	46.35	478.58	$62,409	1.85	3.70	$230,913
Hamilton OH to Deshler OH	116.17	1,388.64	$16,844	4.65	9.30	$156,652
Conneaut OH to Galion OH	147.97	1,762.82	$38,297	5.92	11.84	$453,436
Marion OH to Galion OH	21.37	259.03	$11,356	0.85	1.70	$19,306
Marion OH to Fostoria OH	42.46	514.67	$3,882	1.70	3.40	$13,199
Marion OH to Effingham IL	96.11	1,164.97	$6,003	3.84	7.68	$46,103
TOTAL STATE				**28.64**	**57.28**	**$1,110,256**
TOTAL STATE (Round Up for # of Towers)				**29.00**	**58.00**	**$1,124,212**

This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Ohio, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Ohio. The total valuation of the 716.3 route miles, in the state of Ohio, as of July 1, 2010 is:

One-Hundred Sixty-One Million, Six-Hundred Thousand Dollars

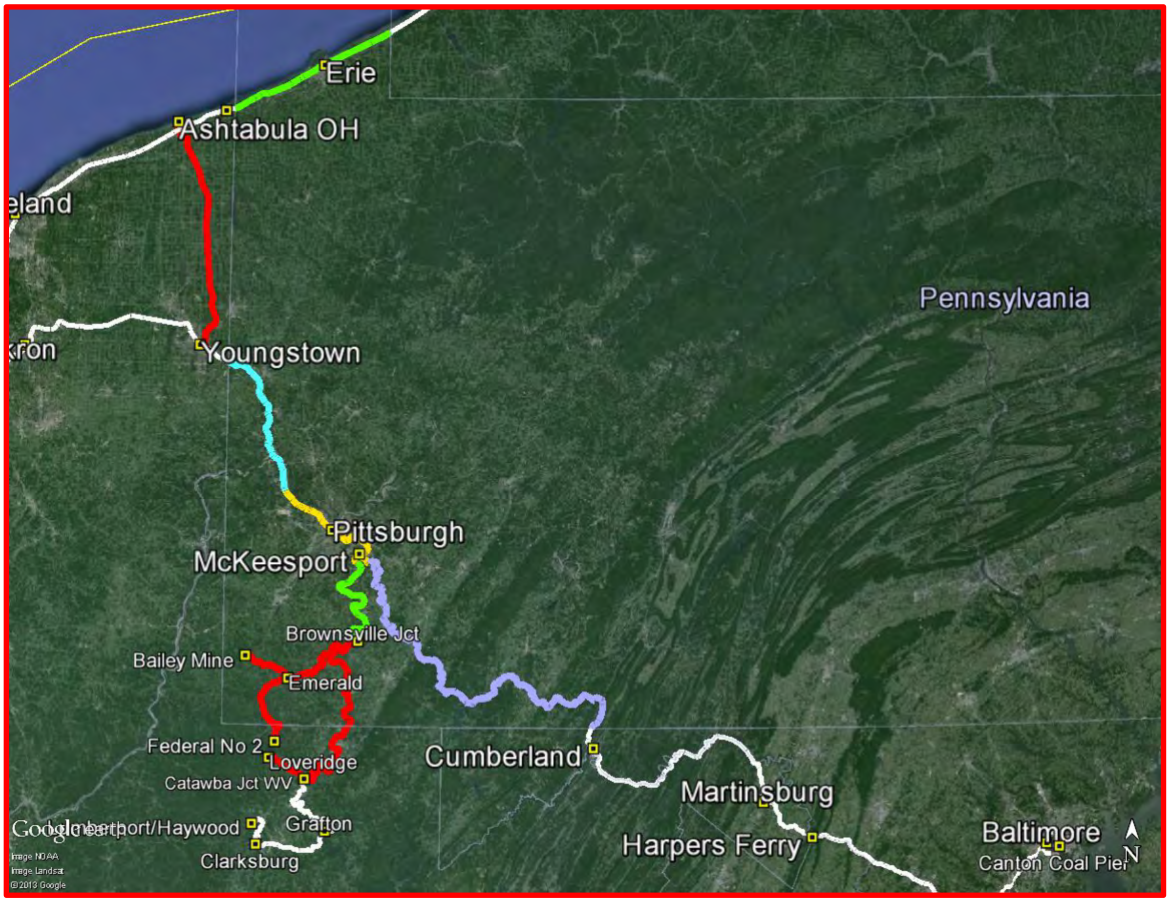
$161,600,000 (rounded)

OHIO

Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres: Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
	Chicago IL to Fostoria OH	73.0	885.2	AGRIC	82%	INDUS	11%	$4,593	$4,065,915
	Fostoria OH to Pittsburgh PA	172.9	2,095.2	AGRIC	53%	INDUS	20%	$11,854	$24,836,200
	Cincinnati OH to Hamilton OH	46.4	478.6	INDUS	41%	RESID	23%	$62,409	$29,867,373
	Hamilton OH to Deshler OH	116.2	1,388.6	AGRIC	55%	INDUS	18%	$16,844	$23,390,548
	Conneaut OH to Galion OH	148.0	1,762.8	AGRIC	42%	INDUS	32%	$38,297	$67,510,506
	Marion OH to Galion OH	21.4	259.0	AGRIC	55%	INDUS	19%	$11,356	$2,941,636
	Marion OH to Fostoria OH	42.5	514.7	AGRIC	94%	R-TOWN	6%	$3,882	$1,998,024
	Marion OH to Effingham IL	96.1	1,165.0	AGRIC	84%	R-TOWN	11%	$6,003	$6,993,309
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR OHIO	**716.3**	**8,549.1**	**AGRIC**	**59%**	**INDUS**	**19%**	**$18,903**	**$161,603,512**
								(rounded)	**$161,600,000**

Pennsylvania

The length of the TPI SAR within Pennsylvania is 282.5 miles and consists of five routes, delineated as follows:



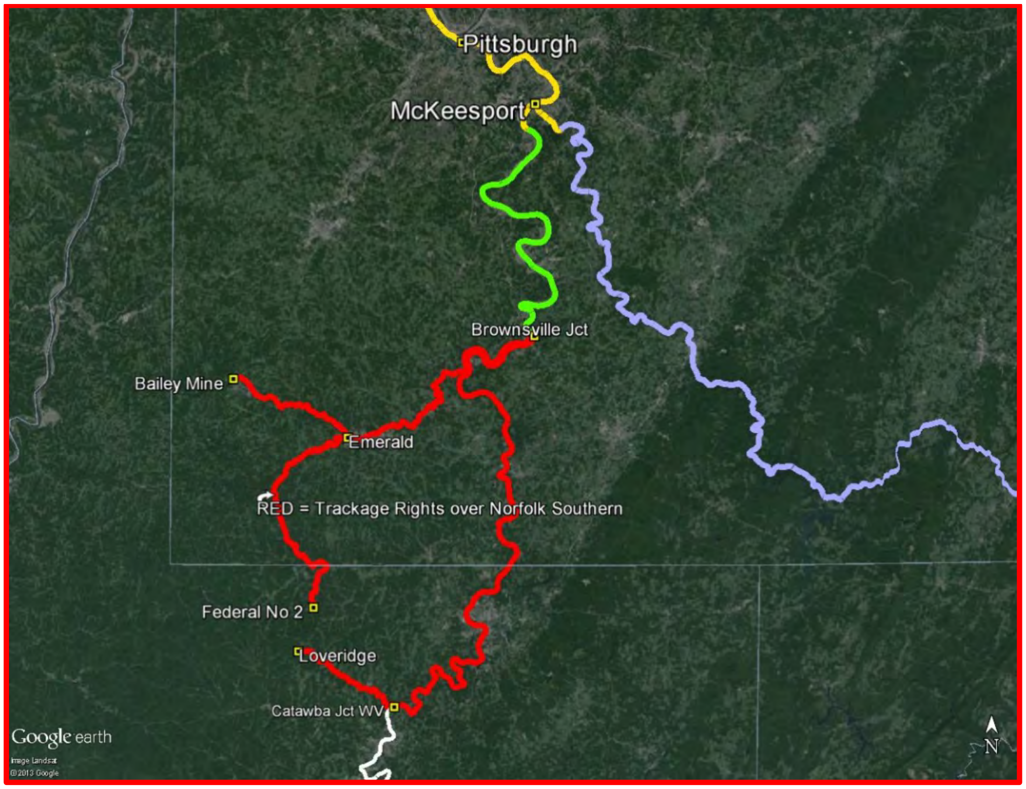
- Conneaut, OH to Buffalo, NY: This 43.9-mile route (GREEN line in map above) begins at the Ohio/Pennsylvania state line in the northwest corner of Pennsylvania, and runs to the New York/Pennsylvania state line. The route is rural, except for the industrial city of Erie, PA. The predominant land use on this route is industrial at 40%, with agricultural at 37%.

- Fostoria, OH to Pittsburgh, PA: This 40.6-mile route (BLUE line) begins at the Ohio/Pennsylvania state line near Youngstown, OH. The line runs southeast through small industrial towns like Aliquippa. Predominant land uses along this route are 45% restricted (wetlands, steep slopes, etc.) and 31% industrial.

- Pittsburgh, PA: This 38.1-mile route (GOLD line) begins on the west/south bank of the Ohio River near Coraopolis and runs through industrial areas and small towns until reaching the area across the Monongahela River from Pittsburgh's CBD. (The detail map above illustrates the TPI SAR route through the Pittsburgh area). Running along the south side of the Monongahela River, the route runs through some redevelopment of old industrial properties, including the hotel/retail development at Station Square, the mixed-use redevelopment at Southside Works, and the retail development at Homestead Works. At this point, the route crosses to the north bank of the Monongahela River and runs through older industrial/residential communities such as Braddock and McKeesport, including the J. Edgar Thomson Works of US Steel between Braddock and

McKeesport. Predominant land uses along this route are 45% restricted land uses (steep slopes, wetlands, etc.) and 41% industrial.

- Pittsburgh, PA to Cumberland, MD: This 124.7-mile route (PURPLE line) runs along the Youghiogheny River, passing through Connellsville, Confluence and Meyersdale, and ending at the Pennsylvania/Maryland state line, just north of Cumberland, MD. Predominant land uses on this route are 58% restricted land uses (steep slopes, wetlands, etc.) and 33% agricultural.
- Glassport, PA to Grafton, WV: This 71.0-mile route runs from Glassport, PA on the Monongahela River southwest of McKeesport, along the Monongahela River through Monessen and Brownsville. The route ends at the Pennsylvania/West Virginia state line, just north of Morgantown, WV. Of the total 71.0 mile route, only 35.3 miles (from Glassport, PA to Brownsville Junction, PA – GREEN line in map below) are valued in this analysis. The remaining 35.7 miles (from Brownsville Junction, PA to the PA/WV state line) are trackage rights over Norfolk Southern (RED lines), and are NOT valued in this analysis. The predominant land uses on this route are industrial at 32% and agricultural at 31%.



The 282.5 route miles in the state of Pennsylvania were divided into 164 line segments, with an overall average line segment length of 1.72 miles for the SAR right of way in the state of Pennsylvania:

AVERAGE LENGTH OF LINE SEGMENTS PENNSYLVANIA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Conneaut OH to Buffalo NY	43.9	18	2.44
Fostoria OH to Pittsburgh PA	40.6	23	1.76
Pittsburgh PA	38.1	69	0.55
Pittsburgh PA to Cumberland MD	124.7	39	3.20
Glassport PA to Grafton WV	35.3	15	2.35
TOTAL STATE	**282.5**	**164**	**1.72**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE PENNSYLVANIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	74.8	197.0	3.3	181.9	20.8	15.3	493.2
Fostoria OH to Pittsburgh PA	69.1	149.0	0.0	49.9	0.0	219.7	487.8
Pittsburgh PA	15.9	147.7	32.6	0.0	0.0	161.4	357.6
Pittsburgh PA to Cumberland MD	17.9	20.1	0.0	497.9	91.7	883.8	1,511.4
Glassport PA to Grafton WV	22.5	136.4	0.0	133.4	94.9	40.3	427.5
TOTAL ACRES	**200.1**	**650.2**	**35.9**	**863.2**	**207.5**	**1,320.6**	**3,277.4**
PERCENT OF TOTAL	***6%***	***20%***	***1%***	***26%***	***6%***	***40%***	
Acres in above table are based on land areas valued, excluding route over water of 4.12 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Pennsylvania is restricted (wetlands, steep slopes, etc.) at 40%, with agricultural land uses accounting for another 26% of the adjacent land uses in Pennsylvania.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Pennsylvania, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) PENNSYLVANIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	$13,500	$35,000	$80,000	$3,500	$10,000	$350	$18,293
Fostoria OH to Pittsburgh PA	$9,293	$35,000		$5,500		$250	$12,686
Pittsburgh PA	$35,730	$44,314	$440,047			$500	$60,207
Pittsburgh PA to Cumberland MD	$6,729	$30,332		$2,500	$7,483	$809	$2,233
Glassport PA to Grafton WV	$35,000	$36,368		$3,548	$10,174	$786	$16,886

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE PENNSYLVANIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Conneaut OH to Buffalo NY	$1,009,636	$6,895,000	$266,667	$636,576	$208,485	$5,367	$9,021,730
Fostoria OH to Pittsburgh PA	$642,061	$5,216,061	$0	$274,667	$0	$54,924	$6,187,712
Pittsburgh PA	$567,348	$6,545,682	$14,334,848	$0	$0	$80,705	$21,528,583
Pittsburgh PA to Cumberland MD	$120,303	$608,485	$0	$1,244,848	$686,152	$715,318	$3,375,106
Glassport PA to Grafton WV	$786,970	$4,961,515	$0	$473,303	$965,576	$31,697	$7,219,061
TOTAL LAND VALUE	**$3,126,318**	**$24,226,742**	**$14,601,515**	**$2,629,394**	**$1,860,212**	**$888,011**	**$47,332,192**
PERCENT OF TOTAL	***6.6%***	***51.2%***	***30.8%***	***5.6%***	***3.9%***	***1.9%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 26% of the total acreage in Pennsylvania (see table on a previous page), accounts for only 5.6% of the total land value in the state. By contrast, industrial land accounts for 51.2% of market value, but only 20% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Pennsylvania, the estimate of value for the land to support communication facilities is $380,632.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES PENNSYLVANIA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Conneaut OH to Buffalo NY	43.93	493.18	$18,293	1.76	3.52	$64,391
Fostoria OH to Pittsburgh PA	40.58	487.76	$12,686	1.62	3.24	$41,103
Pittsburgh PA	38.05	357.58	$60,207	1.52	3.04	$183,029
Pittsburgh PA to Cumberland MD	124.69	1,511.39	$2,233	4.99	9.98	$22,286
Glassport PA to Grafton WV	35.27	427.52	$16,886	1.41	2.82	$47,619
TOTAL STATE				**11.30**	**22.60**	**$358,428**
TOTAL STATE (Round Up for # of Towers)				**12.00**	**24.00**	**$380,632**

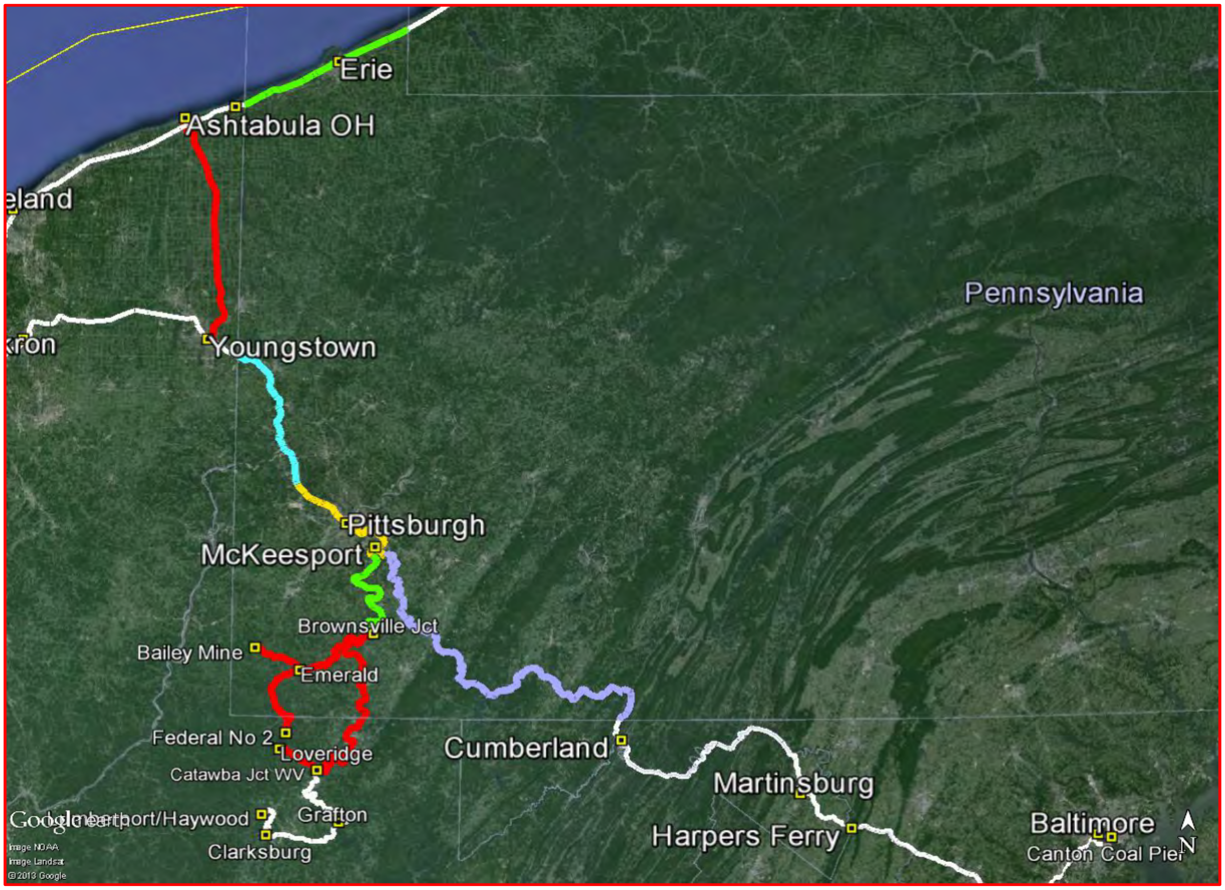
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Pennsylvania, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Pennsylvania. The total valuation of the 282.5 route miles, in the state of Pennsylvania, as of July 1, 2010 is:

Forty-Seven Million, Three-Hundred Thousand Dollars

$47,300,000 (rounded)

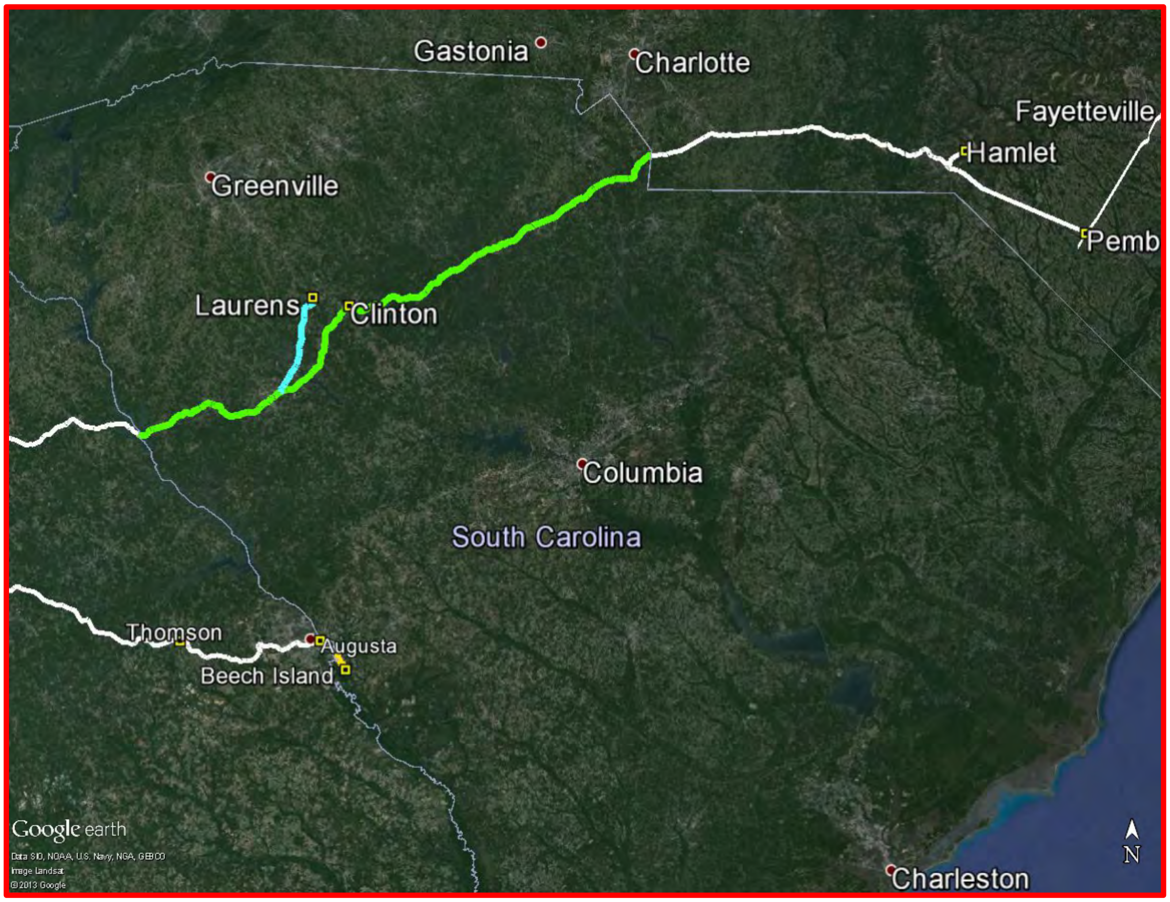
PENNSYLVANIA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
	Conneaut OH to Buffalo NY	43.9	493.2	INDUS	40%	AGRIC	37%	$18,293	$9,021,730
	Fostoria OH to Pittsburgh PA	40.6	487.8	RES (X)	45%	INDUS	31%	$12,686	$6,187,712
	Pittsburgh PA	38.1	357.6	RES (X)	45%	INDUS	41%	$60,207	$21,528,583
	Pittsburgh PA to Cumberland MD	124.7	1,511.4	RES (X)	58%	AGRIC	33%	$2,233	$3,375,106
	Glassport PA to Grafton WV	35.3	427.5	INDUS	32%	AGRIC	31%	$16,886	$7,219,061
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR PENNSYLVANIA	**282.5**	**3,277.4**	**RES (X)**	**40%**	**AGRIC**	**26%**	**$14,442**	**$47,332,192**
								(rounded)	**$47,300,000**

South Carolina

The length of the TPI SAR within South Carolina is 162.9 miles and consists of three routes, delineated as follows:



- Pembroke, NC to Atlanta, GA: This 136.3-mile route (GREEN line on above map) begins at the North Carolina/South Carolina state line and runs southwest through mainly rural areas, to the South Carolina/Georgia state line. This route passes through Clinton and Greenwood, and the predominant land use is agricultural at 81%.
- Parke Junction, SC to Laurens Wye, SC: This 22.5-mile route (BLUE line) runs from Parke Junction, on the Pembroke-Atlanta route, northeast to Laurens Wye. Agricultural land uses account for 82% of the adjacent land uses on this route.

- Atlanta, GA to Beech Island, SC: The South Carolina portion of this route (YELLOW line) is 4.1 miles in length. The route terminates in Beech Island, SC, which is located across the Savannah River from Augusta, GA. Agricultural land uses account for 76% of the adjacent land uses on this route.

The 162.9 route miles in the state of South Carolina were divided into 93 line segments, with an overall average line segment length of 1.75 miles for the SAR right of way in the state of South Carolina:

AVERAGE LENGTH OF LINE SEGMENTS SOUTH CAROLINA			
Route Name	Total Miles	Number of Line Segments	Average Segment Length (Miles)
Pembroke NC to Atlanta GA	136.3	63	2.16
Parke Jct. SC to Laurens Wye SC	22.5	24	0.94
Atlanta GA to Beech Island SC	4.1	6	0.68
TOTAL STATE	**162.9**	**93**	**1.75**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE SOUTH CAROLINA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Pembroke NC to Atlanta GA	124.4	85.0	38.2	1,337.6	40.7	26.7	1,652.6
Parke Jct. SC to Laurens Wye SC	32.5	15.0	0.0	221.6	0.0	0.0	269.2
Atlanta GA to Beech Island SC	0.0	8.8	0.0	37.3	0.0	3.2	49.3
TOTAL ACRES	**157.0**	**108.8**	**38.2**	**1,596.5**	**40.7**	**29.9**	**1,971.2**
PERCENT OF TOTAL	***8%***	***6%***	***2%***	***81%***	***2%***	***2%***	
Acres in above table are based on land areas valued, excluding route over water of 3.52 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the

fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in South Carolina is agricultural at 81%, with residential land uses accounting for another 8% of the adjacent land uses in South Carolina.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in South Carolina, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) SOUTH CAROLINA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Pembroke NC to Atlanta GA	$13,302	$56,835	$130,595	$2,543	$3,500	$300	$9,092
Parke Jct. SC to Laurens Wye SC	$6,500	$50,000		$2,600			$5,718
Atlanta GA to Beech Island SC		$50,000		$4,000		$350	$11,956

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE SOUTH CAROLINA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Pembroke NC to Atlanta GA	$1,655,030	$4,832,727	$4,986,364	$3,401,236	$142,545	$8,000	$15,025,903
Parke Jct. SC to Laurens Wye SC	$211,545	$751,515	$0	$576,255	$0	$0	$1,539,315
Atlanta GA to Beech Island SC	$0	$439,394	$0	$149,333	$0	$1,124	$589,852
TOTAL LAND VALUE	**$1,866,576**	**$6,023,636**	**$4,986,364**	**$4,126,824**	**$142,545**	**$9,124**	**$17,155,070**
PERCENT OF TOTAL	***10.9%***	***35.1%***	***29.1%***	***24.1%***	***0.8%***	***0.1%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 81% of the total acreage

in South Carolina (see table on a previous page), accounts for only 24.1% of the total land value in the state. By contrast, industrial land accounts for 35.1% of market value, but only 6% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of South Carolina, the estimate of value for the land to support communication facilities is $121,746.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES
SOUTH CAROLINA

Route Name	Before Communications Facilities			Additional Needed for Communications Facilities		
	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Pembroke NC to Atlanta GA	136.34	1,652.61	$9,092	5.45	10.90	$99,105
Parke Jct. SC to Laurens Wye SC	22.50	269.21	$5,718	0.90	1.80	$10,292
Atlanta GA to Beech Island SC	4.07	49.33	$11,956	0.16	0.32	$3,826
TOTAL STATE				**6.51**	**13.02**	**$113,224**
TOTAL STATE (Round Up for # of Towers)				**7.00**	**14.00**	**$121,746**

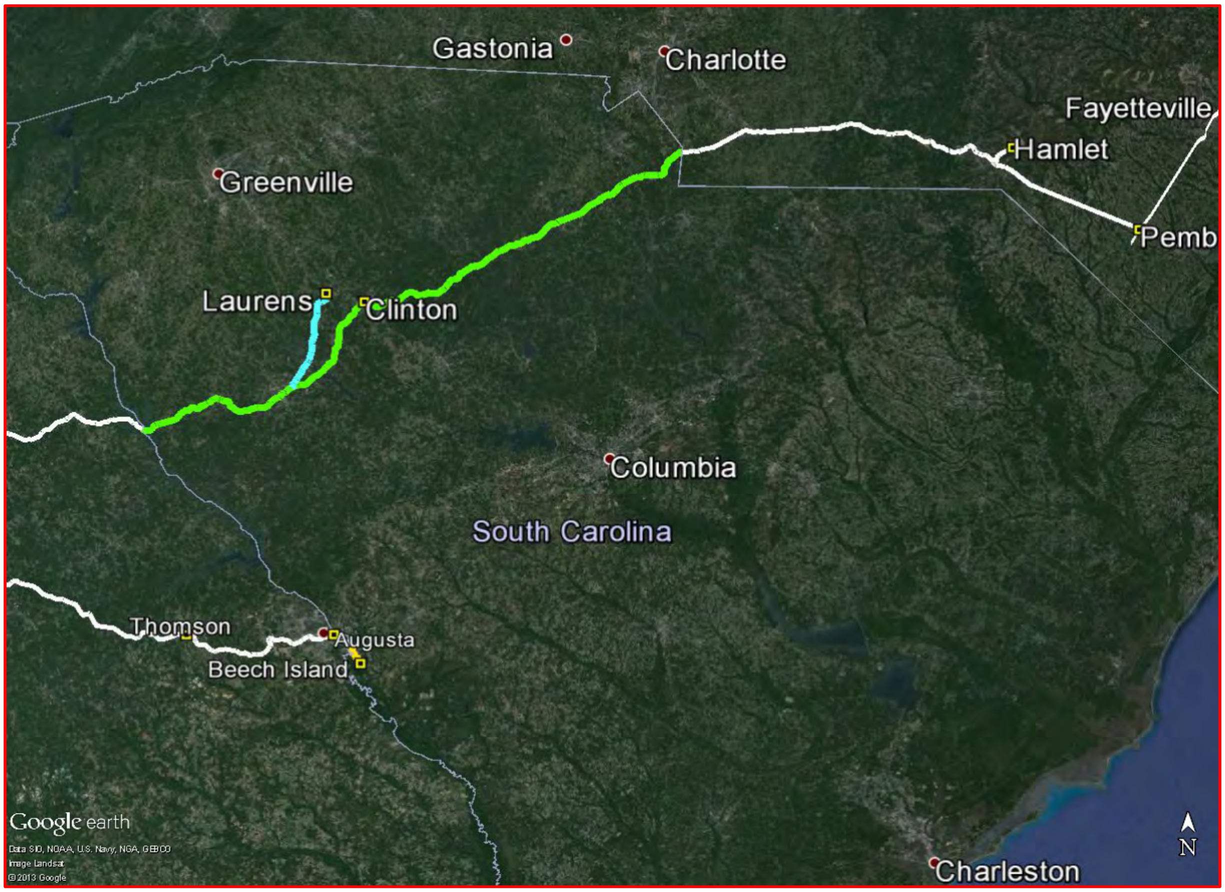
This additional land value needed to support communication facilities is <u>not</u> included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of South Carolina, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of South Carolina. The total valuation of the 162.9 route miles, in the state of South Carolina, as of July 1, 2010 is:

Seventeen Million, Two-Hundred Thousand Dollars

$17,200,000 (rounded)

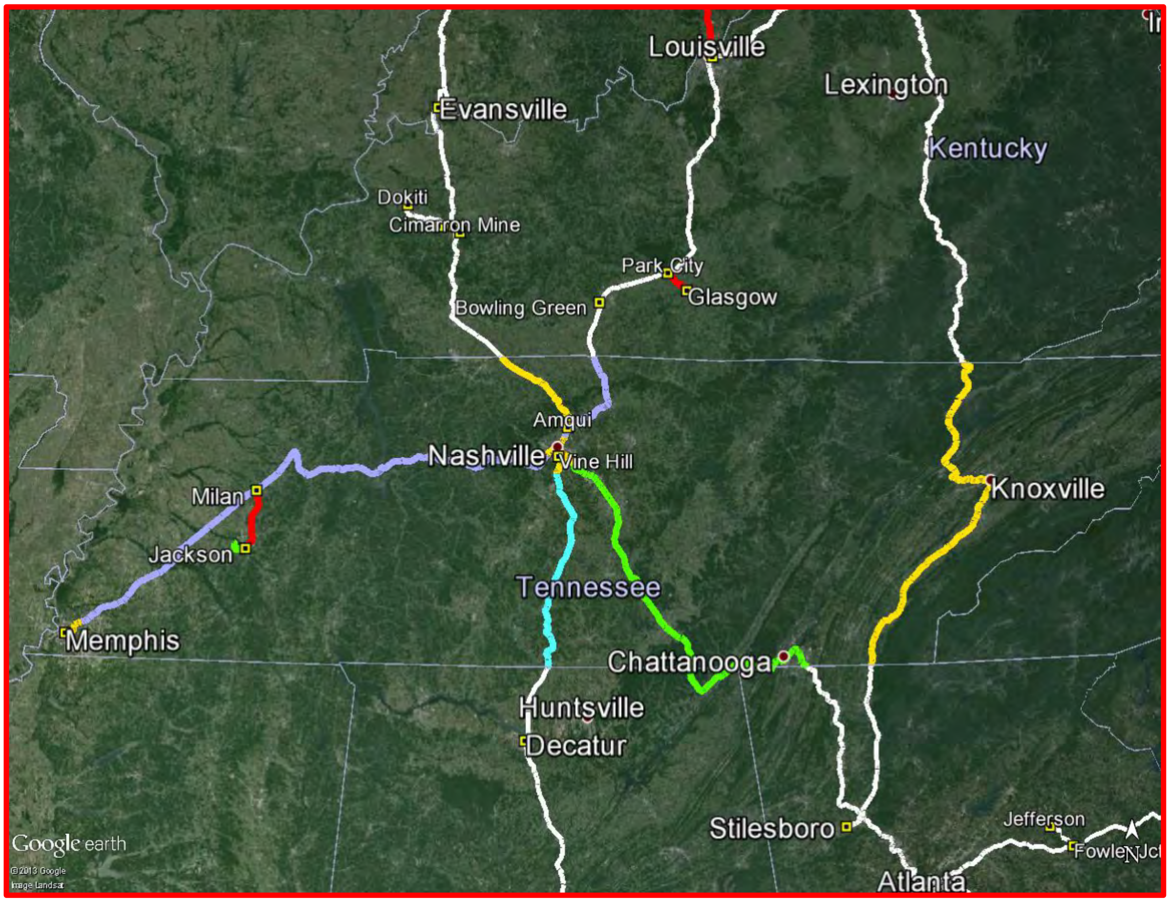
SOUTH CAROLINA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
(green)	**Pembroke NC to Atlanta GA**	136.3	1,652.6	AGRIC	81%	RESID	8%	$9,092	$15,025,903
(cyan)	**Parke Jct. SC to Laurens Wye SC**	22.5	269.2	AGRIC	82%	RESID	12%	$5,718	$1,539,315
(yellow)	**Atlanta GA to Beech Island SC**	4.1	49.3	AGRIC	76%	INDUS	18%	$11,956	$589,852
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR SOUTH CAROLINA	**162.9**	**1,971.2**	**AGRIC**	**81%**	**RESID**	**8%**	**$8,703**	**$17,155,070**
								(rounded)	**$17,200,000**

Tennessee

The length of the TPI SAR within Tennessee is 748.1 miles and consists of eight routes, delineated as follows:



- Memphis, TN: This 8.7-mile route (GOLD line on above map) begins on the south side of Memphis, south of the CBD. This route runs through mainly older industrial areas and older residential areas on the south and east sides of the Memphis metropolitan area. This route is 69% industrial and 27% residential.

- Memphis, TN to Louisville, KY: This 258.4-mile route (PURPLE line) begins at the northeast edge of the Memphis area, and runs northeast to Nashville, where the route turns to the north to end at the Tennessee/Kentucky state line. This route runs through mainly rural areas, and excludes the Nashville metropolitan area (see below). The predominant land use on this route is agricultural at 58% and rural town at 20%.

- Nashville, TN: This 30.1-mile route is comprised of several lines in the Nashville metropolitan area, as shown by the GOLD lines on the map below:

Generally, the SAR route through Nashville goes through areas of newer residential and commercial development on the portion of each line located farthest from the city center. As each line approaches the city center, older industrial and older residential areas are typical. The SAR route passes through the Nashville CBD, passing just north of the state capitol building, and then crosses the Cumberland River to proceed northeast out of Nashville. The predominant land uses in Nashville are industrial at 49% and residential at 29%.

- Birmingham, AL to Nashville, TN: This 79.0-mile route (BLUE line) begins at the Alabama/Tennessee state line and runs north through mainly rural areas, ending in the southern portion of the Nashville area. Land uses along this route are 82% agricultural.

- Nashville, TN to Woodland Junction, IL (UP): This 38.4-mile route (GOLD line) begins at Amqui, located northeast of Nashville. The route runs mainly through rural areas, heading northwest to the Tennessee/Kentucky state line. This route is 54% residential and 32% agricultural.

- Nashville, TN to Atlanta, GA: This 159.0-mile route (GREEN line) runs southeast from Nashville, running mainly through rural areas to the Tennessee/Georgia state line. The route dips into Georgia, going through Stevenson, GA and Bridgeport, GA before crossing back into Tennessee. The portion of this route located in Georgia is included in the Tennessee totals, but the land values for the Georgia portion of this route were based on sales in this part of Georgia. After re-entering Tennessee, the route goes through Chattanooga before turning south and ending at the Tennessee/Georgia state line. This route is 61% agricultural.

- Latonia, KY to Junta, GA: This 160.9-mile route (GOLD line) runs north/south through the state of Tennessee. This route passes through mainly rural areas, but it does pass through the urban area of Knoxville, TN. Agricultural land uses account for 61% of the adjacent land uses on this route.

- Jackson and Wauhatchie, TN Branch Lines: This 13.6 mile route is comprised of two branch lines: The Wauhatchie branch is a bypass route around Wauhatchie yard in Chattanooga. The Jackson branch is a 9-mile branch in the Jackson, TN area, which is reached via trackage rights over Norfolk Southern from Milan, TN to Jackson, TN, a distance of 23.4 miles over Norfolk Southern. The trackage rights over Norfolk Southern are NOT valued in this analysis. In the illustration below, the purple line is the Memphis to Louisville route, the red line is the trackage rights over Norfolk Southern, and the green line is the TPI SAR trackage in the Jackson, TN area:

The 748.1 route miles in the state of Tennessee were divided into 480 line segments, with an overall average line segment length of 1.56 miles for the SAR right of way in the state of Tennessee:

AVERAGE LENGTH OF LINE SEGMENTS TENNESSEE			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Memphis TN	8.7	18	0.48
Memphis TN to Louisville KY	258.4	122	2.12
Nashville TN	30.1	64	0.47
Birmingham AL to Nashville TN	79.0	22	3.59
Nashville TN to Woodland Jct IL (UP)	38.4	13	2.95
Nashville TN to Atlanta GA	159.0	99	1.61
Latonia KY to Junta GA	160.9	131	1.23
Jackson & Wauhatchie TN branches	13.6	11	1.24
TOTAL STATE	**748.1**	**480**	**1.56**

The table below summarizes the land uses encountered "across the fence" from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE TENNESSEE							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Memphis TN	21.5	54.9	0.6	0.0	0.0	2.0	79.0
Memphis TN to Louisville KY	416.5	143.9	32.4	1,805.7	615.6	88.0	3,102.2
Nashville TN	79.3	132.9	35.5	0.0	0.0	24.5	272.2
Birmingham AL to Nashville TN	124.5	29.4	0.0	786.1	0.0	17.5	957.6
Nashville TN to Woodland Jct IL (UP)	252.8	63.1	0.0	149.6	0.0	0.0	465.5
Nashville TN to Atlanta GA	194.0	290.5	86.4	1,127.9	86.1	72.3	1,857.2
Latonia KY to Junta GA	376.6	205.4	52.6	1,161.8	93.1	17.9	1,907.5
Jackson & Wauhatchie TN branches	20.5	42.7	0.0	102.1	0.0	0.0	165.2
TOTAL ACRES	**1,485.7**	**962.8**	**207.6**	**5,133.2**	**794.8**	**222.3**	**8,806.4**
PERCENT OF TOTAL	***17%***	***11%***	***2%***	***58%***	***9%***	***3%***	
Acres in above table are based on land areas valued, excluding route over water of 43.49 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the "across the fence" land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Tennessee is agricultural at 58%, with residential land uses accounting for another 17% of the adjacent land uses in Tennessee.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Tennessee, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) TENNESSEE							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Memphis TN	$85,000	$90,000	$90,000			$200	$86,317
Memphis TN to Louisville KY	$60,336	$78,642	$136,399	$2,110	$10,000	$200	$16,392
Nashville TN	$65,000	$98,666	$125,000			$500	$83,474
Birmingham AL to Nashville TN	$58,141	$50,000		$4,145		$200	$12,503
Nashville TN to Woodland Jct IL (UP)	$50,000	$78,626		$4,543			$39,273
Nashville TN to Atlanta GA	$51,473	$81,444	$93,664	$3,870	$10,699	$215	$25,328
Latonia KY to Junta GA	$46,032	$60,454	$135,953	$4,362	$8,000	$1,000	$22,407
Jackson & Wauhatchie TN branches	$47,751	$54,929		$4,742			$23,036

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE TENNESSEE							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Memphis TN	$1,823,636	$4,937,727	$57,273	$0	$0	$409	$6,819,045
Memphis TN to Louisville KY	$25,130,758	$11,319,697	$4,418,485	$3,809,479	$6,156,364	$17,606	$50,852,388
Nashville TN	$5,155,682	$13,109,091	$4,443,182	$0	$0	$12,227	$22,720,182
Birmingham AL to Nashville TN	$7,241,212	$1,469,697	$0	$3,258,406	$0	$3,503	$11,972,818
Nashville TN to Woodland Jct IL (UP)	$12,639,394	$4,960,606	$0	$679,588	$0	$0	$18,279,588
Nashville TN to Atlanta GA	$9,984,924	$23,659,394	$8,094,848	$4,365,564	$920,788	$15,521	$47,041,039
Latonia KY to Junta GA	$17,334,015	$12,419,697	$7,156,061	$5,068,042	$744,727	$17,939	$42,740,482
Jackson & Wauhatchie TN branches	$978,182	$2,343,636	$0	$484,006	$0	$0	$3,805,824
TOTAL LAND VALUE	**$80,287,803**	**$74,219,545**	**$24,169,848**	**$17,665,085**	**$7,821,879**	**$67,206**	**$204,231,367**
PERCENT OF TOTAL	***39.3%***	***36.3%***	***11.8%***	***8.6%***	***3.8%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 58% of the total acreage in Tennessee (see table on a previous page), accounts for only 8.6% of the total land value in the state. By contrast, industrial land accounts for 36.3% of market value, but only 11% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Tennessee, the estimate of value for the land to support communication facilities is $1,438,758.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES TENNESSEE						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Memphis TN	8.69	79.00	$86,317	0.35	0.70	$60,422
Memphis TN to Louisville KY	258.44	3,102.21	$16,392	10.34	20.68	$338,993
Nashville TN	30.08	272.18	$83,474	1.20	2.40	$200,338
Birmingham AL to Nashville TN	79.00	957.58	$12,503	3.16	6.32	$79,021
Nashville TN to Woodland Jct IL (UP)	38.40	465.45	$39,273	1.54	3.08	$120,959
Nashville TN to Atlanta GA	159.04	1,857.24	$25,328	6.36	12.72	$322,178
Latonia KY to Junta GA	160.86	1,907.48	$22,407	6.43	12.86	$288,150
Jackson & Wauhatchie TN branches	13.63	165.21	$23,036	0.55	1.10	$25,340
TOTAL STATE				**29.93**	**59.86**	**$1,435,401**
TOTAL STATE (Round Up for # of Towers)				**30.00**	**60.00**	**$1,438,758**

This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Tennessee, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Tennessee. The total valuation of the 748.1 route miles, in the state of Tennessee, as of July 1, 2010 is:

Two-Hundred Four Million, Two-Hundred Thousand Dollars

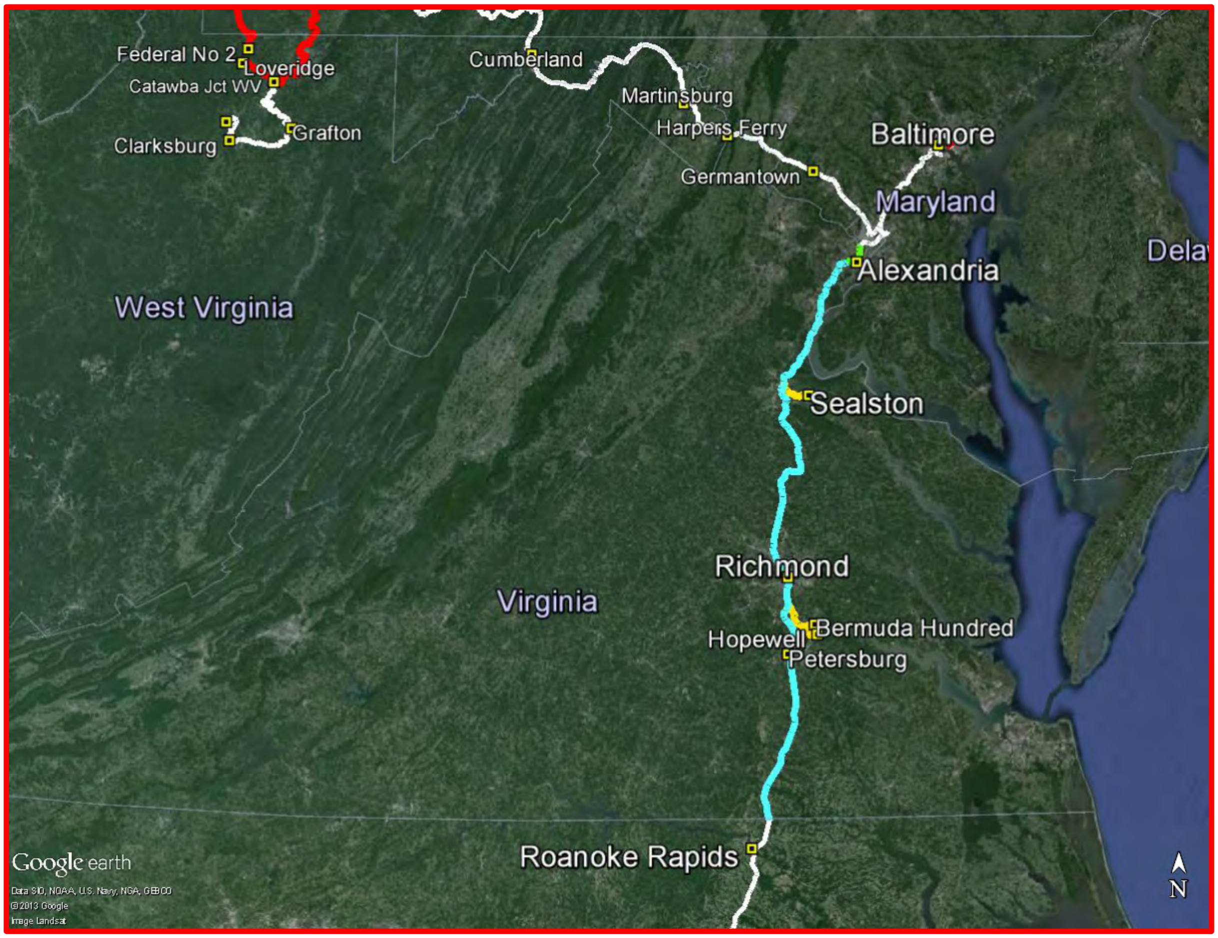
$204,200,000 (rounded)

TENNESSEE

Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres Most Prominent		Second Most		Avg. Value per Acre	Total Value for Route
	Memphis TN	8.7	79.0	INDUS	69%	RESID	27%	$86,317	$6,819,045
	Memphis TN to Louisville KY	258.4	3,102.2	AGRIC	58%	R-TOWN	20%	$16,392	$50,852,388
	Nashville TN	30.1	272.2	INDUS	49%	RESID	29%	$83,474	$22,720,182
	Birmingham AL to Nashville TN	79.0	957.6	AGRIC	82%	RESID	13%	$12,503	$11,972,818
	Nashville TN to Woodland Jct IL (UP)	38.4	465.5	RESID	54%	AGRIC	32%	$39,273	$18,279,588
	Nashville TN to Atlanta GA	159.0	1,857.2	AGRIC	61%	INDUS	16%	$25,328	$47,041,039
	Latonia KY to Junta GA	160.9	1,907.5	AGRIC	61%	RESID	20%	$22,407	$42,740,482
	Jackson & Wauhatchie TN branches	13.6	165.2	AGRIC	62%	INDUS	26%	$23,036	$3,805,824
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR TENNESSEE	**748.1**	**8,806.4**	**AGRIC**	**58%**	**RESID**	**17%**	**$23,191**	**$204,231,367**
								(rounded)	**$204,200,000**

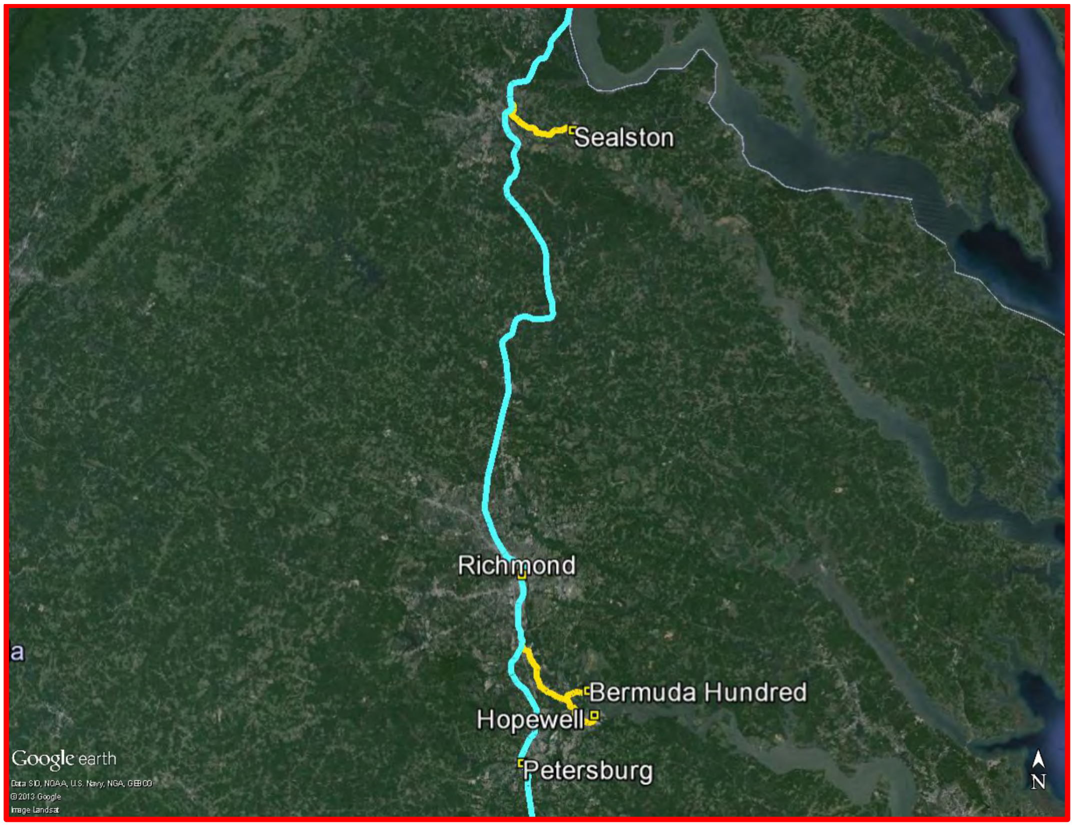
Virginia

The length of the TPI SAR within Virginia is 215.5 miles and consists of three routes, delineated as follows:



- Alexandria Junction, MD (JD) to Alexandria, VA: This 7.8-mile route (GREEN line on above map) begins at the Potomac River, between the Pentagon and National Airport. The route continues south between the high rise office buildings of Crystal City and National Airport, past the former Potomac Yards location, which is now being developed as a retail and mixed use center. South of Potomac Yards, the route enters the City of Alexandria, passing through older residential and industrial areas, as well as newer medium density residential and office development. The route ends at the Alexandria City/Fairfax County line. The predominant land uses on this route are residential at 51% and commercial at 34%.

- Alexandria, VA to Pembroke, NC: This 178.6-mile route (BLUE line) runs from Alexandria south to the Virginia/North Carolina state line. Heading south from Alexandria, this route passes through the developed areas of Newington, Lorton and Woodbridge. South of Woodbridge, the route becomes more rural, but also passes through Quantico and Fredericksburg. The route passes through Richmond, but skirts the CBD to the north and east, passing mainly through older industrial areas in Richmond. Between Richmond and Petersburg, suburban residential and industrial development predominates, and south of Petersburg to the Virginia/North Carolina state line, the route becomes rural again.
- Virginia Branch Lines (3): This 29.1 mile route consists of three branch lines in Virginia (GOLD lines). The Sealston Branch is 9.9 miles long, diverging from the Alexandria, VA to Pembroke, NC route at Dahlgren Junction, VA, which is near Fredericksburg. The Hopewell Branch and the Bermuda Hundred Branch are located between Richmond, VA and Petersburg, VA on the Alexandria, VA to Pembroke, NC route. The map on the next page illustrates the location of these three branch lines in Virginia.



The 215.5 route miles in the state of Virginia were divided into 205 line segments, with an overall average line segment length of 1.05 miles for the SAR right of way in the state of Virginia:

AVERAGE LENGTH OF LINE SEGMENTS VIRGINIA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Alex Jct MD (JD) to Alexandria VA	7.8	16	0.49
Alexandria VA to Pembroke NC	178.6	161	1.11
Virginia Branch Lines (3)	29.1	28	1.04
TOTAL STATE	**215.5**	**205**	**1.05**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE VIRGINIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Alex Jct MD (JD) to Alexandria VA	35.6	10.5	24.1	0.0	0.0	0.0	70.3
Alexandria VA to Pembroke NC	563.6	294.8	37.4	808.5	117.9	277.0	2,099.2
Virginia Branch Lines (3)	120.1	111.7	26.5	84.8	0.0	9.2	352.4
TOTAL ACRES	**719.3**	**417.0**	**88.0**	**893.3**	**117.9**	**286.2**	**2,521.9**
PERCENT OF TOTAL	***29%***	***17%***	***3%***	***35%***	***5%***	***11%***	
Acres in above table are based on land areas valued, excluding route over water of 16.76 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in Virginia is agricultural at 35%, with residential land uses accounting for another 29% of the adjacent land uses in Virginia.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in Virginia, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) VIRGINIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Alex Jct MD (JD) to Alexandria VA	$5,356,322	$875,000	$8,160,075				$5,646,831
Alexandria VA to Pembroke NC	$175,231	$205,679	$280,081	$3,493	$33,643	$679	$84,246
Virginia Branch Lines (3)	$58,479	$102,626	$283,593	$3,544		$200	$74,642

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE VIRGINIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Alex Jct MD (JD) to Alexandria VA	$190,636,364	$9,227,273	$196,954,545	$0	$0	$0	$396,818,182
Alexandria VA to Pembroke NC	$98,761,152	$60,634,697	$10,477,576	$2,823,816	$3,967,879	$188,033	$176,853,152
Virginia Branch Lines (3)	$7,024,545	$11,463,030	$7,510,909	$300,691	$0	$1,842	$26,301,018
TOTAL LAND VALUE	**$296,422,061**	**$81,325,000**	**$214,943,030**	**$3,124,507**	**$3,967,879**	**$189,875**	**$599,972,352**
PERCENT OF TOTAL	***49.4%***	***13.6%***	***35.8%***	***0.5%***	***0.7%***	***0.0%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 35% of the total acreage in Virginia (see table on a previous page), accounts for only 0.5% of the total land value in the state. By contrast, residential land accounts for 49.4% of market value, but only 29% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of Virginia, the estimate of value for the land to support communication facilities is $5,098,159.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES VIRGINIA						
	Before Communications Facilities			Additional Needed for Communications Facilities		
Route Name	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Alex Jct MD (JD) to Alexandria VA	7.83	70.27	$5,646,831	0.31	0.62	$3,501,035
Alexandria VA to Pembroke NC	178.58	2,099.24	$84,246	7.14	14.28	$1,203,035
Virginia Branch Lines (3)	29.07	352.36	$74,642	1.16	2.32	$173,169
TOTAL STATE				**8.61**	**17.22**	**$4,877,239**
TOTAL STATE (Round Up for # of Towers)				**9.00**	**18.00**	**$5,098,159**

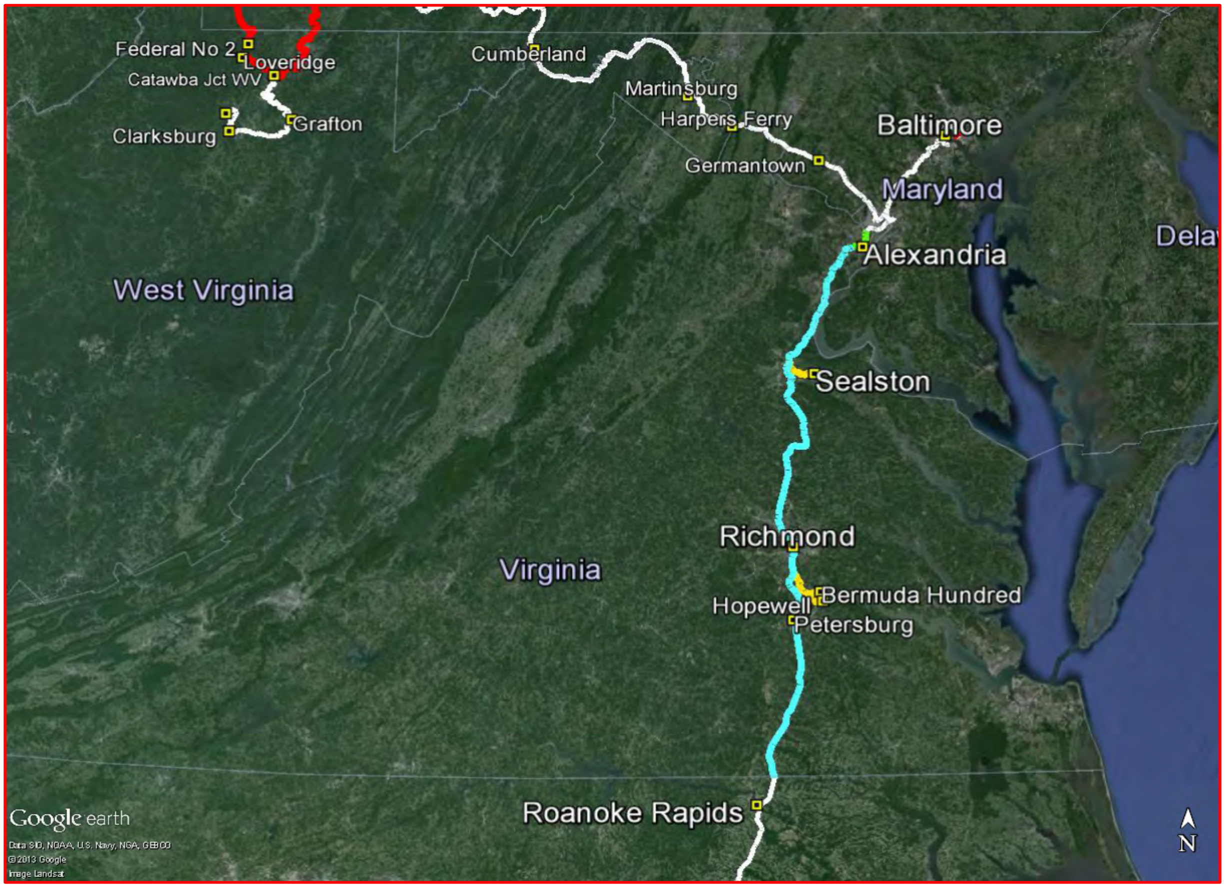
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of Virginia, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of Virginia. The total valuation of the 215.5 route miles, in the state of Virginia, as of July 1, 2010 is:

Six-Hundred Million Dollars

$600,000,000 (rounded)

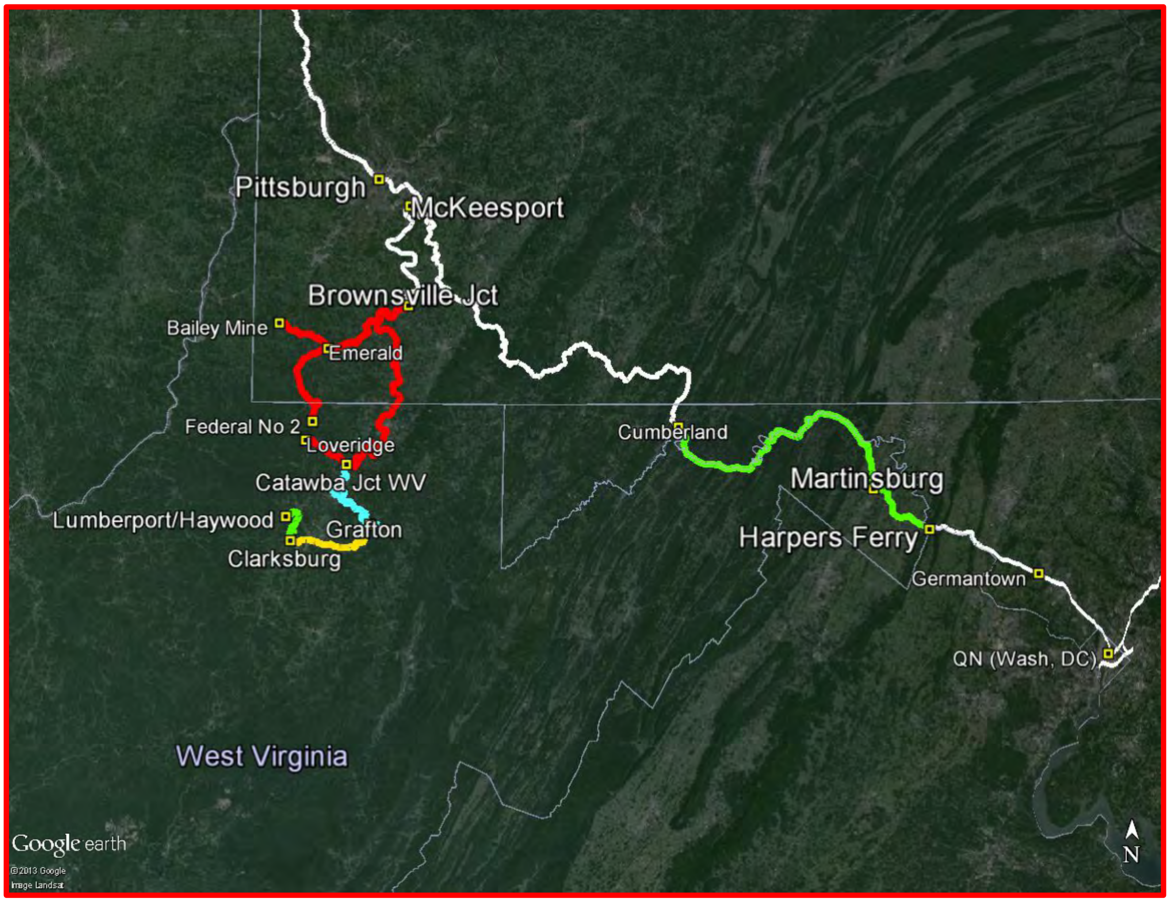
VIRGINIA



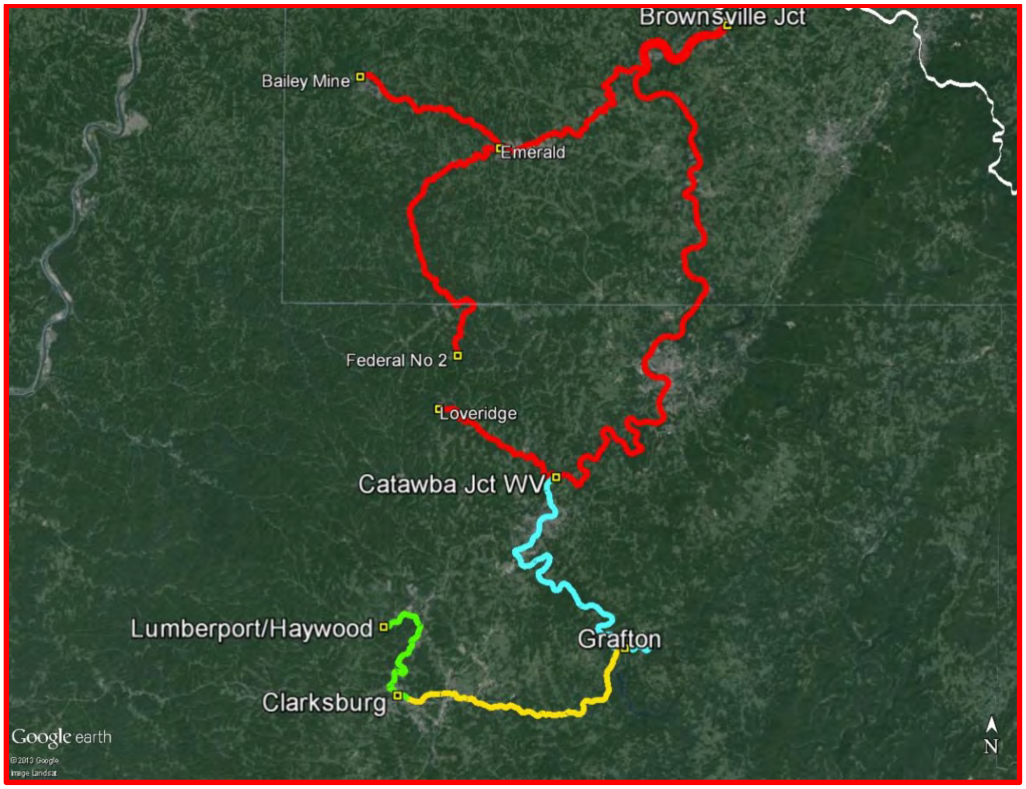
Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
(green)	**Alex Jct MD (JD) to Alexandria VA**	7.8	70.3	RESID	51%	COMM	34%	$5,646,831	$396,818,182
(cyan)	**Alexandria VA to Pembroke NC**	178.6	2,099.2	AGRIC	39%	RESID	27%	$84,246	$176,853,152
(orange)	**Virginia Branch Lines (3)**	29.1	352.4	RESID	34%	INDUS	32%	$74,642	$26,301,018
(red)	**Trackage Rights (Land NOT Valued)**								
	TOTALS FOR VIRGINIA	**215.5**	**2,521.9**	**AGRIC**	**35%**	**RESID**	**29%**	**$237,907**	**$599,972,352**
								(rounded)	**$600,000,000**

West Virginia

The length of the TPI SAR within West Virginia is 155.0 miles and consists of four routes, delineated as follows:



- Cumberland, MD to Germantown, MD: This 92.1-mile route in West Virginia (GREEN line on above map) is the central portion of this route, with the beginning and ending portions of the route located in Maryland. The 92.1-mile portion of the route in West Virginia begins just east of Cumberland, at the Maryland/West Virginia state line, where the route crosses the North Branch of the Potomac River. The route then continues along the Potomac River in West Virginia, passing through Martinsburg, and ending at Harpers Ferry, WV. The predominant land uses on this route are agricultural at 63% and restricted (steep slopes, wetlands, etc.) at 24%.



- Glassport, PA to Grafton, WV: This route (see map above) begins at the Pennsylvania/West Virginia state line and follows the Monongahela River south past Morgantown and Fairmont, ending in Grafton. Of the total 56.3 mile route, only 28.5 miles (BLUE line),from Catawba Junction, WV to Grafton, WV, are valued in this analysis. The remaining 27.8 miles (from the Pennsylvania/West Virginia state line to Catawba Junction, WV) are trackage rights over Norfolk Southern (RED lines), and are not valued in this analysis. This line is 51% rural town and 21% agricultural.

- Grafton, WV to Clarksburg, WV: This 22.1-mile route (GOLD line) runs east/west between Grafton and Clarksburg, through mostly rural areas. The predominant land uses on this route are agricultural at 60% and rural town at 40%.

- Clarksburg, WV to Lumberport/Haywood, WV: This 12.4-mile route (GREEN line) runs north from Clarksburg, WV and terminates in the

Lumberport/Haywood area. The predominant land uses on this route are agricultural at 38%, and rural town at 29%.

The 155.0 route miles in the state of West Virginia were divided into 90 line segments, with an overall average line segment length of 1.72 miles for the SAR right of way in the state of West Virginia:

AVERAGE LENGTH OF LINE SEGMENTS WEST VIRGINIA			
Route Name	**Total Miles**	**Number of Line Segments**	**Average Segment Length (Miles)**
Cumberland MD to Germantown MD	92.1	59	1.56
Glassport PA to Grafton WV	28.5	12	2.37
Grafton WV to Clarksburg WV	22.1	9	2.45
Clarksburg WV to Lumberport-Haywood	12.4	10	1.24
TOTAL STATE	**155.0**	**90**	**1.72**

The table below summarizes the land uses encountered “across the fence” from the hypothetical SAR right of way:

ACRES BY LAND USE TYPE WEST VIRGINIA							
Route Name	**Resid.**	**Indus.**	**Comm.**	**Agric.**	**Rural Twn**	**Restric.**	**Total**
Cumberland MD to Germantown MD	57.9	42.1	29.3	703.8	15.4	267.3	1,115.8
Glassport PA to Grafton WV	0.0	22.8	0.0	72.7	177.8	71.9	345.3
Grafton WV to Clarksburg WV	0.0	1.7	0.0	159.2	105.6	0.0	266.5
Clarksburg WV to Lumberport-Haywood	7.2	20.5	0.0	56.4	43.2	22.8	150.1
TOTAL ACRES	**65.0**	**87.1**	**29.3**	**992.1**	**342.1**	**362.1**	**1,877.7**
PERCENT OF TOTAL	***3%***	***5%***	***2%***	***53%***	***18%***	***19%***	
Acres in above table are based on land areas valued, excluding route over water of 1.21 acres.							

The acreage data in the above table reflects a 100-foot wide right-of-way in rural areas, or a 75-foot right-of-way in urban areas. The right-of-way is divided along the centerline and allocated on each side of the centerline to the “across the fence” land use on each side of the hypothetical SAR right-of-way.

The principal land use classification in West Virginia is agricultural at 53%, with restricted land uses (steep slopes, wetlands, etc.) accounting for another 19% of the adjacent land uses in West Virginia.

The market values applied to each line segment can be found in the valuation workbooks in Section III-F-1 in the submission to the Surface Transportation Board. The following table summarizes the results of our analysis, illustrating the average market value per acre calculated for each of the routes in West Virginia, by six land use categories:

AVERAGE VALUE PER ACRE (by Land Use Type) WEST VIRGINIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Cumberland MD to Germantown MD	$7,963	$86,354	$100,000	$3,917	$15,000	$200	$9,023
Glassport PA to Grafton WV		$32,016		$2,400	$10,000	$200	$7,815
Grafton WV to Clarksburg WV		$50,000		$2,400	$15,000		$7,697
Clarksburg WV to Lumberport-Haywood	$15,000	$50,000		$2,400	$15,000	$200	$12,793

The average values per acre shown above reflect the overall urban/rural composition of each route. Some of the routes are primarily rural in nature, some are primarily urban, and some routes are a combination of both.

Another way to categorize the land uses adjacent to the TPI SAR is the percent of total land value for each of the six major property types:

VALUE BY LAND USE TYPE WEST VIRGINIA							
Route Name	Resid.	Indus.	Comm.	Agric.	Rural Twn	Restric.	Total
Cumberland MD to Germantown MD	$460,909	$3,632,121	$2,933,333	$2,756,303	$230,909	$53,467	$10,067,042
Glassport PA to Grafton WV	$0	$731,515	$0	$174,545	$1,778,182	$14,388	$2,698,630
Grafton WV to Clarksburg WV	$0	$84,848	$0	$382,109	$1,584,545	$0	$2,051,503
Clarksburg WV to Lumberport-Haywood	$107,273	$1,024,242	$0	$135,418	$648,182	$4,558	$1,919,673
TOTAL LAND VALUE	**$568,182**	**$5,472,727**	**$2,933,333**	**$3,448,376**	**$4,241,818**	**$72,412**	**$16,736,848**
PERCENT OF TOTAL	***3.4%***	***32.7%***	***17.5%***	***20.6%***	***25.3%***	***0.4%***	***100.0%***

In general, residential, industrial and commercial land tends to have market values per acre that are higher than the other three land use categories. For example, notice that agricultural land, which accounts for 53% of the total acreage in West Virginia (see table on a previous page), accounts for only 20.6% of the total land value in the state. By contrast, industrial land accounts for 32.7% of market value, but only 5% of the acreage.

Additional land to support communication towers is required approximately every 25 miles, and each tower requires approximately 2.0 acres of land. In the table below, the number of acres needed to support communication towers for each route is calculated, based on the average value per acre for that route. The acres required and the estimated land value for communication facilities is summarized at the state level, and is then rounded up to the nearest whole number of towers and acres. For the TPI Stand Alone Railroad in the state of West Virginia, the estimate of value for the land to support communication facilities is $124,828.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES
WEST VIRGINIA

Route Name	Before Communications Facilities			Additional Needed for Communications Facilities		
	Miles	Acres	Avg $/Acre	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
Cumberland MD to Germantown MD	92.05	1,115.76	$9,023	3.68	7.36	$66,406
Glassport PA to Grafton WV	28.49	345.33	$7,815	1.14	2.28	$17,817
Grafton WV to Clarksburg WV	22.09	266.55	$7,697	0.88	1.76	$13,546
Clarksburg WV to Lumberport-Haywood	12.38	150.06	$12,793	0.50	1.00	$12,793
TOTAL STATE				**6.20**	**12.40**	**$110,562**
TOTAL STATE (Round Up for # of Towers)				**7.00**	**14.00**	**$124,828**

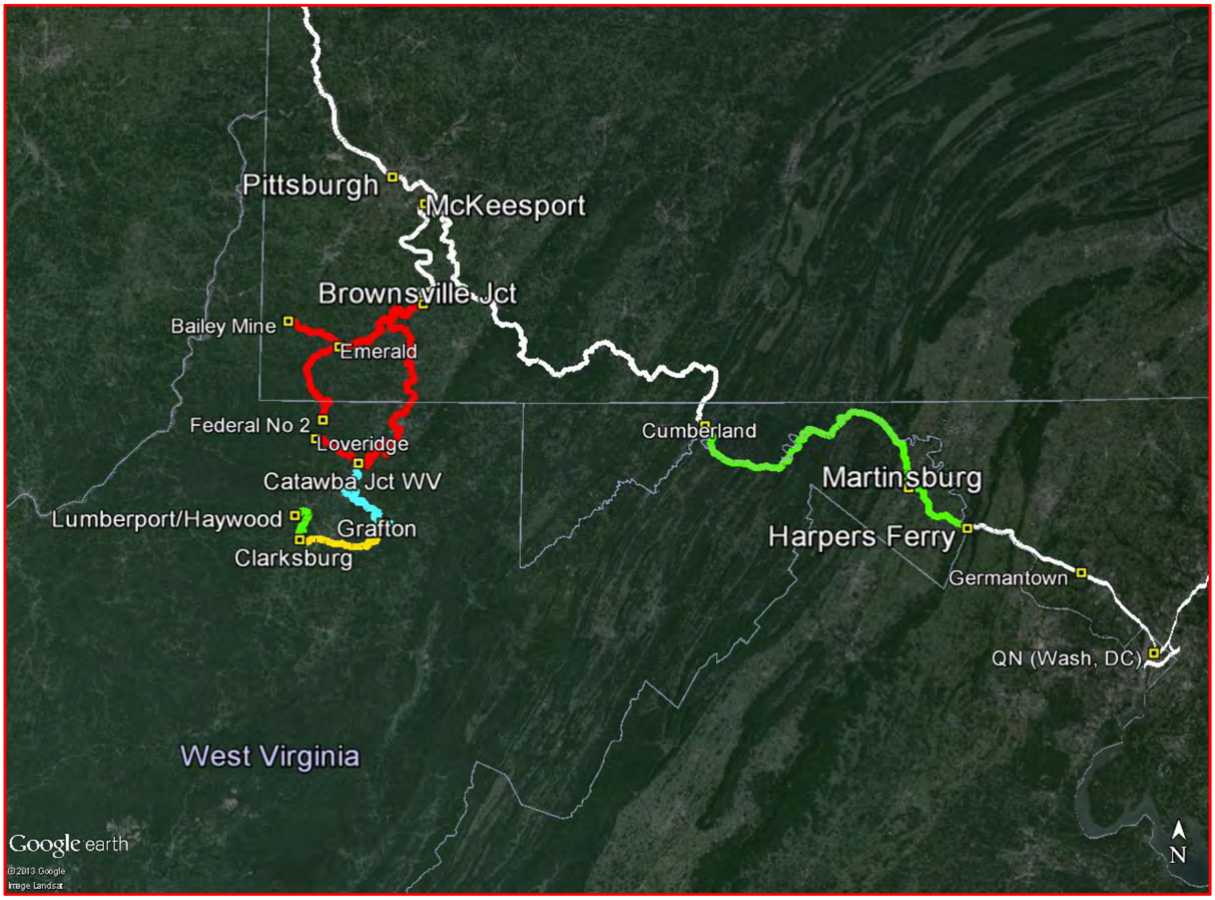
This additional land value needed to support communication facilities is not included in the overall estimate of land value for the TPI Stand Alone Railroad in the state of West Virginia, as shown on the next page. Rather, the additional amount of land value needed to support communication facilities will be added to the overall estimate of land value in a later section of this report.

On the following page is a summary of the valuation of the TPI SAR routes in the state of West Virginia. The total valuation of the 155.0 route miles, in the state of West Virginia, as of July 1, 2010 is:

Sixteen Million, Seven-Hundred Thousand Dollars

$16,700,000 (rounded)

WEST VIRGINIA



Color Code	Route Name	Route Miles	Total Acres	Percent of Total Acres				Avg. Value per Acre	Total Value for Route
				Most Prominent		Second Most			
	Cumberland MD to Germantown MD	92.1	1,115.8	AGRIC	63%	RES (X)	24%	$9,023	$10,067,042
	Glassport PA to Grafton WV	28.5	345.3	R-TOWN	51%	AGRIC	21%	$7,815	$2,698,630
	Grafton WV to Clarksburg WV	22.1	266.5	AGRIC	60%	R-TOWN	40%	$7,697	$2,051,503
	Clarksburg WV to Lumberport-Haywood	12.4	150.1	AGRIC	38%	R-TOWN	29%	$12,793	$1,919,673
	Trackage Rights (Land NOT Valued)								
	TOTALS FOR WEST VIRGINIA	**155.0**	**1,877.7**	**AGRIC**	**53%**	**RES (X)**	**19%**	**$8,913**	**$16,736,848**
								(rounded)	**$16,700,000**

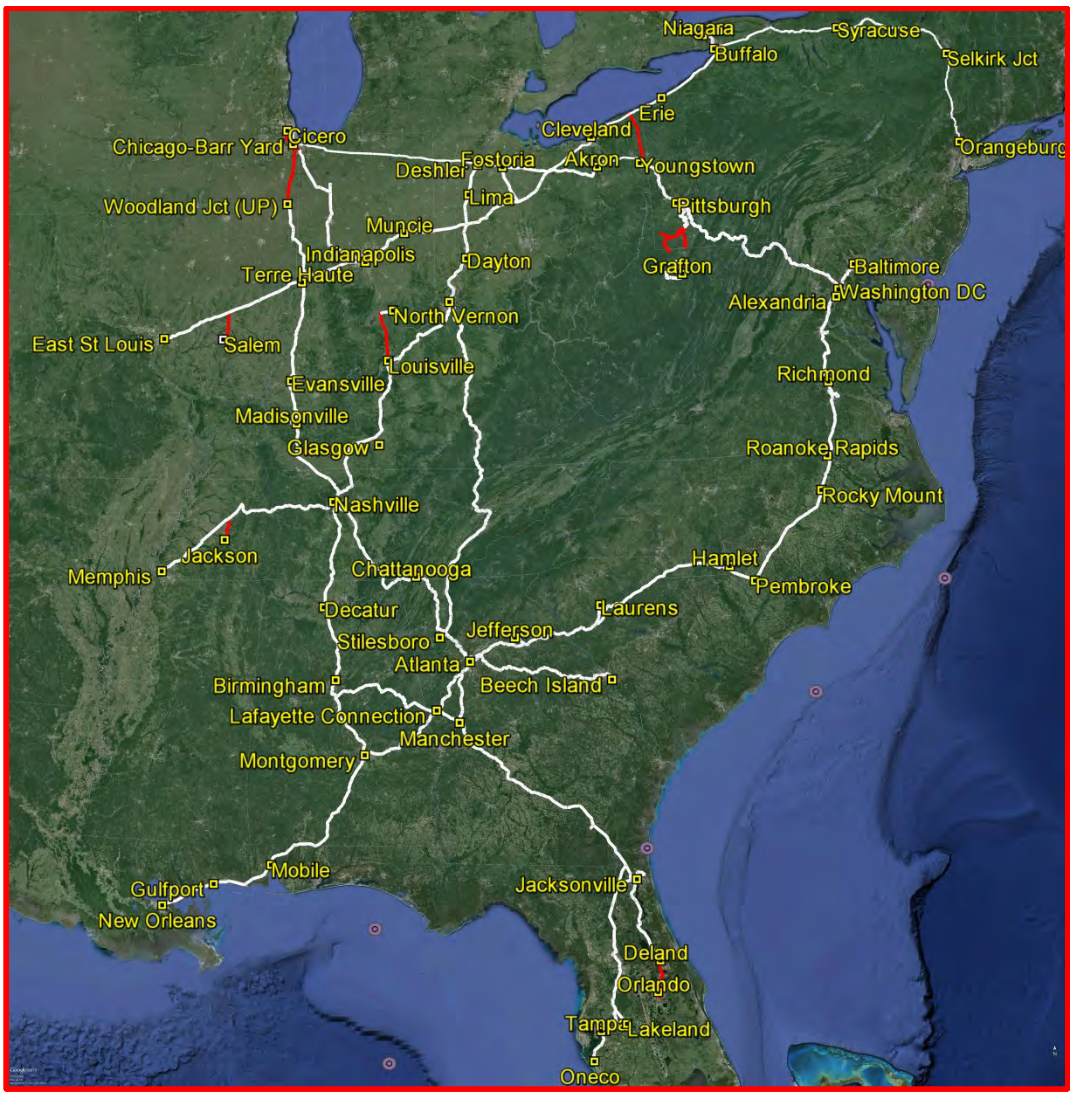
Summary of Fee Simple Land Valuation Before Adjustments

On the following page is a summary of the valuation of the TPI Stand Alone Railroad (SAR), before adjustments. The total valuation of the 6,871.0 route miles in 17 states, plus the District of Columbia, as of July 1, 2010 is:

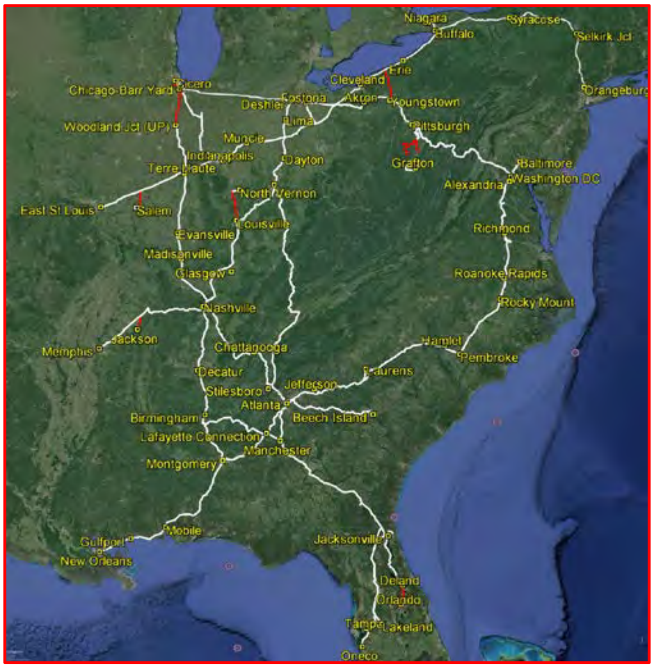
Three-Billion, Four-Hundred Sixty-Five Million, Three-Hundred Thousand Dollars

$3,465,300,000 (rounded)

In the next section of this report, the above estimate of value will have four adjustments applied to the valuation, to produce the final estimate of net land valuation for the TPI SAR.



TPI STAND ALONE RAILROAD (SAR)



State Name	Route Miles	Total Acres	Percent of Total Acres: Most Prominent		Percent of Total Acres: Second Most		Avg. Value per Acre	Estimate of Value as of July 1, 2010
ALABAMA	635.5	7,544.1	AGRIC	60%	INDUS	11%	$14,329	**$108,100,000**
DISTRICT OF COLUMBIA	14.7	127.3	RESID	41%	INDUS	38%	$4,886,357	**$621,900,000**
FLORIDA	479.9	5,526.2	AGRIC	57%	RESID	17%	$47,573	**$262,900,000**
GEORGIA	929.2	11,156.4	AGRIC	51%	RESID	23%	$54,829	**$611,700,000**
ILLINOIS	230.3	2,700.0	AGRIC	71%	R-TOWN	14%	$37,481	**$101,200,000**
INDIANA	693.0	8,212.0	AGRIC	63%	RESID	12%	$19,313	**$158,600,000**
KENTUCKY	593.6	7,094.7	AGRIC	70%	RESID	11%	$14,687	**$104,200,000**
LOUISIANA	34.9	376.8	RES (X)	75%	INDUS	13%	$31,580	**$11,900,000**
MARYLAND	107.3	1,209.3	INDUS	36%	RESID	26%	$204,834	**$247,700,000**
MISSISSIPPI	74.3	736.2	RES (X)	47%	RESID	21%	$35,858	**$26,400,000**
NEW YORK	517.6	6,118.4	AGRIC	53%	INDUS	18%	$14,415	**$88,200,000**
NORTH CAROLINA	280.6	3,398.4	AGRIC	56%	INDUS	15%	$22,216	**$75,500,000**
OHIO	716.3	8,549.1	AGRIC	59%	INDUS	19%	$18,903	**$161,600,000**
PENNSYLVANIA	282.5	3,277.4	RES (X)	40%	AGRIC	26%	$14,432	**$47,300,000**
SOUTH CAROLINA	162.9	1,971.2	AGRIC	81%	RESID	8%	$8,726	**$17,200,000**
TENNESSEE	748.1	8,806.4	AGRIC	58%	RESID	17%	$23,188	**$204,200,000**
VIRGINIA	215.5	2,521.9	AGRIC	35%	RESID	29%	$237,918	**$600,000,000**
WEST VIRGINIA	155.0	1,877.7	AGRIC	53%	RES (X)	19%	$8,894	**$16,700,000**
GRAND TOTAL: TPI SAR	**6,871.0**	**81,203.5**	**AGRIC**	**56%**	**RESID**	**14%**	**$42,674**	**$3,465,300,000**

ADJUSTMENTS TO LAND VALUATION

Adjustment: System Mileage Variation

This analysis produced an estimate of system mileage for the TPI SAR of 6,871.0 miles. This mileage estimate was produced by plotting each of the 4,642 valuation line segments on Google Earth Pro, and measuring the length of each valuation segment using the Google Earth Pro measurement tools.

The client, L.E. Peabody & Associates, has produced the official estimate of the system mileage for the TPI SAR as 6,865.94 miles. These are the "construction miles" for the TPI SAR, which excludes any existing trackage rights agreements being utilized by the TPI SAR. The estimate of system mileage, and the estimate of land value produced in this report also exclude this trackage rights mileage.

Comparing the official system mileage produced by L. E. Peabody & Associates with the estimate of system mileage produced using Google Earth Pro measurement tools in this report, indicates a variation of 5.06 miles, or a percentage variation of 0.074%:

6,871.00	System mileage estimate - this analysis
6,865.94	System mileage estimate - L.E. Peabody
5.06	Difference in mileage estimates
.00074	Indicated adjustment factor

This small difference in estimated system mileage is probably caused by de minimis cumulative errors in physically plotting the valuation segments along the railroad right-of-way as displayed on Google Earth Pro. The variation is not significant to the analysis.

To match the estimate of system mileage, and the resulting estimate of acreage and land valuation, to the L. E. Peabody official estimate of system mileage, the above factor of .00074 was applied to the estimates produced in this valuation. The table below summarizes the adjustment:

ADJUSTMENTS TO VALUATION

TPI STAND ALONE RAILROAD (SAR)

Component of Valuation	Total Miles	Total Acres	Avg. Value per Acre	Estimate of Value as of July 1, 2010
TPI Stand Alone Railroad - Fee Simple Land Value	6,871.00	81,203.5	$42,674	$3,465,300,000
Less: Adjustment for System Mileage Variation	(5.06)	(59.8)	$42,674	($2,600,000)
TPI SAR - Fee Simple Land Value (Adjusted for Mileage Variation)	6,865.94	81,143.7	$42,674	$3,462,700,000

Adjustment: Land for Communications Facilities

In addition to the land required for slopes, drainage, tracks, signals and access roads (which is provided by the basic 75-foot/100-foot right-of-way width assumed in this analysis), additional land to support communications towers is required approximately every 25 miles, with each communications tower requiring approximately 2.0 acres of land. In the previous valuation sections of this report by state, the number of acres needed to support communications towers for each route was calculated, and the value of the land to support these communication towers was calculated based on the average value per acre for that route. The table on the next page summarizes these calculations for the TPI SAR.

ADDITIONAL LAND AREA REQUIRED FOR COMMUNICATIONS FACILITIES TPI STAND ALONE RAILROAD (SAR)			
Route Name	Towers @ 1 per 25 miles	Acres @ 2 Acres/Tower	Land Value at Avg $/Acre
ALABAMA	26.0	52.0	$814,529
DISTRICT OF COLUMBIA	1.0	2.0	$10,002,676
FLORIDA	20.0	40.0	$1,981,622
GEORGIA	38.0	76.0	$4,300,127
ILLINOIS	10.0	20.0	$928,146
INDIANA	28.0	56.0	$1,162,583
KENTUCKY	24.0	48.0	$764,004
LOUISIANA	2.0	4.0	$126,581
MARYLAND	5.0	10.0	$2,128,658
MISSISSIPPI	3.0	6.0	$215,180
NEW YORK	21.0	42.0	$628,340
NORTH CAROLINA	12.0	24.0	$533,269
OHIO	29.0	58.0	$1,124,212
PENNSYLVANIA	12.0	24.0	$380,632
SOUTH CAROLINA	7.0	14.0	$121,746
TENNESSEE	30.0	60.0	$1,438,758
VIRGINIA	9.0	18.0	$5,098,159
WEST VIRGINIA	7.0	14.0	$124,828
GRAND TOTAL: TPI SAR	**284.0**	**568.0**	**$31,874,050**

The total estimate of land value required to support the communications facilities is estimated at $31,900,000 (rounded).

This adjustment for land to support communications facilities will be applied in the final section of this report.

Adjustment: Land for Yards/Other Support Facilities

A functional railroad network requires yard facilities at specific locations. These yard facilities not only provide classification (sorting) functions for freight cars moving to different destinations, but the yard facilities also include other necessary support functions, such as car and locomotive inspection and repair, locomotive fueling facilities, etc.

The client, L. E. Peabody & Associates, provided the appraisers with a list of 142 yard locations for the TPI Stand Alone Railroad (SAR). For each yard facility, L. E. Peabody and Associates provided an estimate of land acreage required to support the yard, as well as the milepost location of each yard facility.

In this analysis, each yard facility was defined in terms of the valuation line segments used in this analysis, and a weighted average land value per acre was produced, based on the relative length of each valuation line segment along the yard's entire length. This weighted average value per acre for the yard was then applied to the total acreage required for each yard facility, producing an estimate of the total land value required for that yard.

Category	Number of Yards	Total Acres	Average Value per Acre	Land Value for Yards
Major Yards	12	2,116.81	$97,231	$205,820,453
Other Yards	68	2,503.10	$107,142	$268,187,079
Intermodal	19	1,663.90	$173,640	$288,919,533
Automotive	20	999.00	$137,915	$137,777,000
Bulk Transfer	23	46.00	$95,515	$4,393,700
Total	**142**	**7,328.81**	**$123,499**	**$905,097,764**

The table above summarizes the estimate of value for the land supporting the 142 TPI SAR yards. The total land value required for yard facilities is estimated at $905,100,000 (rounded). This adjustment for land for yards and other support facilities for the TPI SAR will be applied in the final section of this report. An exhibit showing each yard facility and its supporting land value is shown on the next five pages:

Land Values for TPI SAR Yard Facilities

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
A. MAJOR YARDS					
Chicago	IL	Barr	130.98	$190,911	$25,006,411
Willard	OH	Willard East and West	206.70	$3,900	$806,148
Selkirk	NY	Selkirk	196.97	$1,300	$256,061
Cumberland	MD	Cumberland	131.89	$56,898	$7,504,241
Indianapolis	IN	Avon	184.96	$80,833	$14,950,933
Cincinnati	OH	Queensgate	202.54	$100,000	$20,253,788
Louisville	KY	Osborn	165.98	$140,000	$23,237,879
Nashville	TN	Radnor	281.70	$80,991	$22,815,460
Birmingham	AL	Boyles	114.20	$113,809	$12,996,932
Atlanta	GA	Tilford	149.32	$450,000	$67,194,000
Hamlet	NC	Hamlet	158.83	$27,490	$4,366,237
Waycross	GA	Rice	192.73	$33,375	$6,432,364
SUBTOTAL: MAJOR YARDS:			**2,116.81**		**$205,820,453**
B. OTHER YARDS					
Chicago	IL	59th Street	48.30	$314,154	$15,172,203
Garrett	IN	Garrett	26.78	$5,818	$155,813
Deshler	OH	Deshler	17.12	$4,726	$80,902
Buffalo	NY	Frontier	101.70	$67,913	$6,907,065
Rochester	NY	Rochester	21.59	$45,000	$971,550
Syracuse	NY	DeWitt	53.71	$17,306	$929,479
Demmler	PA	Demmler	52.69	$8,398	$442,470
Connellsville	PA	Connellsville	65.30	$15,375	$1,003,988
Brunswick	MD	Brunswick	68.94	$24,941	$1,719,427
East St. Louis	IL	Rose Lake	45.87	$38,500	$1,765,995
South Anderson	IN	South Anderson	15.61	$31,968	$498,902
Atkinson	KY	Atkinson	81.02	$40,000	$3,240,800
Lima	OH	Lima	27.35	$33,030	$903,379
Worthville	KY	Worthville	12.61	$6,400	$80,704
Baltimore	MD	Bay View	31.21	$170,000	$5,306,061
Baltimore	MD	Mount Winans	19.09	$232,128	$4,431,537
Benning	DC	Benning	37.88	$2,260,227	$85,617,409
Richmond	VA	Acca	80.91	$86,362	$6,987,532
Collier	VA	Collier	30.27	$12,956	$392,165
Rocky Mount	NC	Rocky Mount	75.57	$70,545	$5,331,120

Land Values for TPI SAR Yard Facilities

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
Pembroke	NC	Pembroke	22.50	$2,818	$63,405
Memphis	TN	Leewood	19.73	$90,000	$1,776,136
Memphis	TN	Sargent	5.68	$90,000	$511,200
Montgomery	AL	S & N	73.52	$37,550	$2,760,778
Mobile	AL	Siebert	50.98	$70,000	$3,568,939
New Orleans	LA	Gentilly	58.79	$105,000	$6,172,727
Widows Creek	TN	Widows Creek	14.24	$3,000	$42,720
Atlanta	GA	Hulsey	56.25	$652,500	$36,703,125
Greenwood	SC	Maxwell	74.92	$8,947	$670,377
Jacksonville	FL	Moncrief	98.75	$152,613	$15,070,540
Baldwin	FL	Baldwin	35.61	$3,186	$113,448
Orlando / Taft	FL	Taft	45.19	$156,206	$7,058,930
Tampa	FL	Yoeman	59.09	$136,024	$8,037,647
Rockport	FL	Rockport	10.42	$136,683	$1,424,242
Lafayette	IN	Lafayette	24.20	$53,295	$1,289,747
Corbin	KY	Corbin	62.77	$33,582	$2,107,946
Orangeburg	NY	Orangeburg	16.78	$154,452	$2,591,711
Newell	PA	Newell	79.62	$4,287	$341,326
Augusta	GA	Augusta	39.85	$30,776	$1,226,377
Indianapolis	IN	Hawthorne	10.30	$93,875	$966,913
Winston	FL	Winston	25.98	$3,000	$77,940
Busch	FL	Busch	31.63	$173,974	$5,502,788
Wauhatchie 13/	TN	Wauhatchie	30.19	$33,500	$1,011,365
CRESTLINE/GALLION	OH	CRESTLINE	49.77	$4,740	$235,923
CLEVELAND	OH	CLEVELAND-COLLINWOOD	49.81	$100,000	$4,981,061
MARION	OH	MARION YARD	5.57	$23,775	$132,384
EVANSVILLE	IN	Howell	52.80	$11,737	$619,760
CHICAGO	IL	CICERO	14.62	$351,423	$5,138,231
BIRMINGHAM	AL	ALICE	52.20	$97,872	$5,108,640
FOSTORIA	OH	FOSTORIA	30.19	$4,138	$124,933
ASHTABULA	OH	ASHTABULA	23.41	$8,571	$200,634
NEW CASTLE	PA	NEW CASTLE	46.17	$17,625	$813,821
RIDGEWAY	OH	RIDGEWAY	17.46	$4,854	$84,766
Danville	IL	Brewer	14.28	$10,000	$142,803
Terre Haute	IN	Terre Haute	22.46	$5,740	$128,941
Vincennes	IN	Vincennes	25.91	$36,724	$951,489

Land Values for TPI SAR Yard Facilities

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
Nashville	TN	KAYNE AVE.	18.07	$108,820	$1,966,180
Dayton	OH	DAYTON	14.02	$88,969	$1,246,921
Bruceton	TN	BRUCETON	18.48	$4,181	$77,286
Flomaton	AL	FLOMATON	12.95	$10,000	$129,545
Monroe	NC	MONROE	17.92	$100,000	$1,791,667
Manchester	GA	MANCHESTER	34.13	$16,967	$579,078
Fitzgerald	GA	FITZGERALD	31.44	$7,875	$247,585
Wildwood	FL	WILDWOOD	27.27	$6,655	$181,500
Union	OH	UNION	7.01	$3,500	$24,527
Etowah	TN	ETOWAH	25.00	$68,902	$1,722,554
Lockport	NY	LOCKPORT	15.53	$28,617	$444,431
Grafton	WV	GRAFTON	16.10	$5,193	$83,592

SUBTOTAL: OTHER YARDS **2,503.10** **$268,187,079**

C. INTERMODAL TERMINALS

Chicago - 59th Street	IL	Chicago - 59th Street IM	132.0	$298,221	$39,365,153
Chicago - Bedford Park	IL	Chicago - Bedford Park IM	255.0	$220,000	$56,100,000
Cleveland	OH	Cleveland IM	75.0	$100,000	$7,500,000
Buffalo	NY	Buffalo IM	57.0	$42,584	$2,427,305
Syracuse	NY	Syracuse IM	18.0	$18,503	$333,055
East St. Louis	IL	East St. Louis IM	105.0	$38,500	$4,042,500
Indianapolis	IN	Indianapolis IM	25.0	$75,000	$1,875,000
Evansville	IN	Evansville IM	17.2	$12,250	$210,700
Cincinnati	OH	Cincinnati IM	36.0	$100,000	$3,600,000
Memphis	TN	Memphis IM (CN Facility)	40.0		$0
Nashville	TN	Nashville IM	66.6	$117,969	$7,856,719
Mobile	AL	Mobile IM	7.3	$70,000	$511,000
New Orleans	LA	New Orleans IM	110.4	$105,000	$11,592,000
Atlanta - Fairburn	GA	Atlanta - Fairburn IM	160.0	$268,813	$43,010,101
Atlanta - Hulsey	GA	Atlanta - Hulsey IM	61.6	$625,000	$38,500,000
Jacksonville	FL	Jacksonville IM	224.0	$200,000	$44,800,000
Orlando	FL	Orlando IM	157.0	$130,000	$20,410,000
Tampa	FL	Tampa IM	46.8	$145,000	$6,786,000
Baltimore	MD	Baltimore IM (MD Port Authority)	70.0		$0

Land Values for TPI SAR Yard Facilities

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
SUBTOTAL: INTERMODAL TERMINALS			**1,663.90**		**$288,919,533**

D. AUTOMOTIVE TERMINALS

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
Birmingham	AL	Birmingham Auto	25.0	$75,000	$1,875,000
Jacksonville / Blount Island	FL	Blount Island Auto	350.0	$200,000	$70,000,000
Orlando	FL	Orlando Auto	49.0	$130,000	$6,370,000
Lawrenceville	GA	Lawrenceville (Atlanta) Auto	50.0	$250,000	$12,500,000
West Point	GA	West Point Auto (KIA owned)	0.0		$0
Bowling Green	KY	Bowling Green Auto (GM owned)	0.0		$0
Louisville	KY	Louisville Strawberry Yard Auto	11.0	$140,000	$1,540,000
Louisville	KY	Louisville Auto (Ford)	34.0	$140,000	$4,760,000
O'Bannon	KY	O'Bannon Auto (Ford)	28.0	$107,500	$3,010,000
Baltimore	MD	Fairfield/Seawall Auto Facility	5.0	$170,000	$850,000
Baltimore	MD	Curtis Bay Amports Auto Facility	55.0	$170,000	$9,350,000
Jessup	MD	Annapolis Junction Auto Facility	125.0	$150,000	$18,750,000
Selkirk	NY	Selkirk Auto Facility	65.0	$1,300	$84,500
Cincinnati	OH	Cementdale Auto Facility	10.0	$50,000	$500,000
Warren	OH	Lordstown Auto Facility	33.0	$20,000	$660,000
Marion	OH	Marion Auto Facility	91.0	$22,500	$2,047,500
Nashville	TN	Nashville Auto Facility (North)	35.0	$100,000	$3,500,000
Nashville	TN	Nashville Auto Facility (South)	incl. above		$0
Smyrna	TN	Smyrna Auto Facility	33.0	$60,000	$1,980,000
Memphis	TN	Memphis Auto Facility (BNSF owned)	0.0		$0

SUBTOTAL: AUTOMOTIVE TERMINALS **999.00** **$137,777,000**

E. BULK TRANSFER TERMINALS

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
Atlanta	GA	Atlanta Transflo	2.0	$250,000	$500,000
Augusta	GA	Augusta Transflo	2.0	$50,000	$100,000
Birmingham	AL	Birmingham Transflo	2.0	$115,000	$230,000
Buffalo	NY	Buffalo Transflo	2.0	$55,000	$110,000
Chattanooga	TN	Chattanooga Transflo	2.0	$100,000	$200,000
Cincinnati	OH	Cincinnati Transflo	2.0	$100,000	$200,000
Clarksburg	WV	Clarksburg Transflo	2.0	$50,000	$100,000
Cleveland	OH	Cleveland East Transflo	2.0	$100,000	$200,000
Dalton	GA	Dalton Transflo	2.0	$50,000	$100,000

Land Values for TPI SAR Yard Facilities

City	State	TPIRR Yard Name	Acres	Avg. Value per Acre	Total Land Value
East Chicago	IN	East Chicago Transflo	2.0	$62,750	$125,500
Evansville	IN	Evansville Transflo	2.0	$60,000	$120,000
Fairmont	WV	Fairmont Transflo	2.0	$10,000	$20,000
Indianapolis	IN	Indianapolis Transflo	2.0	$100,000	$200,000
Jacksonville	FL	Jacksonville Transflo	2.0	$200,000	$400,000
Knoxville	TN	Knoxville Transflo	2.0	$150,000	$300,000
Louisville	KY	Louisville Transflo	2.0	$140,000	$280,000
Nashville	TN	Nashville Transflo	2.0	$100,000	$200,000
New Orleans	LA	New Orleans Transflo	2.0	$105,000	$210,000
Petersburg	VA	Petersburg Transflo	2.0	$16,600	$33,200
Richmond	VA	Richmond Transflo	2.0	$70,000	$140,000
Sanford	FL	Sanford Transflo	2.0	$130,000	$260,000
Syracuse	NY	Syracuse Transflo	2.0	$37,500	$75,000
Tampa	FL	Tampa Transflo	2.0	$145,000	$290,000

SUBTOTAL: BULK TRANSFER TERMINALS	**46.00**	**$4,393,700**
GRAND TOTAL: ALL YARDS	**7,328.81**	**$905,097,764**

Adjustment: Remove Land Value for Easement Areas

The TPI Stand Alone Railroad (SAR) is able to utilize existing easement agreements or other land use agreements that allow the existing railroad (in this case, CSX Transportation) to occupy certain land areas by paying fees to the land owner. Where these land use/easement agreements exist, the TPI SAR will not need to acquire land to support the SAR. An adjustment is required to our estimate of value to remove the land area covered by existing land use/easement agreements.

The client, L. E. Peabody & Associates, provided the appraisers with a description of each of the existing land use agreements, defining each land use agreement in terms of the railroad mileposts involved, and the land acreage involved with each agreement. The land acreage involved with each land use agreement is adjusted to reflect a maximum acreage based on the 75 foot/100 foot right-of-way widths utilized in this analysis.

The fee simple land valuation produced in this analysis must be removed from the valuation for each of the land use agreement areas. In total, the TPI SAR includes over 2,300 existing land use agreements, totaling 8,113.1 acres of land.

To remove the fee simple land value, each land use agreement was assigned, based on its location, to one of the 101 routes included in this analysis. Then, the weighted average value per acre for the route was applied to the total acreage involved in each land use agreement, producing an estimate of the total fee simple land value that must be removed for that land use agreement area.

The exhibit on the next page summarizes the fee simple land values to be removed for each of the 17 states, plus the District of Columbia.

Easement / Land Use Agreements

Fee Simple Land Values for Easement Areas

State	Total Fee Simple Land Valuation	Fee Simple Land Values for Easement Areas	Easement Values: % of Total
Alabama	$108,100,000	$8,844,331	8.2%
District of Columbia	$621,900,000	$76,767,295	12.3%
Florida	$262,900,000	$15,494,573	5.9%
Georgia	$611,700,000	$232,463,557	38.0%
Illinois	$101,200,000	$9,742,630	9.6%
Indiana	$158,600,000	$12,481,839	7.9%
Kentucky	$104,200,000	$5,111,203	4.9%
Louisiana	$11,900,000	$165,255	1.4%
Maryland	$247,700,000	$28,515,341	11.5%
Mississippi	$26,400,000	$166,843	0.6%
New York	$88,200,000	$423,558	0.5%
North Carolina	$75,500,000	$24,408,599	32.3%
Ohio	$161,600,000	$3,447,927	2.1%
Pennsylvania	$47,300,000	$1,672,197	3.5%
South Carolina	$17,200,000	$11,997,842	69.8%
Tennessee	$204,200,000	$6,971,140	3.4%
Virginia	$600,000,000	$4,477,513	0.7%
West Virginia	$16,700,000	$262,545	1.6%
TOTAL TPI SAR	**$3,465,300,000**	**$443,414,188**	**12.8%**

The total estimate of land value to be deducted for the existing easement/land use agreements is $443,400,000 (rounded).

This adjustment for removing the fee simple land value for the existing land use agreements for the TPI SAR will be applied in the final section of this report.

Summary of Net Land Valuation for TPI SAR

The table below summarizes the adjustments made to the estimate of land value produced in this analysis:

ADJUSTMENTS TO VALUATION TPI STAND ALONE RAILROAD (SAR)				
Component of Valuation	Total Miles	Total Acres	Avg. Value per Acre	Estimate of Value as of July 1, 2010
TPI Stand Alone Railroad - Fee Simple Land Value	6,871.00	81,203.5	$42,674	$3,465,300,000
Less: Adjustment for System Mileage Variation	(5.06)	(59.8)	$42,674	($2,600,000)
TPI SAR - Fee Simple Land Value (Adjusted for Mileage Variation)	6,865.94	81,143.7	$42,674	$3,462,700,000
Plus: Land for Communications Facilities	--	568.0	$56,162	$31,900,000
Plus: Land for Yards & Other Support Facilities	--	7,328.8	$123,499	$905,100,000
Less: Fee Simple Land Value for Easement Areas	--	(8,113.1)	$54,652	$ (443,400,000)
Net Land Valuation for TPI Stand Alone Railroad	**6,865.9**	**80,927.4**	**$48,887**	**$3,956,300,000**
Net Land Valuation for TPI Stand Alone Railroad (rounded)				**$3,960,000,000**

The total valuation of the 6,865.9 route miles in 17 states, plus the District of Columbia, for the TPI Stand Alone Railroad, as of July 1, 2010 is:

Three-Billion, Nine-Hundred Sixty Million Dollars

$3,960,000,000 (rounded)

This opinion of value is subject to all general and specific assumptions and conditions contained within the report, including the hypothetical condition and extraordinary assumptions[8] as set forth herein. Please note that the conclusions reached were based on the information as set forth herein, and are specifically and generally limited by the assumptions and conditions set forth within the report and subject to the certification attached hereto. The assumptions and conditions set forth throughout the report are an integral part of this analysis and have a bearing on the conclusions reached herein.

[8] An “Extraordinary Assumption” is defined by the Uniform Standards of Professional Appraisal Practice as “an assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser’s opinions or conclusions.”; USPAP 2014-2015 Edition, page U-3, The Appraisal Foundation.

See Section III-F-1 of the Work Files for:

- **101 Route Valuation workbooks (segmented by state)**
- **Workbooks for sales used in analysis**
- **Land valuation workbook for Yards/Support Facilities**
- **Land valuation workbook for areas covered by Land Use/Easement Agreements**
- **Photographs taken during physical inspections**

TABLE A: TPIRR ANNUAL COST OF CAPITAL

Year	Industry Cost of Capital	Industry Cost of Debt 1/	Industry Cost of Preferred Equity 2/	Industry Cost of Equity 3/	TPIRR's Cost of Debt	TPIRR's Cost of Preferred Equity	TPIRR's Cost of Equity	Debt as a Percent of Total Investment	Preferred Equity as a Percent of Total Investment	Equity as a Percent of Total Investment	Composite Cost of Capital	1 + Cost of Capital	STB Prescribed Debt as a % of Capital 4/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2008	11.75%	6.57%	0.00%	13.17%	6.57%	0.00%	13.17%	21.54%	0.00%	78.46%	11.75%	1.1175	21.54%
2009	10.43%	5.72%	0.00%	12.37%	5.72%	0.00%	12.37%	29.10%	0.00%	70.90%	10.43%	1.1043	29.10%
2010	11.03%	4.61%	0.00%	12.99%	4.61%	0.00%	12.99%	23.38%	0.00%	76.62%	11.03%	1.1103	23.38%
2011	11.10%	3.97%	0.00%	13.57%	5.79%	0.00%	13.57%	25.77%	0.00%	74.23%	11.57%	1.1157	20.83%
2012	10.80%	3.29%	0.00%	13.40%	5.79%	0.00%	13.40%	25.77%	0.00%	74.23%	11.44%	1.1144	22.56%
2013					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2014					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2015					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2016					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2017					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2018					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2019					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	
2020					5.79%	0.00%	13.10%	25.77%	0.00%	74.23%	11.22%	1.1122	

1/ Cost of railroad industry debt from the STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided September 30, 2010 and the STB Decision in Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital - 2010, decided September 30, 2011.

2/ No preferred equity was issued in 2008 - 2010.

3/ Cost of railroad industry common equity from the STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided September 30, 2010 and the STB Decision in Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital - 2010, decided September 30, 2011.

4/ Railroad industry capital structure from the STB Decision in Ex Parte No. 558 (Sub-No. 12), Railroad Cost of Capital - 2008, decided September 24, 2009, STB Decision in Ex Parte No. 558 (Sub-No. 13), Railroad Cost of Capital - 2009, decided September 30, 2010 and the STB Decision in Ex Parte No. 558 (Sub-No. 14), Railroad Cost of Capital - 2010, decided September 30, 2011.

TABLE B: TPIRR INFLATION INDEXES

Period (1)	Land 1/ (2)	Hybrid RCAF 2/ (3)	MWS Excluding Fuel 3/ (4)	Materials & Supplies 4/ (5)	Wages & Supplements 5/ (6)
1Q 2008	100.0		397.6	276.2	421.9
2Q 2008	97.4		399.6	283.4	422.7
3Q 2008	92.5		410.0	285.6	434.9
4Q 2008	86.5		418.1	318.9	437.1
1Q 2009	79.7		423.9	319.5	444.1
2Q 2009	74.0		422.7	305.5	445.8
3Q 2009	70.7		425.8	312.5	448.0
4Q 2009	69.0		421.7	302.2	445.4
1Q 2010	68.5		451.4	311.2	479.7
2Q 2010	69.6		448.8	305.2	477.9
3Q 2010	69.7	100.0	448.1	304.5	477.1
4Q 2010	70.1	103.4	451.7	322.0	477.5
1Q 2011	71.2	102.3	453.9	314.7	481.9
2Q 2011	72.8	110.1	454.5	309.1	484.0
3Q 2011	74.4	112.8	460.7	329.4	486.8
4Q 2011	75.6	113.1	466.7	331.8	493.5
1Q 2012	77.5	109.4	466.4	331.4	493.2
2Q 2012	79.0	111.0	476.6	344.5	502.7
3Q 2012	79.3	109.6	477.5	346.6	503.3
4Q 2012	80.1	113.1	475.6	340.7	502.4
1Q 2013	80.9	112.7	477.1	339.0	504.6
2Q 2013	82.9	113.7	471.1	334.0	498.4
3Q 2013	85.9	110.4	478.0	340.8	505.2
4Q 2013	86.6	110.1	477.6	332.4	506.8
1Q 2014	87.3	110.6	478.2	338.1	505.8
2Q 2014	87.9	110.6	481.7	341.1	509.3
3Q 2014	88.6	111.4	489.6	344.2	518.5
4Q 2014	89.3	112.3	496.7	348.3	526.3
1Q 2015	90.1	113.3	502.7	350.7	533.1
2Q 2015	90.8	112.8	503.1	352.5	533.1
3Q 2015	91.5	113.3	506.4	354.2	536.8
4Q 2015	92.2	114.5	510.7	356.4	541.7
1Q 2016	93.0	114.6	514.8	358.3	546.2
2Q 2016	93.7	114.8	518.9	360.3	550.8
3Q 2016	94.5	114.9	523.0	362.2	555.4
4Q 2016	95.2	115.1	527.1	364.2	560.1
1Q 2017	96.0	115.8	531.9	366.6	565.5
2Q 2017	96.8	116.6	536.7	369.1	570.9
3Q 2017	97.5	117.3	541.6	371.6	576.4
4Q 2017	98.3	118.0	546.6	374.0	581.9
1Q 2018	99.1	118.9	551.7	376.5	587.7
2Q 2018	99.9	119.7	556.8	378.9	593.5
3Q 2018	100.7	120.5	561.9	381.3	599.3
4Q 2018	101.5	121.3	567.2	383.8	605.2
1Q 2019	102.4	122.1	572.4	386.1	611.2
2Q 2019	103.2	123.0	577.6	388.3	617.2
3Q 2019	104.0	123.8	583.0	390.7	623.3
4Q 2019	104.9	124.6	588.3	393.0	629.4
1Q 2020	105.7	125.4	593.6	395.8	635.3
2Q 2020	106.6	126.1	599.0	398.6	641.3
Annual Inflation Rate 6/	4.36%		2.93%	2.71%	2.98%

1/ Used to index Road Property Account 2. Based on historic change in rural land prices as reported by the USDA and urban land prices as reported by the National Council of Real Estate Investment Fiduciaries.

2/ Used to index expenses in Table K. Based on the RCAF-U and RCAF-A through 4Q2013 then Global Insight forecast for remaining periods.

3/ Used to index Road Property Accounts 3, 5, 6, 13, 17, 19, 20, 26, 27, 37, and 39. Based on RCR indices - East Region through 4Q2013 then Global Insight forecast.

4/ Used to index Road Property Accounts 8, 9, and 11. Based on RCR indexes - East Region through 4Q2013 then Global Insight forecast for remaining periods.

5/ Used to index Road Property Accounts 1 and 12. Based on RCR indexes - East Region through 4Q2013 then Global Insight forecast for remaining periods.

6/ 2Q 2010 ÷ 2Q 2020^(1/10)-"1. The Annual Rate is used to develop asset replacement values at the end of asset lives.

TABLE C: TPIRR PROPERTY INVESTMENT VALUES

Construction of the TPIRR occurs between January 1, 2008 and July 1, 2010.
Investments are assumed to be in July 1, 2010 dollars.

Property Account	Property Component	Service Life In Years 1/	Investment In 3Q2008 Dollars 2/	Investment In 3Q2009 Dollars 3/	Investment In 3Q2010 Dollars 4/	2008 Investment Value 5/	2009 Investment Value 6/	2010 Investment Value 7/	Total Property Investment 3Q 2010 8/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Engineering	NA	$2,009,343,685	$2,069,868,868	$2,204,317,940	$1,722,294,587	$295,695,553	$0	$2,017,990,140
2	Land	NA	$5,251,828,051	$4,013,920,938	$3,956,399,437	$5,251,828,051	$0	$0	$5,251,828,051
3	Grading	68	$3,743,343,713	$3,887,599,398	$4,091,200,776	$2,139,053,551	$1,666,114,028	$0	$3,805,167,578
5	Tunnels	76	$1,649,387,111	$1,712,948,858	$1,802,659,425	$0	$1,427,457,382	$300,443,238	$1,727,900,619
6	Bridges & Culverts	60	$3,682,673,688	$3,824,591,357	$4,024,892,877	$0	$2,868,443,517	$1,006,223,219	$3,874,666,737
8	Ties	21	$1,356,732,432	$1,484,519,906	$1,446,516,196	$0	$1,113,389,929	$361,629,049	$1,475,018,978
9	Rails and OTM	34	$4,309,871,083	$4,715,807,820	$4,595,083,140	$0	$3,536,855,865	$1,148,770,785	$4,685,626,650
11	Ballast	36	$1,789,010,268	$1,957,512,986	$1,907,400,653	$0	$1,468,134,739	$476,850,163	$1,944,984,903
12	Labor	32	$1,501,289,729	$1,546,511,379	$1,646,965,578	$0	$1,159,883,534	$411,741,395	$1,571,624,929
13	Fences and Roadway Signs	45	$17,394,666	$18,064,997	$19,011,097	$0	$13,548,748	$4,752,774	$18,301,522
16	Stations and Office Buildings	39	$0	$0	$0	$0	$0	$0	$0
17	Roadway Buildings	37	$871,601,481	$905,190,026	$952,596,643	$0	$905,190,026	$0	$905,190,026
19	Fuel Stations	28	$34,520,586	$35,850,891	$37,728,474	$0	$35,850,891	$0	$35,850,891
20	Shops and Enginehouses	33	$93,313,962	$96,909,963	$101,985,333	$0	$96,909,963	$0	$96,909,963
26	Communications Systems	13	$352,979,886	$366,582,526	$385,781,188	$0	$122,194,175	$257,187,459	$379,381,634
27	Signals and Interlockers	29	$1,253,461,091	$1,301,765,202	$1,369,941,256	$0	$433,921,734	$913,294,171	$1,347,215,905
39	Public Improvements	42	$234,766,498	$243,813,598	$256,582,605	$0	$48,762,720	$205,266,084	$254,028,803
	Total		$28,151,517,932	$28,181,458,713	$28,799,062,618	$9,113,176,189	$15,192,352,805	$5,086,158,336	$29,391,687,330

1/ 1 ÷ Depreciation Rate shown in Schedule 332 of CSXT's 2012 Annual Report R-1
2/ July 1, 2010, indexed to 2008 dollars; Investment Exhibit - 3Q2010 x Inflation Index from Table B, 3Q2008 ÷ 3Q2010.
3/ July 1, 2010, indexed to 2009 dollars; Investment Exhibit - 3Q2010 x Inflation Index from Table B, 3Q2009 ÷ 3Q2010.
4/ July 1, 2010, indexed to 2010 dollars; Investment Exhibit - 3Q2010 x Inflation Index from Table B, 3Q2010 ÷ 3Q2010.
5/ Column (4) x Percent constructed in 2008.
6/ Column (5) x Percent constructed in 2009.
7/ Column (6) x Percent constructed in 2010.
8/ Sum of Columns (7) through (9).

TABLE D: INTEREST DURING CONSTRUCTION

Month of Installation (1)	Cost of Funds 1/ (2)	Timing of Account 1 Investment 2/ (3)	Timing of Account 2 Investment 2/ (4)	Timing of Accounts 3, 5 and 6 Investment 2/ (5)	Timing of Accounts 8 Through 39 Investment 2/ (6)	Total Investment by Month 3/ (7)	Interest During Construction 4/ (8)	Cost of Debt 5/ (9)	Deductible Interest During Construction 6/ (10)
Jan-08	0.93%	$143,524,549	$0	$0	$0	$143,524,549	$0	0.53%	$0
Feb-08	0.93%	$143,524,549	$0	$0	$0	$143,524,549	$1,334,719	0.53%	$164,368
Mar-08	0.93%	$143,524,549	$0	$0	$0	$143,524,549	$2,681,851	0.53%	$330,265
Apr-08	0.93%	$143,524,549	$0	$0	$0	$143,524,549	$4,041,511	0.53%	$497,704
May-08	0.93%	$143,524,549	$750,261,150	$0	$0	$893,785,699	$5,413,814	0.53%	$666,700
Jun-08	0.93%	$143,524,549	$750,261,150	$0	$0	$893,785,699	$13,776,000	0.53%	$1,696,487
Jul-08	0.93%	$143,524,549	$750,261,150	$0	$0	$893,785,699	$22,215,951	0.53%	$2,735,849
Aug-08	0.93%	$143,524,549	$750,261,150	$0	$0	$893,785,699	$30,734,391	0.53%	$3,784,878
Sep-08	0.93%	$143,524,549	$750,261,150	$534,763,388	$0	$1,428,549,087	$39,332,048	0.53%	$4,843,662
Oct-08	0.93%	$143,524,549	$750,261,150	$534,763,388	$0	$1,428,549,087	$52,982,739	0.53%	$6,524,717
Nov-08	0.93%	$143,524,549	$750,261,150	$534,763,388	$0	$1,428,549,087	$66,760,377	0.53%	$8,221,405
Dec-08	0.93%	$143,524,549	$0	$534,763,388	$0	$678,287,937	$80,666,141	0.53%	$9,933,872
Jan-09	0.83%	$147,847,776	$0	$555,371,343	$0	$703,219,119	$78,347,677	0.46%	$12,753,674
Feb-09	0.83%	$147,847,776	$0	$555,371,343	$0	$703,219,119	$84,839,057	0.46%	$13,810,361
Mar-09	0.83%	$0	$0	$698,117,081	$172,991,813	$871,108,894	$91,384,353	0.46%	$14,875,824
Apr-09	0.83%	$0	$0	$461,461,685	$983,193,237	$1,444,654,922	$99,378,436	0.46%	$16,177,125
May-09	0.83%	$0	$0	$461,461,685	$983,193,237	$1,444,654,922	$112,202,558	0.46%	$18,264,675
Jun-09	0.83%	$0	$0	$461,461,685	$983,193,237	$1,444,654,922	$125,133,192	0.46%	$20,369,563
Jul-09	0.83%	$0	$0	$461,461,685	$983,193,237	$1,444,654,922	$138,171,222	0.46%	$22,491,933
Aug-09	0.83%	$0	$0	$461,461,685	$983,193,237	$1,444,654,922	$151,317,542	0.46%	$24,631,931
Sep-09	0.83%	$0	$0	$461,461,685	$810,201,424	$1,271,663,109	$164,573,049	0.46%	$26,789,703
Oct-09	0.83%	$0	$0	$461,461,685	$810,201,424	$1,271,663,109	$176,501,851	0.46%	$28,731,510
Nov-09	0.83%	$0	$0	$461,461,685	$1,088,259,379	$1,549,721,063	$188,529,728	0.46%	$30,689,444
Dec-09	0.83%	$0	$0	$461,461,685	$1,137,022,098	$1,598,483,783	$202,966,942	0.46%	$33,039,578
Jan-10	0.88%	$0	$0	$485,629,359	$1,145,184,984	$1,630,814,342	$229,796,455	0.38%	$23,083,456
Feb-10	0.88%	$0	$0	$485,629,359	$1,145,184,984	$1,630,814,342	$246,091,466	0.38%	$24,720,319
Mar-10	0.88%	$0	$0	$335,407,740	$1,145,184,984	$1,480,592,723	$262,529,187	0.38%	$26,371,517
Apr-10	0.88%	$0	$0	$0	$343,936,928	$343,936,928	$277,795,244	0.38%	$27,905,019
May-10	0.88%	$0	$0	$0	$0	$0	$283,240,301	0.38%	$28,451,984
Jun-10	0.88%	$0	$0	$0	$0	$0	$285,720,886	0.38%	$28,701,164
Total		**$2,017,990,140**	**$5,251,828,051**	**$9,407,734,934**	**$12,714,134,205**	**$29,391,687,330**	**$3,518,458,687**		**$461,258,684**

1/ ((1 + Cost of Capital from Table A for the applicable year)^(1/12) - 1) x 100.
2/ Applicable account value from Table C for the applicable investment period.
3/ Sum of Columns (3) through (6).
4/ January 08 equals Column (2) x prior Column (7), all other periods equal Column (2) x ((Sum of Column (7) for all prior periods) + (Sum of Column (8) for all prior periods))
5/ ((1 + Cost of Debt from Table A for the applicable year)^(1/12) - 1) x 100.
6/ January 08 equals prior Column (7) x Column (9) x Table A, Column (9) for 2008, all other periods equal Column (9) x ((Sum of Column (7) for all prior periods) + (Sum of Column (8) for all prior periods)) x Table A, Column (9) for the applicable yea

TABLE E: TPIRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPTIAL

INTEREST SCHEDULE FOR THE TPIRR 2008 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP			INTEREST SCHEDULE FOR THE TPIRR 2009 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP			INTEREST SCHEDULE FOR THE TPIRR 2010 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP		
1. Total Investment	$9,113,176,189	1/	1. Total Investment	$15,192,352,805	1/	1. Total Investment	$5,086,158,336	1/
2. IDC	$319,939,542	2/	2. IDC	$1,613,345,607	2/	2. IDC	$1,585,173,539	2/
3. Principal	$2,031,893,128	3/	3. Principal	$4,890,458,238	3/	3. Principal	$1,559,757,392	3/
4. Interest	6.57%	4/	4. Interest	5.72%	4/	4. Interest	4.61%	4/
5. Term (Quarters)	80	5/	5. Term (Quarters)	80	5/	5. Term (Quarters)	80	5/
6. Quarterly Coupon	$32,581,752	6/	6. Quarterly Coupon	$68,481,643	6/	6. Quarterly Coupon	$17,673,541	6/

Quarter (1)	Interest 7/ (2)	Quarter (3)	Interest 7/ (4)	Quarter (5)	Interest 7/ (6)
1	$32,581,752	1	$68,481,643	1	$17,673,541
2	$32,581,752	2	$68,481,643	2	$17,673,541
3	$32,581,752	3	$68,481,643	3	$17,673,541
4	$32,581,752	4	$68,481,643	4	$17,673,541
5	$32,581,752	5	$68,481,643	5	$17,673,541
6	$32,581,752	6	$68,481,643	6	$17,673,541
7	$32,581,752	7	$68,481,643	7	$17,673,541
8	$32,581,752	8	$68,481,643	8	$17,673,541
9	$32,581,752	9	$68,481,643	9	$17,673,541
10	$32,581,752	10	$68,481,643	10	$17,673,541
11	$32,581,752	11	$68,481,643	11	$17,673,541
12	$32,581,752	12	$68,481,643	12	$17,673,541
13	$32,581,752	13	$68,481,643	13	$17,673,541
14	$32,581,752	14	$68,481,643	14	$17,673,541
15	$32,581,752	15	$68,481,643	15	$17,673,541
16	$32,581,752	16	$68,481,643	16	$17,673,541
17	$32,581,752	17	$68,481,643	17	$17,673,541
18	$32,581,752	18	$68,481,643	18	$17,673,541
19	$32,581,752	19	$68,481,643	19	$17,673,541
20	$32,581,752	20	$68,481,643	20	$17,673,541
21	$32,581,752	21	$68,481,643	21	$17,673,541
22	$32,581,752	22	$68,481,643	22	$17,673,541
23	$32,581,752	23	$68,481,643	23	$17,673,541
24	$32,581,752	24	$68,481,643	24	$17,673,541
25	$32,581,752	25	$68,481,643	25	$17,673,541
26	$32,581,752	26	$68,481,643	26	$17,673,541
27	$32,581,752	27	$68,481,643	27	$17,673,541
28	$32,581,752	28	$68,481,643	28	$17,673,541
29	$32,581,752	29	$68,481,643	29	$17,673,541
30	$32,581,752	30	$68,481,643	30	$17,673,541
31	$32,581,752	31	$68,481,643	31	$17,673,541
32	$32,581,752	32	$68,481,643	32	$17,673,541
33	$32,581,752	33	$68,481,643	33	$17,673,541
34	$32,581,752	34	$68,481,643	34	$17,673,541
35	$32,581,752	35	$68,481,643	35	$17,673,541
36	$32,581,752	36	$68,481,643	36	$17,673,541
37	$32,581,752	37	$68,481,643	37	$17,673,541
38	$32,581,752	38	$68,481,643	38	$17,673,541
39	$32,581,752	39	$68,481,643	39	$17,673,541
40	$32,581,752	40	$68,481,643	40	$17,673,541
41	$32,581,752	41	$68,481,643	41	$17,673,541
42	$32,581,752	42	$68,481,643	42	$17,673,541
43	$32,581,752	43	$68,481,643	43	$17,673,541
44	$32,581,752	44	$68,481,643	44	$17,673,541
45	$32,581,752	45	$68,481,643	45	$17,673,541
46	$32,581,752	46	$68,481,643	46	$17,673,541
47	$32,581,752	47	$68,481,643	47	$17,673,541
48	$32,581,752	48	$68,481,643	48	$17,673,541
49	$32,581,752	49	$68,481,643	49	$17,673,541
50	$32,581,752	50	$68,481,643	50	$17,673,541
51	$32,581,752	51	$68,481,643	51	$17,673,541
52	$32,581,752	52	$68,481,643	52	$17,673,541
53	$32,581,752	53	$68,481,643	53	$17,673,541
54	$32,581,752	54	$68,481,643	54	$17,673,541
55	$32,581,752	55	$68,481,643	55	$17,673,541

TABLE E: TPIRR INTEREST PAYMENTS FOR ASSETS PURCHASED WITH DEBT CAPTIAL

INTEREST SCHEDULE FOR THE TPIRR 2008 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP			INTEREST SCHEDULE FOR THE TPIRR 2009 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP			INTEREST SCHEDULE FOR THE TPIRR 2010 ROAD PROPERTY INVESTMENT FOR THE 3Q2010 START-UP		
1. Total Investment	$9,113,176,189	1/	1. Total Investment	$15,192,352,805	1/	1. Total Investment	$5,086,158,336	1/
2. IDC	$319,939,542	2/	2. IDC	$1,613,345,607	2/	2. IDC	$1,585,173,539	2/
3. Principal	$2,031,893,128	3/	3. Principal	$4,890,458,238	3/	3. Principal	$1,559,757,392	3/
4. Interest	6.57%	4/	4. Interest	5.72%	4/	4. Interest	4.61%	4/
5. Term (Quarters)	80	5/	5. Term (Quarters)	80	5/	5. Term (Quarters)	80	5/
6. Quarterly Coupon	$32,581,752	6/	6. Quarterly Coupon	$68,481,643	6/	6. Quarterly Coupon	$17,673,541	6/

Quarter (1)	Interest 7/ (2)	Quarter (3)	Interest 7/ (4)	Quarter (5)	Interest 7/ (6)
56	$32,581,752	56	$68,481,643	56	$17,673,541
57	$32,581,752	57	$68,481,643	57	$17,673,541
58	$32,581,752	58	$68,481,643	58	$17,673,541
59	$32,581,752	59	$68,481,643	59	$17,673,541
60	$32,581,752	60	$68,481,643	60	$17,673,541
61	$32,581,752	61	$68,481,643	61	$17,673,541
62	$32,581,752	62	$68,481,643	62	$17,673,541
63	$32,581,752	63	$68,481,643	63	$17,673,541
64	$32,581,752	64	$68,481,643	64	$17,673,541
65	$32,581,752	65	$68,481,643	65	$17,673,541
66	$32,581,752	66	$68,481,643	66	$17,673,541
67	$32,581,752	67	$68,481,643	67	$17,673,541
68	$32,581,752	68	$68,481,643	68	$17,673,541
69	$32,581,752	69	$68,481,643	69	$17,673,541
70	$32,581,752	70	$68,481,643	70	$17,673,541
71	$32,581,752	71	$68,481,643	71	$17,673,541
72	$32,581,752	72	$68,481,643	72	$17,673,541
73	$32,581,752	73	$68,481,643	73	$17,673,541
74	$32,581,752	74	$68,481,643	74	$17,673,541
75	$32,581,752	75	$68,481,643	75	$17,673,541
76	$32,581,752	76	$68,481,643	76	$17,673,541
77	$32,581,752	77	$68,481,643	77	$17,673,541
78	$32,581,752	78	$68,481,643	78	$17,673,541
79	$32,581,752	79	$68,481,643	79	$17,673,541
80	$32,581,752	80	$68,481,643	80	$17,673,541

1/ From Table D, Column (7) for the applicable year investment.
2/ From Table D, Column (8) for the applicable year investment.
3/ (Total Investment + IDC) x (Proportion of Debt from Table A, Column (9)).
4/ From Table A, Column (6) for the applicable year investment.
5/ Based on Ex Parte No. 657 20-year payment period x 4.
6/ Quarterly coupon payments on Line 3 principal and Line 4 interest rates.
7/ Line 6 coupon payment.

TABLE F: TPIRR PRESENT VALUE OF REPLACEMENT COST

Property Account	Property Component	Service Life In Years 1/	Investment 2/	Salvage 3/	Replacement Year Asset Net Cost 4/	Replacement Cost Adjusted To Reflect An Infinite Life 5/	Present Value Of Replacement Cost Adjusted To Reflect An Infinite Life (2010 Dollars) 6/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3	Grading	68	$32,752,077,215	$0	$27,992,394,378	$28,208,337,947	$21,898,374
5	Tunnels	76	18,344,000,066	0	15,678,165,416	15,750,080,063	5,721,005
6	Bridges & Culverts	60	25,739,860,167	0	21,461,273,766	21,776,815,835	43,180,350
8	Ties	21	3,062,332,337	0	2,444,354,361	3,165,778,438	360,163,143
9	Rails and OTM	34	13,811,643,162	926,616,441	10,261,099,393	11,272,085,467	325,712,816
11	Ballast	36	6,102,293,944	0	4,870,852,400	5,271,318,975	119,341,792
12	Labor	32	4,799,506,842	0	3,830,967,441	4,266,708,749	149,213,372
13	Fences and Roadway Signs	45	80,032,569	0	66,729,224	69,552,034	626,639
16	Stations and Office Buildings	39	0	0	0	0	0
17	Roadway Buildings	37	3,104,405,987	0	2,588,378,738	2,794,770,595	60,693,350
19	Fuel Stations	28	96,743,650	0	80,662,519	93,067,953	4,814,214
20	Shops and Enginehouses	33	299,309,674	0	249,557,178	275,932,257	8,755,303
26	Communications Systems	13	658,297,168	0	525,452,948	869,316,259	222,428,054
27	Signals and Interlockers	29	3,705,087,547	126,009,860	2,853,289,663	3,269,155,407	157,882,565
39	Public Improvements	42	1,017,846,854	0	848,656,125	893,643,543	11,050,204
	Total		$113,573,437,182	$1,052,626,301	$93,751,833,549	$97,976,563,524	$1,491,481,180

1/ From Table C, Column (3).
2/ (Table C, Column (10) after allocation of Engineering) x (Table B, 1.0 + Annual Inflation Index)^(Column (3)).
3/ [(Column (4) x Salvage %) - (Table C, Column (10) after allocation of Engineering x Salvage %)] x (1 - Current Federal Tax Rate) + (Table C, Column (10) after allocation of Engineering x Salvage %).
4/ Column (4) - (Present Value of the remaining tax deductions for depreciation, interest expense and the Present Value of any salvage).
5/ Column (6) + [(Column (6) / ((1 + Real Cost of Capital)^Column (3) - 1)].
6/ Column (7) / ((1 + Average Nominal Cost of Capital from Table A Column (2))^Column (3)).

TABLE G PART 1: TAX DEPRECIATION SCHEDULES

Depreciation of Start-up investment for tax purposes using
accounting lives from Modified Accelerated Cost Recovery System (MACRS) 1/

Road Property Account	Road Property Component	Asset Lives Per MACRS 2/	Total 3Q 2010 Investment	Depreciable Base
(1)	(2)	(3)	(4)	(5)
1	Engineering	5	$2,017,990,140	$2,017,990,140
2	Land	N/A	$5,251,828,051	$0
3	Grading	50	$3,805,167,578	$3,805,167,578
5	Tunnels	50	$1,727,900,619	$1,727,900,619
6	Bridges & Culverts	15	$3,874,666,737	$3,874,666,737
8	Ties	7	$1,475,018,978	$1,475,018,978
9	Rails and OTM	7	$4,685,626,650	$4,685,626,650
11	Ballast	7	$1,944,984,903	$1,944,984,903
12	Labor	7	$1,571,624,929	$1,571,624,929
13	Fences and Roadway Signs	15	$18,301,522	$18,301,522
16	Stations and Office Buildings	15	$0	$0
17	Roadway Buildings	15	$905,190,026	$905,190,026
19	Fuel Stations	15	$35,850,891	$35,850,891
20	Shops and Enginehouses	15	$96,909,963	$96,909,963
26	Communications Systems	7	$379,381,634	$379,381,634
27	Signals and Interlockers	7	$1,347,215,905	$1,347,215,905
39	Public Improvements	15	$254,028,803	$254,028,803
	Total		**$29,391,687,330**	**$24,139,859,278**

1/ Applicable Depreciation Method: 200 or 150 percent
Declining Balance Switching to Straight Line
Applicable Recovery Periods: 7, 15 and 50 a/ years
Applicable Convention: Mid-quarter(property placed in service in third quarter)

The Depreciation Rates are as follows for the corresponding
Recovery Period and Recovery year:

Year	5-Year	7-Year	15-Year	50-Year a/
1	20.00%	10.71%	3.75%	2.00%
2	20.00%	25.51%	9.63%	2.00%
3	20.00%	18.22%	8.66%	2.00%
4	20.00%	13.02%	7.80%	2.00%
5	20.00%	9.30%	7.02%	2.00%
6		8.85%	6.31%	2.00%
7		8.86%	5.90%	2.00%
8		5.53%	5.90%	2.00%
9			5.91%	2.00%
10			5.90%	2.00%
11			5.91%	2.00%
12			5.90%	2.00%
13			5.91%	2.00%
14			5.90%	2.00%
15			5.91%	2.00%
16			3.69%	2.00%
17				2.00%
18				2.00%
19-50				2.00%

a/ 50 year property uses the Straight Line Method for all time periods

2/ Bonus Depreciation Per the Economic Stimulus Act of 2008, the American Recovery & Reinvestment Act, and The Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 for the following depreciable assets:

MARCS Lives	Bonus Depreciation - 50%	Bonus Depreciation - 100%
7	$5,701,926,500	$0
15	$2,592,473,971	$0

TABLE G PART 2: TAX DEPRECIATION SCHEDULES

	Amortization - 5 Years			Road Property Depreciation - MACRS 7 Years			Depreciation - MACRS 15 Years			Depreciation - MACRS 50 Years			Total
Year	Unamortized Investment 1/	Rate 2/	Annual Amort. 3/	Undepreciated Investment 4/	Rate 2/	Annual Amount 5/	Undepreciated Investment 6/	Rate 2/	Annual Amount 7/	Unamortized Investment 8/	Rate 2/	Annual Amount 9/	Annual Depreciation 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	$2,017,990,140	20.00%	$403,598,028	$5,701,926,500	10.71%	$610,676,328	$2,592,473,971	3.75%	$97,217,774	$5,533,068,198	2%	$110,661,364	$9,516,553,964
2	$1,614,392,112	20.00%	$403,598,028	$5,091,250,171	25.51%	$1,454,561,450	$2,495,256,197	9.63%	$249,655,243	$5,422,406,834	2%	$110,661,364	$2,218,476,085
3	$1,210,794,084	20.00%	$403,598,028	$3,636,688,721	18.22%	$1,038,891,008	$2,245,600,954	8.66%	$224,508,246	$5,311,745,470	2%	$110,661,364	$1,777,658,646
4	$807,196,056	20.00%	$403,598,028	$2,597,797,713	13.02%	$742,390,830	$2,021,092,708	7.80%	$202,212,970	$5,201,084,106	2%	$110,661,364	$1,458,863,192
5	$403,598,028	20.00%	$403,598,028	$1,855,406,883	9.30%	$530,279,164	$1,818,879,738	7.02%	$181,991,673	$5,090,422,742	2%	$110,661,364	$1,226,530,229
6				$1,325,127,719	8.85%	$504,620,495	$1,636,888,065	6.31%	$163,585,108	$4,979,761,378	2%	$110,661,364	$778,866,967
7				$820,507,223	8.86%	$505,190,688	$1,473,302,958	5.90%	$152,955,964	$4,869,100,014	2%	$110,661,364	$768,808,016
8				$315,316,535	5.53%	$315,316,535	$1,320,346,993	5.90%	$152,955,964	$4,758,438,650	2%	$110,661,364	$578,933,864
9							$1,167,391,029	5.91%	$153,215,212	$4,647,777,286	2%	$110,661,364	$263,876,576
10					100%		$1,014,175,817	5.90%	$152,955,964	$4,537,115,922	2%	$110,661,364	$263,617,328
11							$861,219,853	5.91%	$153,215,212	$4,426,454,558	2%	$110,661,364	$263,876,576
12							$708,004,641	5.90%	$152,955,964	$4,315,793,194	2%	$110,661,364	$263,617,328
13							$555,048,677	5.91%	$153,215,212	$4,205,131,830	2%	$110,661,364	$263,876,576
14							$401,833,466	5.90%	$152,955,964	$4,094,470,466	2%	$110,661,364	$263,617,328
15							$248,877,501	5.91%	$153,215,212	$3,983,809,102	2%	$110,661,364	$263,876,576
16							$95,662,290	3.69%	$95,662,290	$3,873,147,738	2%	$110,661,364	$206,323,653
17										$3,762,486,374	2%	$110,661,364	$110,661,364
18								100%		$3,651,825,010	2%	$110,661,364	$110,661,364
19										$3,541,163,646	2%	$110,661,364	$110,661,364
20										$3,430,502,282	2%	$110,661,364	$110,661,364
21										$3,319,840,919	2%	$110,661,364	$110,661,364
22										$3,209,179,555	2%	$110,661,364	$110,661,364
23										$3,098,518,191	2%	$110,661,364	$110,661,364
24										$2,987,856,827	2%	$110,661,364	$110,661,364
25										$2,877,195,463	2%	$110,661,364	$110,661,364
26										$2,766,534,099	2%	$110,661,364	$110,661,364
27										$2,655,872,735	2%	$110,661,364	$110,661,364
28										$2,545,211,371	2%	$110,661,364	$110,661,364
29										$2,434,550,007	2%	$110,661,364	$110,661,364
30										$2,323,888,643	2%	$110,661,364	$110,661,364
31										$2,213,227,279	2%	$110,661,364	$110,661,364
32										$2,102,565,915	2%	$110,661,364	$110,661,364
33										$1,991,904,551	2%	$110,661,364	$110,661,364
34										$1,881,243,187	2%	$110,661,364	$110,661,364
35										$1,770,581,823	2%	$110,661,364	$110,661,364
36										$1,659,920,459	2%	$110,661,364	$110,661,364
37										$1,549,259,095	2%	$110,661,364	$110,661,364
38										$1,438,597,731	2%	$110,661,364	$110,661,364
39										$1,327,936,367	2%	$110,661,364	$110,661,364
40										$1,217,275,003	2%	$110,661,364	$110,661,364
41										$1,106,613,640	2%	$110,661,364	$110,661,364
42										$995,952,276	2%	$110,661,364	$110,661,364
43										$885,290,912	2%	$110,661,364	$110,661,364

TABLE G PART 2: TAX DEPRECIATION SCHEDULES

Road Property

	Amortization - 5 Years			Depreciation - MACRS 7 Years			Depreciation - MACRS 15 Years			Depreciation - MACRS 50 Years			Total
Year	Unamortized Investment 1/	Rate 2/	Annual Amort. 3/	Undepreciated Investment 4/	Rate 2/	Annual Amount 5/	Undepreciated Investment 6/	Rate 2/	Annual Amount 7/	Unamortized Investment 8/	Rate 2/	Annual Amount 9/	Annual Depreciation 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
44										$774,629,548	2%	$110,661,364	$110,661,364
45										$663,968,184	2%	$110,661,364	$110,661,364
46										$553,306,820	2%	$110,661,364	$110,661,364
47										$442,645,456	2%	$110,661,364	$110,661,364
48										$331,984,092	2%	$110,661,364	$110,661,364
49										$221,322,728	2%	$110,661,364	$110,661,364
50										$110,661,364	2%	$110,661,364	$110,661,364
											100%		

1/ From Table G Part 1, Column (5), Road Property Accounts 1 minus Table G Part 1, 5-Year Bonus Depreciation.
2/ From Table G, Footnote 1/, Page 8.
3/ Column (2), Year 1 x Column (3).
4/ From Table G Part 1, Column (5), Road Property Accounts 8, 9, 11, 12, 26 and 27 minus Table G Part 1, 7-Year Bonus Depreciation.
5/ Column (5), Year 1 x Column (6).
6/ From Table G Part 1, Column (5), Road Property Accounts 6, 13, 16, 17, 19, 20 and 39 minus Table G Part 1, 15-Year Bonus Depreciation.
7/ Column (8), Year 1 x Column (9).
8/ From Table G, Page 8, Column (5), Road Property Accounts 3 and 5.
9/ Column (11), Year 1 x Column (12).
10/ Column (4) + Column (7) + Column (10) + Column (13) plus Page 8, 5, 7 & 15 Year Bonus Depreciation.

TABLE H: TPIRR AVERAGE ANNUAL INFLATION IN ASSET PRICES

Development of average annual inflation factors for all capital assets

1. 3Q 2010 Land value	$5,251,828,051	1/
2. 3Q 2010 Property asset value accounts 3, 5, 6, 13, 17, 26, 27, 39 and 52	$12,444,613,678	1/
3. 3Q 2010 Road Property asset value accounts 8, 9, and 11	$8,105,630,532	1/
4. 3Q 2010 Road Property asset value accounts 1 and 12	$3,589,615,068	1/

Period (1)	Quarter (2)	Inflation Index For Land 2/ (3)	Inflation Index For Line 2 Property Assets 3/ (4)	Inflation Index For Line 3 Road Property Assets 4/ (5)	Inflation Index For Line 4 Road Property Assets 5/ (6)	Land Value 6/ (7)	Road Property Value 7/ (8)	3Q 2010 Inflation Index 8/ (9)
0		1.000	1.000	1.000	1.000	$5,251,828,051	$24,139,859,278	1.000
1	3Q 2010	1.002	0.998	0.998	0.998	$5,260,632,608	$24,095,849,353	0.999
2	4Q 2010	1.007	1.006	1.055	0.999	$5,289,978,226	$24,663,449,341	1.019
3	1Q 2011	1.023	1.011	1.031	1.008	$5,372,678,781	$24,563,625,261	1.019
4	2Q 2011	1.046	1.013	1.013	1.013	$5,491,333,660	$24,447,308,855	1.019
5	3Q 2011	1.069	1.027	1.079	1.019	$5,615,225,835	$25,179,393,833	1.048
6	4Q 2011	1.087	1.040	1.087	1.033	$5,706,981,947	$25,459,831,104	1.060
7	1Q 2012	1.113	1.039	1.086	1.032	$5,845,689,746	$25,438,635,775	1.064
8	2Q 2012	1.135	1.062	1.129	1.052	$5,961,004,935	$26,140,739,889	1.092
9	3Q 2012	1.140	1.064	1.136	1.053	$5,988,060,458	$26,225,975,088	1.096
10	4Q 2012	1.151	1.060	1.116	1.051	$6,044,450,846	$26,009,835,875	1.091
11	1Q 2013	1.162	1.063	1.111	1.056	$6,103,251,341	$26,022,804,215	1.093
12	2Q 2013	1.191	1.050	1.094	1.043	$6,256,848,803	$25,677,070,659	1.086
13	3Q 2013	1.234	1.065	1.117	1.057	$6,481,951,745	$26,100,071,888	1.109
14	4Q 2013	1.244	1.064	1.089	1.060	$6,533,446,508	$25,877,907,645	1.103
15	1Q 2014	1.254	1.065	1.108	1.058	$6,585,276,010	$26,036,013,369	1.110
16	2Q 2014	1.264	1.073	1.118	1.066	$6,637,570,304	$26,240,661,541	1.119
17	3Q 2014	1.274	1.091	1.128	1.085	$6,690,334,069	$26,611,337,320	1.133
18	4Q 2014	1.284	1.107	1.141	1.101	$6,743,572,036	$26,976,266,767	1.147
19	1Q 2015	1.294	1.120	1.149	1.116	$6,797,288,989	$27,257,621,167	1.159
20	2Q 2015	1.305	1.121	1.155	1.116	$6,851,489,766	$27,315,864,122	1.162
21	3Q 2015	1.315	1.128	1.161	1.123	$6,906,179,258	$27,483,680,933	1.170
22	4Q 2015	1.326	1.138	1.168	1.133	$6,961,362,412	$27,695,755,580	1.179
23	1Q 2016	1.336	1.147	1.174	1.143	$7,017,044,231	$27,893,445,970	1.188
24	2Q 2016	1.347	1.156	1.180	1.153	$7,073,229,773	$28,092,588,940	1.196
25	3Q 2016	1.358	1.165	1.187	1.162	$7,129,924,153	$28,293,195,417	1.205
26	4Q 2016	1.369	1.174	1.193	1.172	$7,187,132,544	$28,495,276,418	1.214
27	1Q 2017	1.379	1.185	1.201	1.183	$7,244,860,178	$28,733,646,609	1.224
28	2Q 2017	1.391	1.196	1.209	1.195	$7,303,112,345	$28,974,053,069	1.234
29	3Q 2017	1.402	1.207	1.217	1.206	$7,361,894,396	$29,216,513,505	1.245
30	4Q 2017	1.413	1.218	1.226	1.218	$7,421,211,741	$29,461,045,784	1.255
31	1Q 2018	1.424	1.229	1.233	1.230	$7,481,069,853	$29,708,736,296	1.265
32	2Q 2018	1.436	1.241	1.241	1.242	$7,541,474,266	$29,958,568,504	1.276
33	3Q 2018	1.448	1.252	1.249	1.254	$7,602,430,576	$30,210,561,359	1.287
34	4Q 2018	1.459	1.264	1.257	1.266	$7,663,944,445	$30,464,733,982	1.297
35	1Q 2019	1.471	1.275	1.265	1.279	$7,726,021,597	$30,714,810,594	1.308
36	2Q 2019	1.483	1.287	1.272	1.291	$7,788,667,822	$30,967,019,895	1.319
37	3Q 2019	1.495	1.299	1.280	1.304	$7,851,888,977	$31,221,380,620	1.329
38	4Q 2019	1.507	1.311	1.288	1.317	$7,915,690,985	$31,477,911,672	1.340
39	1Q 2020	1.519	1.323	1.297	1.329	$7,980,079,836	$31,743,876,969	1.352
40	2Q 2020	1.532	1.335	1.306	1.342	$8,045,061,589	$32,012,115,428	1.363
Annual Average 9/								3.40%

1/ Table C, Page 3, Column (10).
2/ Previous Column (3) x (1 + Quarterly Inflation Rate Change from Table B).
3/ Previous Column (4) x (1 + Quarterly Inflation Rate Change from Table B).
4/ Previous Column (5) x (1 + Quarterly Inflation Rate Change from Table B).
5/ Previous Column (6) x (1 + Quarterly Inflation Rate Change from Table B).
6/ Line 1 x Column (3) for applicable quarter.
7/ (Line 2 x Column (4) for applicable quarter) + (Line 3 x Column (5) for applicable quarter) + (Line 4 x Column (6) for applicable quarter).
8/ (Column (7) + Column (8)) ÷ (Period 0; (Column (7) + Column (8))).
9/ Annual weighted inflation using the last two quarters, used to calculate real cost of capital.

TABLE I: TPIRR DISCOUNTED CASH FLOW

Discounted Cash Flow
Present Value of the Cash Flow Discounted at the Cost of Capital in Table A
Inflation In Asset Values From Table H

1. 3Q 2010 Road Property Investment	$29,454,010,295 1/	Federal Tax Rate	35.0%	
2. Interest During Construction (3Q 2010 Invest.)	$3,518,458,687 2/			
3. Total 3Q 2010 Investment	$32,972,468,982 3/	Route Mile Weighted		
4. Present Value Of Replacement Cost for the TPIRR	$1,491,481,180 4/	Average State Tax Rate	6.11%	6/
5. Total Cost Recovered From Quarterly Revenue Flow	$34,463,950,162 5/			

Period	Quarter	Quarterly Levelized Capital Carrying Charge Requirement 7/	Interest on Investment Financed With Debt 8/	Tax Depreciation 9/	Actual Federal Tax Payments 10/	Actual State Tax Payments 11/	Cash Flow 12/	Present Value Cash Flow 13/	Cumulative Present Value 14/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1		$804,063,860	$118,736,937	$4,758,276,982	$0	$0	$804,063,860	$793,138,752	$793,138,752
2	4Q 2010	$820,413,993	$118,736,937	$4,758,276,982	$0	$0	$820,413,993	$787,424,531	$1,580,563,283
3	1Q 2011	$819,944,986	$118,736,937	$554,619,021	$0	$0	$819,944,986	$765,842,195	$2,346,405,478
4	2Q 2011	$820,009,036	$118,736,937	$554,619,021	$0	$0	$820,009,036	$745,441,129	$3,091,846,607
5	3Q 2011	$843,453,953	$118,736,937	$554,619,021	$0	$0	$843,453,953	$746,270,420	$3,838,117,027
6	4Q 2011	$853,648,201	$118,736,937	$554,619,021	$0	$0	$853,648,201	$735,112,682	$4,573,229,709
7	1Q 2012	$856,866,827	$118,736,937	$444,414,661	$0	$0	$856,866,827	$718,351,574	$5,291,581,283
8	2Q 2012	$879,255,658	$118,736,937	$444,414,661	$0	$0	$879,255,658	$717,788,040	$6,009,369,324
9	3Q 2012	$882,331,262	$118,736,937	$444,414,661	$0	$0	$882,331,262	$701,406,912	$6,710,776,235
10	4Q 2012	$877,955,797	$118,736,937	$444,414,661	$0	$0	$877,955,797	$679,623,446	$7,390,399,681
11	1Q 2013	$879,921,521	$118,736,937	$364,715,798	$0	$0	$879,921,521	$663,280,103	$8,053,679,784
12	2Q 2013	$874,658,980	$118,736,937	$364,715,798	$0	$0	$874,658,980	$642,020,827	$8,695,700,611
13	3Q 2013	$892,410,328	$118,736,937	$364,715,798	$0	$0	$892,410,328	$637,870,142	$9,333,570,753
14	4Q 2013	$887,735,750	$118,736,937	$364,715,798	$0	$0	$887,735,750	$617,886,524	$9,951,457,278
15	1Q 2014	$893,485,803	$118,736,937	$306,632,557	$0	$0	$893,485,803	$605,577,873	$10,557,035,150
16	2Q 2014	$900,523,368	$118,736,937	$306,632,557	$0	$0	$900,523,368	$594,339,585	$11,151,374,735
17	3Q 2014	$912,121,231	$118,736,937	$306,632,557	$0	$0	$912,121,231	$586,205,059	$11,737,579,794
18	4Q 2014	$923,574,691	$118,736,937	$306,632,557	$0	$0	$923,574,691	$577,998,018	$12,315,577,812
19	1Q 2015	$932,752,179	$118,736,937	$194,716,742	$0	$0	$932,752,179	$568,431,224	$12,884,009,036
20	2Q 2015	$935,831,974	$118,736,937	$194,716,742	$0	$0	$935,831,974	$555,350,108	$13,439,359,144
21	3Q 2015	$941,926,344	$118,736,937	$194,716,742	$0	$0	$941,926,344	$544,306,165	$13,983,665,309
22	4Q 2015	$949,246,443	$118,736,937	$194,716,742	$0	$0	$949,246,443	$534,149,241	$14,517,814,550
23	1Q 2016	$956,186,220	$118,736,937	$192,202,004	$0	$0	$956,186,220	$523,942,280	$15,041,756,830
24	2Q 2016	$963,179,579	$118,736,937	$192,202,004	$206,756,905	$38,465,713	$717,956,961	$383,086,373	$15,424,843,203
25	3Q 2016	$970,226,961	$118,736,937	$192,202,004	$216,644,008	$40,305,141	$713,277,812	$370,607,612	$15,795,450,816
26	4Q 2016	$977,328,807	$118,736,937	$192,202,004	$218,977,695	$40,739,308	$717,611,804	$363,080,164	$16,158,530,980
27	1Q 2017	$985,438,824	$118,736,937	$144,733,466	$237,240,974	$44,137,066	$704,060,783	$346,880,935	$16,505,411,915
28	2Q 2017	$993,618,980	$118,736,937	$144,733,466	$239,928,998	$44,637,155	$709,052,827	$340,177,980	$16,845,589,895
29	3Q 2017	$1,001,869,907	$118,736,937	$144,733,466	$242,640,277	$45,141,570	$714,088,060	$333,608,190	$17,179,198,086
30	4Q 2017	$1,010,192,243	$118,736,937	$144,733,466	$245,375,021	$45,650,350	$719,166,871	$327,168,840	$17,506,366,925
31	1Q 2018	$1,018,615,893	$118,736,937	$65,969,144	$274,025,249	$50,980,530	$693,610,114	$307,266,353	$17,813,633,279
32	2Q 2018	$1,027,113,167	$118,736,937	$65,969,144	$276,817,478	$51,500,005	$698,795,683	$301,444,337	$18,115,077,616
33	3Q 2018	$1,035,684,736	$118,736,937	$65,969,144	$279,634,121	$52,024,022	$704,026,592	$295,735,396	$18,410,813,013
34	4Q 2018	$1,044,331,279	$118,736,937	$65,969,144	$282,475,401	$52,552,623	$709,303,255	$290,137,273	$18,700,950,286
35	1Q 2019	$1,052,881,063	$118,736,937	$65,904,332	$285,306,183	$53,079,271	$714,495,609	$284,595,786	$18,985,546,071
36	2Q 2019	$1,061,504,846	$118,736,937	$65,904,332	$288,139,984	$53,606,480	$719,758,382	$279,172,708	$19,264,718,780
37	3Q 2019	$1,070,203,304	$118,736,937	$65,904,332	$290,998,323	$54,138,255	$725,066,726	$273,855,541	$19,538,574,320
38	4Q 2019	$1,078,977,115	$118,736,937	$65,904,332	$293,881,424	$54,674,636	$730,421,056	$268,642,159	$19,807,216,479
39	1Q 2020	$1,088,025,401	$118,736,937	$65,969,144	$296,833,420	$55,223,835	$735,968,146	$263,582,899	$20,070,799,378
40	2Q 2020	$1,097,152,187	$118,736,937	$65,969,144	$299,832,509	$55,781,795	$741,537,883	$258,612,125	$20,329,411,503
	Future	$61,145,925,958	$6,617,386,386	$1,629,047,712	$17,382,930,631	$3,233,975,773	$40,529,019,555	$14,134,538,659	$34,463,950,162

1/ From Table C, Column (10) + Repaving and Rail Grinding Capital Costs from [TPIRR Capitalized MOW.xlsx].
2/ From Table D, Column (8).
3/ Line 1 + Line 2.
4/ Table F Column (8).
5/ Line 3 + Line 4.
6/ Alabama, Washtington Dc, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, New York, Ohio, Pennsylvania, South Carolina, Tennessee, corporate income tax rates weighted on TPIRR route miles.
7/ Quarterly carrying costs needed to recover the total investment over 40 quarters after consideration of the applicable interest payments, tax depreciation and tax liability. The Future value is an estimate of a perpetual income stream for the TPIRR and is calculated by taking the Period 40, Column (3) value and dividing it by the TPIRR's estimated quarterly Real Cost of Capital.
8/ Value from Table E.
9/ Value from Table G - Part 2, Column (14) divided by 4 quarters.
10/ Table J: Part 1.
11/ Table J: Part 2.
12/ (Column (3) - Column (6) - Column (7)).
13/ Column (8) discounted by the fourth root of the annual Cost of Capital adjusted to Midquarter dollars from Table A.
14/ Cumulative total of Column (9).

TABLE J - PART 1: COMPUTATION OF FEDERAL TAX LIABILITY - TAXABLE INCOME
(Road Property)

Time Period	Taxable Income B/4 NOL's IRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2008	($39,399,906)	($39,399,906)	($39,399,906)	$0	($39,399,906)	($39,399,906)	$0	($39,399,906)	$0	$0
2009	($262,625,319)	($262,625,319)	($302,025,226)	$0	($302,025,226)	($302,025,226)	$0	($302,025,226)	$0	$0
1Q-2Q 2010	($159,233,459)	($159,233,459)	($461,258,684)	$0	($461,258,684)	($461,258,684)	$0	($461,258,684)	$0	$0
3Q 2010	($4,072,950,059)	($4,072,950,059)	($4,534,208,743)	$0	($4,534,208,743)	($4,534,208,743)	$0	($4,534,208,743)	$0	$0
4Q 2010	($4,056,599,926)	($4,056,599,926)	($8,590,808,669)	$0	($8,590,808,669)	($8,590,808,669)	$0	($8,590,808,669)	$0	$0
1Q 2011	$146,589,028	$0	($8,590,808,669)	$146,589,028	($8,444,219,641)	($8,444,219,641)	$0	($8,444,219,641)	$0	$0
2Q 2011	$146,653,078	$0	($8,444,219,641)	$146,653,078	($8,297,566,563)	($8,297,566,563)	$0	($8,297,566,563)	$0	$0
3Q 2011	$170,097,995	$0	($8,297,566,563)	$170,097,995	($8,127,468,568)	($8,127,468,568)	$0	($8,127,468,568)	$0	$0
4Q 2011	$180,292,243	$0	($8,127,468,568)	$180,292,243	($7,947,176,325)	($7,947,176,325)	$0	($7,947,176,325)	$0	$0
1Q 2012	$293,715,229	$0	($7,947,176,325)	$293,715,229	($7,653,461,096)	($7,653,461,096)	$0	($7,653,461,096)	$0	$0
2Q 2012	$316,104,060	$0	($7,653,461,096)	$316,104,060	($7,337,357,036)	($7,337,357,036)	$0	($7,337,357,036)	$0	$0
3Q 2012	$319,179,664	$0	($7,337,357,036)	$319,179,664	($7,018,177,373)	($7,018,177,373)	$0	($7,018,177,373)	$0	$0
4Q 2012	$314,804,199	$0	($7,018,177,373)	$314,804,199	($6,703,373,174)	($6,703,373,174)	$0	($6,703,373,174)	$0	$0
1Q 2013	$396,468,786	$0	($6,703,373,174)	$396,468,786	($6,306,904,388)	($6,306,904,388)	$0	($6,306,904,388)	$0	$0
2Q 2013	$391,206,245	$0	($6,306,904,388)	$391,206,245	($5,915,698,143)	($5,915,698,143)	$0	($5,915,698,143)	$0	$0
3Q 2013	$408,957,593	$0	($5,915,698,143)	$408,957,593	($5,506,740,550)	($5,506,740,550)	$0	($5,506,740,550)	$0	$0
4Q 2013	$404,283,015	$0	($5,506,740,550)	$404,283,015	($5,102,457,534)	($5,102,457,534)	$0	($5,102,457,534)	$0	$0
1Q 2014	$468,116,309	$0	($5,102,457,534)	$468,116,309	($4,634,341,225)	($4,634,341,225)	$0	($4,634,341,225)	$0	$0
2Q 2014	$475,153,874	$0	($4,634,341,225)	$475,153,874	($4,159,187,351)	($4,159,187,351)	$0	($4,159,187,351)	$0	$0
3Q 2014	$486,751,737	$0	($4,159,187,351)	$486,751,737	($3,672,435,614)	($3,672,435,614)	$0	($3,672,435,614)	$0	$0
4Q 2014	$498,205,197	$0	($3,672,435,614)	$498,205,197	($3,174,230,417)	($3,174,230,417)	$0	($3,174,230,417)	$0	$0
1Q 2015	$619,298,501	$0	($3,174,230,417)	$619,298,501	($2,554,931,917)	($2,554,931,917)	$0	($2,554,931,917)	$0	$0
2Q 2015	$622,378,296	$0	($2,554,931,917)	$622,378,296	($1,932,553,621)	($1,932,553,621)	$0	($1,932,553,621)	$0	$0
3Q 2015	$628,472,666	$0	($1,932,553,621)	$628,472,666	($1,304,080,955)	($1,304,080,955)	$0	($1,304,080,955)	$0	$0
4Q 2015	$635,792,765	$0	($1,304,080,955)	$635,792,765	($668,288,191)	($668,288,191)	$0	($668,288,191)	$0	$0
1Q 2016	$645,247,279	$0	($668,288,191)	$645,247,279	($23,040,912)	($23,040,912)	$0	($23,040,912)	$0	$0
2Q 2016	$613,774,925	$0	($23,040,912)	$23,040,912	$0	$0	$0	$0	$590,734,014	$206,756,905
3Q 2016	$618,982,879	$0	$0	$0	$0	$0	$0	$0	$618,982,879	$216,644,008
4Q 2016	$625,650,558	$0	$0	$0	$0	$0	$0	$0	$625,650,558	$218,977,695
1Q 2017	$677,831,355	$0	$0	$0	$0	$0	$0	$0	$677,831,355	$237,240,974
2Q 2017	$685,511,422	$0	$0	$0	$0	$0	$0	$0	$685,511,422	$239,928,998
3Q 2017	$693,257,935	$0	$0	$0	$0	$0	$0	$0	$693,257,935	$242,640,277
4Q 2017	$701,071,490	$0	$0	$0	$0	$0	$0	$0	$701,071,490	$245,375,021
1Q 2018	$782,929,283	$0	$0	$0	$0	$0	$0	$0	$782,929,283	$274,025,249
2Q 2018	$790,907,081	$0	$0	$0	$0	$0	$0	$0	$790,907,081	$276,817,478
3Q 2018	$798,954,633	$0	$0	$0	$0	$0	$0	$0	$798,954,633	$279,634,121
4Q 2018	$807,072,575	$0	$0	$0	$0	$0	$0	$0	$807,072,575	$282,475,401
1Q 2019	$815,160,523	$0	$0	$0	$0	$0	$0	$0	$815,160,523	$285,306,183
2Q 2019	$823,257,097	$0	$0	$0	$0	$0	$0	$0	$823,257,097	$288,139,984
3Q 2019	$831,423,780	$0	$0	$0	$0	$0	$0	$0	$831,423,780	$290,998,323
4Q 2019	$839,661,211	$0	$0	$0	$0	$0	$0	$0	$839,661,211	$293,881,424
1Q 2020	$848,095,485	$0	$0	$0	$0	$0	$0	$0	$848,095,485	$296,833,420

TABLE J - PART 1: COMPUTATION OF FEDERAL TAX LIABILITY - TAXABLE INCOME
(Road Property)

Time Period	Taxable Income B/4 NOL's IRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2Q 2020	$856,664,311	$0	$0	$0	$0	$0	$0	$0	$856,664,311	$299,832,509
Future	$49,665,516,088	$0	$0	$0	$0	$0	$0	$0	$49,665,516,088	$17,382,930,631

1/ Table I Column (3) - Table E Columns (2),(4) & (6) - Table G, Column (14) / 4 - Table J - Part 2, Column (11). Values for 2008 from Table D, Sum of Column (10).
2/ Column (2) if less than zero, otherwise zero.
3/ Cumulative total of Column (2).
4/ If Column (2) is greater than zero, and (Column (2) + Column (4) is less than zero, then Column (2), otherwise Column (4).
5/ Column (4) + Column (5) + Column (8).
6/ Previous period Column (9) + current period Column (3) - current period Column (5).
7/ If previous Column (10) is greater than zero, and previous Column (10) is less than current Column (7), then previous Column (10), otherwise zero.
8/ Column (7) + Column (8).
9/ If Column (2) is greater than zero, then Column (2) - Column (5) - Column (8), otherwise zero.
10/ Column (10) times applicable Federal Statutory Tax Rate.

TABLE J - PART 2: COMPUTATION OF STATE TAX LIABILITY - TAXABLE INCOME

(Road Property)

Time Period	Taxable Income B/4 NOL's IRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2008	($39,399,906)	($39,399,906)	($39,399,906)	$0	($39,399,906)	($39,399,906)	$0	($39,399,906)	$0	$0
2009	($262,625,319)	($262,625,319)	($302,025,226)	$0	($302,025,226)	($302,025,226)	$0	($302,025,226)	$0	$0
1Q-2Q 2010	($159,233,459)	($159,233,459)	($461,258,684)	$0	($461,258,684)	($461,258,684)	$0	($461,258,684)	$0	$0
3Q 2010	($4,072,950,059)	($4,072,950,059)	($4,534,208,743)	$0	($4,534,208,743)	($4,534,208,743)	$0	($4,534,208,743)	$0	$0
4Q 2010	($4,056,599,926)	($4,056,599,926)	($8,590,808,669)	$0	($8,590,808,669)	($8,590,808,669)	$0	($8,590,808,669)	$0	$0
1Q 2011	$146,589,028	$0	($8,590,808,669)	$146,589,028	($8,444,219,641)	($8,444,219,641)	$0	($8,444,219,641)	$0	$0
2Q 2011	$146,653,078	$0	($8,444,219,641)	$146,653,078	($8,297,566,563)	($8,297,566,563)	$0	($8,297,566,563)	$0	$0
3Q 2011	$170,097,995	$0	($8,297,566,563)	$170,097,995	($8,127,468,568)	($8,127,468,568)	$0	($8,127,468,568)	$0	$0
4Q 2011	$180,292,243	$0	($8,127,468,568)	$180,292,243	($7,947,176,325)	($7,947,176,325)	$0	($7,947,176,325)	$0	$0
1Q 2012	$293,715,229	$0	($7,947,176,325)	$293,715,229	($7,653,461,096)	($7,653,461,096)	$0	($7,653,461,096)	$0	$0
2Q 2012	$316,104,060	$0	($7,653,461,096)	$316,104,060	($7,337,357,036)	($7,337,357,036)	$0	($7,337,357,036)	$0	$0
3Q 2012	$319,179,664	$0	($7,337,357,036)	$319,179,664	($7,018,177,373)	($7,018,177,373)	$0	($7,018,177,373)	$0	$0
4Q 2012	$314,804,199	$0	($7,018,177,373)	$314,804,199	($6,703,373,174)	($6,703,373,174)	$0	($6,703,373,174)	$0	$0
1Q 2013	$396,468,786	$0	($6,703,373,174)	$396,468,786	($6,306,904,388)	($6,306,904,388)	$0	($6,306,904,388)	$0	$0
2Q 2013	$391,206,245	$0	($6,306,904,388)	$391,206,245	($5,915,698,143)	($5,915,698,143)	$0	($5,915,698,143)	$0	$0
3Q 2013	$408,957,593	$0	($5,915,698,143)	$408,957,593	($5,506,740,550)	($5,506,740,550)	$0	($5,506,740,550)	$0	$0
4Q 2013	$404,283,015	$0	($5,506,740,550)	$404,283,015	($5,102,457,534)	($5,102,457,534)	$0	($5,102,457,534)	$0	$0
1Q 2014	$468,116,309	$0	($5,102,457,534)	$468,116,309	($4,634,341,225)	($4,634,341,225)	$0	($4,634,341,225)	$0	$0
2Q 2014	$475,153,874	$0	($4,634,341,225)	$475,153,874	($4,159,187,351)	($4,159,187,351)	$0	($4,159,187,351)	$0	$0
3Q 2014	$486,751,737	$0	($4,159,187,351)	$486,751,737	($3,672,435,614)	($3,672,435,614)	$0	($3,672,435,614)	$0	$0
4Q 2014	$498,205,197	$0	($3,672,435,614)	$498,205,197	($3,174,230,417)	($3,174,230,417)	$0	($3,174,230,417)	$0	$0
1Q 2015	$619,298,501	$0	($3,174,230,417)	$619,298,501	($2,554,931,917)	($2,554,931,917)	$0	($2,554,931,917)	$0	$0
2Q 2015	$622,378,296	$0	($2,554,931,917)	$622,378,296	($1,932,553,621)	($1,932,553,621)	$0	($1,932,553,621)	$0	$0
3Q 2015	$628,472,666	$0	($1,932,553,621)	$628,472,666	($1,304,080,955)	($1,304,080,955)	$0	($1,304,080,955)	$0	$0
4Q 2015	$635,792,765	$0	($1,304,080,955)	$635,792,765	($668,288,191)	($668,288,191)	$0	($668,288,191)	$0	$0
1Q 2016	$645,247,279	$0	($668,288,191)	$645,247,279	($23,040,912)	($23,040,912)	$0	($23,040,912)	$0	$0
2Q 2016	$652,240,638	$0	($23,040,912)	$23,040,912	$0	$0	$0	$0	$629,199,727	$38,465,713
3Q 2016	$659,288,020	$0	$0	$0	$0	$0	$0	$0	$659,288,020	$40,305,141
4Q 2016	$666,389,866	$0	$0	$0	$0	$0	$0	$0	$666,389,866	$40,739,308
1Q 2017	$721,968,421	$0	$0	$0	$0	$0	$0	$0	$721,968,421	$44,137,066
2Q 2017	$730,148,577	$0	$0	$0	$0	$0	$0	$0	$730,148,577	$44,637,155
3Q 2017	$738,399,505	$0	$0	$0	$0	$0	$0	$0	$738,399,505	$45,141,570
4Q 2017	$746,721,840	$0	$0	$0	$0	$0	$0	$0	$746,721,840	$45,650,350
1Q 2018	$833,909,813	$0	$0	$0	$0	$0	$0	$0	$833,909,813	$50,980,530
2Q 2018	$842,407,086	$0	$0	$0	$0	$0	$0	$0	$842,407,086	$51,500,005
3Q 2018	$850,978,655	$0	$0	$0	$0	$0	$0	$0	$850,978,655	$52,024,022
4Q 2018	$859,625,199	$0	$0	$0	$0	$0	$0	$0	$859,625,199	$52,552,623
1Q 2019	$868,239,794	$0	$0	$0	$0	$0	$0	$0	$868,239,794	$53,079,271
2Q 2019	$876,863,578	$0	$0	$0	$0	$0	$0	$0	$876,863,578	$53,606,480
3Q 2019	$885,562,035	$0	$0	$0	$0	$0	$0	$0	$885,562,035	$54,138,255
4Q 2019	$894,335,847	$0	$0	$0	$0	$0	$0	$0	$894,335,847	$54,674,636
1Q 2020	$903,319,320	$0	$0	$0	$0	$0	$0	$0	$903,319,320	$55,223,835

TABLE J - PART 2: COMPUTATION OF STATE TAX LIABILITY - TAXABLE INCOME
(Road Property)

Time Period	Taxable Income B/4 NOL's IRR 1/	Net Operating Losses Generated 2/	NOL's Generated Plus Carryforward 3/	Carryforward Utilized 4/	Carryforward Remaining 5/	Carryback Available 6/	Carryback Utilized 7/	Carryback Remaining 8/	Annual Taxable Income 9/	Annual Tax Liability 10/
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2Q 2020	$912,446,106	$0	$0	$0	$0	$0	$0	$0	$912,446,106	$55,781,795
Future	$52,899,491,860	$0	$0	$0	$0	$0	$0	$0	$52,899,491,860	$3,233,975,773

1/ Table I Column (3) - Table E Columns (2),(4) & (6) - Table G, Column (14) ÷ 4 - Table J - Part 2, Column (11). Values for 2008 from Table D, Sum of Column (10).
2/ Column (2) if less than zero, otherwise zero.
3/ Cumulative total of Column (2).
4/ If Column (2) is greater than zero, and (Column (2) + Column (4) is less than zero, then Column (2), otherwise Column (4).
5/ Column (4) + Column (5) + Column (8).
6/ Previous period Column (9) + current period Column (3) - current period Column (5).
7/ If previous Column (10) is greater than zero, and previous Column (10) is less than current Column (7), then previous Column (10), otherwise zero.
8/ Column (7) + Column (8).
9/ If Column (2) is greater than zero, then Column (2) - Column (5) - Column (8), otherwise zero.
10/ Column (10) times applicable route mile weighted State Statutory Tax Rates.

TABLE K - PART 1: TPIRR OPERATING EXPENSES

Item (1)	2010 (2)	2011 (3)	2012 (4)	2013 (5)	2014 (6)	2015 (7)	2016 (8)	2017 (9)	2018 (10)	2019 (11)	2020 (12)
1. Train & Engine Personnel	$394,890,521	$402,558,191	$394,987,382	$413,013,869	$423,689,648	$442,756,038	$464,193,879	$473,633,104	$491,779,365	$511,695,630	$533,457,628
2. Locomotive Lease Expense	$82,794,414	$84,402,050	$82,814,722	$86,594,231	$88,832,560	$92,830,100	$97,324,848	$99,303,916	$103,108,538	$107,284,266	$111,846,978
3. Locomotive Maintenance Expense	$113,244,860	$115,443,759	$113,272,638	$118,442,189	$121,503,740	$126,971,510	$133,119,354	$135,826,291	$141,030,191	$146,741,684	$152,982,488
4. Locomotive Operating Expense	$860,576,649	$877,286,641	$860,787,734	$900,072,480	$923,337,983	$964,888,966	$1,011,608,004	$1,032,178,710	$1,071,724,478	$1,115,127,576	$1,162,553,044
5. Railcar Lease Expense	$217,410,818	$221,632,328	$217,464,145	$227,388,803	$233,266,457	$243,763,643	$255,566,455	$260,763,312	$270,753,913	$281,719,006	$293,700,286
6. Material & Supply Operating	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446	$4,776,446
7. Ad Valorem Tax	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015	$41,285,015
8. Operating Managers	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806	$96,020,806
9. General & Administration	$91,637,089	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836	$93,977,836
10. Loss and Damage	$8,838,241	$9,009,855	$8,840,409	$9,243,868	$9,482,808	$9,909,543	$10,389,354	$10,600,618	$11,006,758	$11,452,514	$11,939,580
11. Trackage Rights	$23,579,788	$24,037,642	$23,585,572	$24,661,973	$25,299,448	$26,437,944	$27,718,045	$28,281,682	$29,365,235	$30,554,480	$31,853,937
12. Intermodal Lift Costs	$67,174,231	$68,478,566	$67,190,708	$70,257,166	$72,073,207	$75,316,561	$78,963,320	$80,569,013	$83,655,846	$87,043,771	$90,745,672
13. Motor Vehicle Cost	$22,800,460	$23,243,181	$22,806,052	$23,846,878	$24,463,284	$25,564,152	$26,801,945	$27,346,953	$28,394,694	$29,544,633	$30,801,143
14. Insurance 1.36%	$30,477,226	$30,983,483	$30,515,139	$31,630,289	$32,290,711	$33,470,190	$34,796,371	$35,380,298	$36,502,857	$37,734,911	$39,081,145
15. Maintenance of Way	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525	$209,816,525
16. Total Operating Expenses	$2,265,323,088	$2,302,952,323	$2,268,141,129	$2,351,028,374	$2,400,116,473	$2,487,785,275	$2,586,358,203	$2,629,760,525	$2,713,198,504	$2,804,775,100	$2,904,838,530
17. Expense Per Quarter	$566,330,772	$575,738,081	$567,035,282	$587,757,094	$600,029,118	$621,946,319	$646,589,551	$657,440,131	$678,299,626	$701,193,775	$726,209,633

TABLE K - PART 2: TPIRR OPERATING EXPENSES INDEXED

Period (1)	Quarter (2)	Hybrid Index 1/ (3)	Operating Expense Indexed For Inflation 2/ (4)
1	3Q 2010	100.000	$585,837,003
2	4Q 2010	103.359	$604,859,054
3	1Q 2011	102.318	$608,588,215
4	2Q 2011	110.066	$653,197,604
5	3Q 2011	112.849	$649,715,095
6	4Q 2011	113.102	$651,169,681
7	1Q 2012	109.416	$620,425,631
8	2Q 2012	110.974	$629,261,715
9	3Q 2012	109.563	$621,259,532
10	4Q 2012	113.062	$641,100,797
11	1Q 2013	112.696	$662,378,520
12	2Q 2013	113.677	$668,146,182
13	3Q 2013	110.386	$648,799,985
14	4Q 2013	110.101	$647,126,831
15	1Q 2014	110.605	$663,661,132
16	2Q 2014	110.561	$663,395,667
17	3Q 2014	111.401	$668,437,474
18	4Q 2014	112.348	$674,119,193
19	1Q 2015	113.303	$704,681,986
20	2Q 2015	112.793	$701,510,918
21	3Q 2015	113.272	$704,492,339
22	4Q 2015	114.450	$711,819,059
23	1Q 2016	114.610	$741,056,236
24	2Q 2016	114.770	$742,090,617
25	3Q 2016	114.930	$743,126,442
26	4Q 2016	115.079	$744,089,621
27	1Q 2017	115.816	$761,417,804
28	2Q 2017	116.557	$766,290,213
29	3Q 2017	117.303	$771,193,802
30	4Q 2017	118.040	$776,043,571
31	1Q 2018	118.852	$806,170,793
32	2Q 2018	119.669	$811,713,273
33	3Q 2018	120.492	$817,293,859
34	4Q 2018	121.301	$822,782,579
35	1Q 2019	122.129	$856,359,679
36	2Q 2019	122.963	$862,205,640
37	3Q 2019	123.802	$868,091,509
38	4Q 2019	124.629	$873,889,919
39	1Q 2020	125.385	$910,555,646
40	2Q 2020	126.145	$916,077,676

1/ 3Q10 equals 100.0, all other quarters equal Quarterly Inflation Indexes for the Hybrid Index from Table B.

2/ Quarterly expense from Table K, Page 18, for the applicable time period x Column (3) ÷ 3Q10. Start-up costs have been distributed over the first 12 months in periods 1 - 4.

TABLE L: TPIRR STAND-ALONE COSTS AND REVENUES

Revenue Requirements to Cover Total Stand-Alone Costs

Period (1)	Quarter (2)	Quarterly Capital Requirement Road Property (3)	Quarterly Operating Expense (4)	Annual Stand-Alone Requirement (5)	Annual Stand-Alone Revenues (6)	Overpayments Or Shortfalls In Revenues (7)	PV Difference (8)	Cumulative PV Difference (9)
1	3Q 2010	$804,063,860	$585,837,003					
2	4Q 2010	$820,413,993	$604,859,054	$2,815,173,911	$3,152,087,973	$336,914,062	$336,914,062	$336,914,062
3	1Q 2011	$819,944,986	$608,588,215					
4	2Q 2011	$820,009,036	$653,197,604					
5	3Q 2011	$843,453,953	$649,715,095					
6	4Q 2011	$853,648,201	$651,169,681	$5,899,726,771	$6,831,542,442	$931,815,670	$835,216,424	$1,172,130,486
7	1Q 2012	$856,866,827	$620,425,631					
8	2Q 2012	$879,255,658	$629,261,715					
9	3Q 2012	$882,331,262	$621,259,532					
10	4Q 2012	$877,955,797	$641,100,797	$6,008,457,219	$6,850,693,987	$842,236,768	$678,196,102	$1,850,326,588
11	1Q 2013	$879,921,521	$662,378,520					
12	2Q 2013	$874,658,980	$668,146,182					
13	3Q 2013	$892,410,328	$648,799,985					
14	4Q 2013	$887,735,750	$647,126,831	$6,161,178,096	$7,300,676,008	$1,139,497,912	$828,326,335	$2,678,652,923
15	1Q 2014	$893,485,803	$663,661,132					
16	2Q 2014	$900,523,368	$663,395,667					
17	3Q 2014	$912,121,231	$668,437,474					
18	4Q 2014	$923,574,691	$674,119,193	$6,299,318,559	$7,670,634,217	$1,371,315,658	$896,302,653	$3,574,955,576
19	1Q 2015	$932,752,179	$704,681,986					
20	2Q 2015	$935,831,974	$701,510,918					
21	3Q 2015	$941,926,344	$704,492,339					
22	4Q 2015	$949,246,443	$711,819,059	$6,582,261,243	$8,138,932,009	$1,556,670,766	$914,836,173	$4,489,791,749
23	1Q 2016	$956,186,220	$741,056,236					
24	2Q 2016	$963,179,579	$742,090,617					
25	3Q 2016	$970,226,961	$743,126,442					
26	4Q 2016	$977,328,807	$744,089,621	$6,837,284,484	$8,719,658,935	$1,882,374,452	$994,676,575	$5,484,468,324
27	1Q 2017	$985,438,824	$761,417,804					
28	2Q 2017	$993,618,980	$766,290,213					
29	3Q 2017	$1,001,869,907	$771,193,802					
30	4Q 2017	$1,010,192,243	$776,043,571	$7,066,065,345	$9,122,098,838	$2,056,033,494	$976,866,840	$6,461,335,164
31	1Q 2018	$1,018,615,893	$806,170,793					
32	2Q 2018	$1,027,113,167	$811,713,273					
33	3Q 2018	$1,035,684,736	$817,293,859					
34	4Q 2018	$1,044,331,279	$822,782,579	$7,383,705,580	$9,721,148,000	$2,337,442,421	$998,562,875	$7,459,898,039
35	1Q 2019	$1,052,881,063	$856,359,679					
36	2Q 2019	$1,061,504,846	$862,205,640					
37	3Q 2019	$1,070,203,304	$868,091,509					
38	4Q 2019	$1,078,977,115	$873,889,919	$7,724,113,076	$10,422,109,310	$2,697,996,234	$1,036,346,882	$8,496,244,921
39	1Q 2020	$1,088,025,401	$910,555,646					
40	2Q 2020	$1,097,152,187	$916,077,676	$4,011,810,910	$5,587,198,472	$1,575,387,562	$573,807,042	$9,070,051,963

Railroad Industry Debt between 1998 to 2009
($ in Thousands)

	Railroad (1)	Bonds (2)	ETC (3)	CSA (4)	Other (5)	Total (6)
	1998					
1.	BNSF	$3,567,245	$384,003	$0	$1,465,800	$5,417,048
2.	Conrail	1,315,232	164,531	0	486,888	1,966,651
3.	CSX	4,751,927	606,877	165,555	1,167,181	6,691,540
4.	NS	5,553,302	382,253	0	2,196,875	8,132,430
5.	UP	6,083,074	374,485	121,483	1,856,527	8,435,569
6.	Total	$21,270,780	$1,912,149	$287,038	$7,173,271	$30,643,238
	1999					
7.	BNSF	$3,788,968	$434,180	$0	$1,633,315	$5,856,463
8.	CSX	4,646,421	675,181	150,904	1,235,278	6,707,784
9.	NS	5,586,787	411,447	0	2,096,136	8,094,370
10.	UP	6,400,711	324,661	95,627	1,835,651	8,656,650
11.	Total	$20,422,887	$1,845,469	$246,531	$6,800,380	$29,315,267
	2000					
12.	BNSF	$3,874,165	$479,450	$0	$1,616,226	$5,969,841
13.	CSX	4,301,219	722,600	130,993	777,661	5,932,473
14.	NS	5,303,625	399,607	0	1,880,779	7,584,011
15.	UP	5,900,352	264,294	72,433	1,900,215	8,137,294
16.	Total	$19,379,361	$1,865,951	$203,426	$6,174,881	$27,623,619
	2001					
17.	BNSF	$4,753,585	$477,866	$0	$1,491,266	$6,722,717
18.	CSX	5,322,289	757,043	130,975	268,512	6,478,819
19.	NS	6,830,019	506,733	0	356,197	7,692,949
20.	UP	5,923,562	237,954	54,863	1,775,176	7,991,555
21.	Total	$22,829,455	$1,979,596	$185,838	$3,891,151	$28,886,040
	2002					
22.	BNSF	$5,346,700	$431,510	$0	$1,271,585	$7,049,795
23.	CSX	5,398,556	608,004	124,985	675,212	6,806,757
24.	NS	7,059,667	338,868	0	506,454	7,904,989
25.	UP	6,038,802	187,827	32,287	1,711,672	7,970,588
26.	Total	$23,843,725	$1,566,209	$157,272	$4,164,923	$29,732,129
	2003					
27.	BNSF	$5,718,153	$386,023	$0	$1,098,941	$7,203,117
28.	CSX	5,237,473	490,636	115,990	174,600	6,018,699
29.	NS	6,952,242	293,619	0	939,125	8,184,986
30.	UP	6,332,851	168,355	2,773	2,019,969	8,523,948
31.	Total	$24,240,719	$1,338,633	$118,763	$4,232,635	$29,930,750

Railroad Industry Debt between 1998 to 2009

($ in Thousands)

	Railroad (1)	Bonds (2)	ETC (3)	CSA (4)	Other (5)	Total (6)
	2004					
32.	BNSF	$5,444,619	$324,213	$0	$790,901	$6,559,733
33.	CSX	6,418,995	427,920	159,558	136,431	7,142,904
34.	NS	6,911,770	246,784	0	784,506	7,943,060
35.	UP	6,132,695	247,642	0	1,301,462	7,681,799
36.	Total	$24,908,079	$1,246,559	$159,558	$3,013,300	$29,327,496
	2005					
37.	BNSF	$5,464,515	$368,458	$0	$1,195,009	$7,027,982
38.	CSX	5,062,299	366,722	142,197	306,737	5,877,955
39.	NS	6,787,492	195,483	0	326,245	7,309,220
40.	UP	5,812,182	208,593	0	1,251,308	7,272,083
41.	Total	$23,126,488	$1,139,256	$142,197	$3,079,299	$27,487,240
	2006					
42.	BNSF	$5,948,542	$315,007	$0	$1,472,626	$7,736,175
43.	CSX	4,637,108	287,070	74,489	293,002	5,291,669
44.	NS	6,409,527	157,391	0	147,213	6,714,131
45.	UP	5,966,313	169,828	0	1,166,408	7,302,549
46.	Total	$22,961,490	$929,296	$74,489	$3,079,249	$27,044,524
	2007					
47.	BNSF	$6,194,580	$262,421	$0	$1,201,743	$7,658,744
48.	CSX	4,959,289	221,209	63,389	230,126	5,474,013
49.	NS	6,034,279	131,643	0	286,067	6,451,989
50.	UP	4,931,853	189,350	0	1,140,434	6,261,637
51.	Total	$22,120,001	$804,623	$63,389	$2,858,370	$25,846,383
	2008					
52.	BNSF	$7,098,663	$227,997	$0	$1,443,114	$8,769,774
53.	CSX	6,785,450	192,631	54,389	179,534	7,212,004
54.	NS	5,860,071	112,996	0	273,935	6,247,002
55.	UP	6,142,454	233,118	0	1,468,746	7,844,318
56.	Total	$25,886,638	$766,742	$54,389	$3,365,329	$30,073,098
	2009					
57.	BNSF	$7,915,817	$236,659	$0	$1,554,082	$9,706,558
58.	CSX	7,657,784	158,159	43,349	78,462	7,937,754
59.	NS	6,685,553	97,756	0	124,709	6,908,018
60.	UP	7,288,352	215,499	0	2,075,919	9,579,770
61.	Total	$29,547,506	$708,073	$43,349	$3,833,172	$34,132,100

Sources: STB Ex Parte No. 558 - Railroad Cost of Capital.

TPIRR Maximum Markup Methodology R/VC Ratios

	Year (1)	MMM Revenue to Variable Cost Ratio (2)
1.	July -Dec 2010	223.6%
2.	2011	179.5%
3.	2012	174.3%
4.	2013	160.2%
5.	2014	149.7%
6.	2015	145.6%
7.	2016	137.8%
8.	2017	135.5%
9.	2018	131.3%
10.	2019	126.9%
11.	Jan-Jun 2020	122.2%

Source: e-workpaper "MMM Results V07.xlsx."

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q10

	Origin 1/		Destination		Railroad(s)	Commodity	3Q2010 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,727	$549	$988	$1,227	$1,227
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,473	$1,100	$1,980	$2,460	$2,460
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,884	$1,098	$1,977	$2,456	$2,456
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$5,977	$1,393	$2,508	$3,116	$3,116
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,719	$624	$1,123	$1,395	$1,395
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,157	$2,541	$4,574	$5,683	$5,683
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,036	$923	$1,661	$2,064	$2,064
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$5,976	$1,382	$2,487	$3,090	$3,090
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,049	$1,555	$2,800	$3,479	$3,479
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$5,983	$1,433	$2,579	$3,204	$3,204
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,020	$598	$1,076	$1,337	$1,337
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,320	$971	$1,747	$2,171	$2,171
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$7,921	$1,968	$3,543	$4,402	$4,402
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,045	$997	$1,794	$2,228	$2,228
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,580	$2,133	$3,839	$4,769	$4,769
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,048	$2,255	$4,059	$5,043	$5,043
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,894	$771	$1,388	$1,724	$1,724
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,578	$1,019	$1,835	$2,279	$2,279
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,884	$1,099	$1,978	$2,458	$2,458
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,513	$1,499	$2,699	$3,353	$3,353
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,767	$1,721	$3,099	$3,850	$3,850
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$4,946	$1,124	$2,024	$2,514	$2,514
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,031	$679	$1,223	$1,519	$1,519
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,034	$1,657	$2,983	$3,706	$3,706
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$5,988	$1,273	$2,291	$2,846	$2,846
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,433	$1,709	$3,076	$3,822	$3,822
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,738	$1,581	$2,846	$3,536	$3,536
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,618	$701	$1,262	$1,568	$1,568
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,780	$1,089	$1,960	$2,434	$2,434
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,577	$1,909	$3,436	$4,269	$4,269
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,383	$2,489	$3,092	$3,092
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,250	$1,432	$2,578	$3,203	$3,203
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,633	$2,051	$3,691	$4,586	$4,586
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$5,977	$1,385	$2,492	$3,096	$3,096
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,391	$2,503	$3,110	$3,110
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,131	$1,150	$2,071	$2,573	$2,573
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$7,907	$2,091	$3,764	$4,677	$4,677
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$5,972	$1,342	$2,416	$3,002	$3,002
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,458	$1,252	$2,253	$2,799	$2,799
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,499	$889	$1,600	$1,988	$1,988
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,020	$598	$1,076	$1,337	$1,337
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,535	$1,457	$2,623	$3,258	$3,258
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,457	$416	$750	$931	$931
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,780	$1,089	$1,960	$2,434	$2,434
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,036	$929	$1,672	$2,077	$2,077
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,633	$2,043	$3,677	$4,568	$4,568
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$9,738	$2,775	$4,994	$6,205	$6,205
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,577	$1,909	$3,436	$4,269	$4,269
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,393	$1,851	$3,331	$4,138	$4,138
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,874	$1,047	$1,884	$2,341	$2,341
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,768	$1,796	$3,233	$4,016	$4,016
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$4,935	$1,036	$1,866	$2,318	$2,318
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,840	$1,568	$2,823	$3,507	$3,507
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,848	$1,628	$2,931	$3,641	$3,641
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,844	$1,603	$2,885	$3,584	$3,584
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,020	$598	$1,076	$1,337	$1,337
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,440	$1,099	$1,978	$2,457	$2,457
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,079	$1,302	$2,343	$2,911	$2,911
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,169	$1,082	$1,947	$2,419	$2,419
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,203	$1,281	$2,306	$2,865	$2,865
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,383	$2,489	$3,092	$3,092
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,382	$2,792	$5,025	$6,243	$6,243
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$3,995	$769	$1,385	$1,721	$1,721
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,399	$1,394	$2,509	$3,117	$3,117
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,088	$1,246	$2,243	$2,786	$2,786
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,049	$1,765	$3,177	$3,947	$3,947
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,338	$998	$1,797	$2,233	$2,233
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,066	$1,102	$1,983	$2,464	$2,464
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,160	$620	$1,116	$1,386	$1,386
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,021	$1,707	$3,072	$3,816	$3,816
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,021	$1,704	$3,068	$3,812	$3,812
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,045	$996	$1,792	$2,227	$2,227
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$5,972	$1,342	$2,416	$3,002	$3,002
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,034	$1,655	$2,979	$3,701	$3,701
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,630	$2,020	$3,636	$4,517	$4,517

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q10

Origin 1/		Destination		Railroad(s)	Commodity	3Q2010 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,767	$1,721	$3,099	$3,850	$3,850
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,767	$1,723	$3,101	$3,853	$3,853
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$4,935	$1,036	$1,866	$2,318	$2,318
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,094	$1,285	$2,312	$2,873	$2,873
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,094	$1,285	$2,312	$2,873	$2,873
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,830	$1,511	$2,719	$3,378	$3,378
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,393	$1,851	$3,331	$4,138	$4,138
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$3,995	$769	$1,384	$1,720	$1,720
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,303	$367	$660	$821	$821
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,332	$592	$1,066	$1,325	$1,325
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,335	$624	$1,123	$1,396	$1,396
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,931	$869	$1,564	$1,943	$1,943
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$5,976	$1,379	$2,482	$3,084	$3,084

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q10

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	Tariff Rate 1/ (5)	Phase III Cost 1/ (6)	4Q2010 Jurisdictional Threshold 1/ (7)	SAC Rate 2/ (8)	STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,727	$559	$1,006	$1,249	$1,249
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,473	$1,120	$2,015	$2,504	$2,504
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,884	$1,118	$2,012	$2,500	$2,500
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$5,977	$1,418	$2,553	$3,171	$3,171
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,719	$635	$1,143	$1,420	$1,420
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,157	$2,587	$4,656	$5,784	$5,784
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,036	$940	$1,691	$2,101	$2,101
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$5,976	$1,406	$2,532	$3,145	$3,145
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,049	$1,583	$2,850	$3,541	$3,541
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$5,983	$1,458	$2,625	$3,261	$3,261
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,020	$608	$1,095	$1,361	$1,361
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,320	$988	$1,779	$2,210	$2,210
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$7,921	$2,004	$3,607	$4,481	$4,481
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,045	$1,014	$1,826	$2,268	$2,268
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,580	$2,171	$3,907	$4,854	$4,854
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,048	$2,295	$4,132	$5,133	$5,133
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,894	$785	$1,413	$1,755	$1,755
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,578	$1,038	$1,868	$2,320	$2,320
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,884	$1,119	$2,014	$2,502	$2,502
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,513	$1,526	$2,747	$3,413	$3,413
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,767	$1,752	$3,154	$3,919	$3,919
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$4,946	$1,144	$2,060	$2,559	$2,559
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,031	$691	$1,245	$1,546	$1,546
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,034	$1,687	$3,037	$3,773	$3,773
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$5,988	$1,295	$2,332	$2,897	$2,897
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,433	$1,740	$3,131	$3,890	$3,890
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,738	$1,609	$2,897	$3,599	$3,599
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,618	$714	$1,285	$1,596	$1,596
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,780	$1,108	$1,995	$2,478	$2,478
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,577	$1,943	$3,498	$4,345	$4,345
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,407	$2,533	$3,148	$3,148
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,250	$1,458	$2,624	$3,260	$3,260
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,633	$2,088	$3,758	$4,668	$4,668
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$5,977	$1,409	$2,537	$3,152	$3,152
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,416	$2,548	$3,166	$3,166
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,131	$1,171	$2,108	$2,619	$2,619
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$7,907	$2,129	$3,832	$4,760	$4,760
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$5,972	$1,366	$2,459	$3,055	$3,055
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,458	$1,274	$2,293	$2,849	$2,849
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,499	$905	$1,628	$2,023	$2,023
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,020	$608	$1,095	$1,361	$1,361
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,535	$1,483	$2,670	$3,317	$3,317
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,457	$424	$763	$948	$948
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,780	$1,108	$1,995	$2,478	$2,478
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,036	$945	$1,702	$2,114	$2,114
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,633	$2,079	$3,743	$4,650	$4,650
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$9,738	$2,824	$5,084	$6,316	$6,316
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,577	$1,943	$3,498	$4,345	$4,345
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,393	$1,884	$3,391	$4,213	$4,213
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,874	$1,065	$1,918	$2,382	$2,382
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,768	$1,828	$3,291	$4,088	$4,088
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$4,935	$1,055	$1,899	$2,359	$2,359
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,840	$1,596	$2,874	$3,570	$3,570
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,848	$1,657	$2,983	$3,706	$3,706
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,844	$1,631	$2,936	$3,648	$3,648
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,020	$608	$1,095	$1,360	$1,360
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,440	$1,118	$2,013	$2,501	$2,501
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,079	$1,325	$2,385	$2,963	$2,963
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,169	$1,101	$1,982	$2,462	$2,462
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,203	$1,304	$2,347	$2,916	$2,916
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$5,977	$1,407	$2,533	$3,148	$3,148
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,382	$2,842	$5,115	$6,355	$6,355
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$3,995	$783	$1,410	$1,752	$1,752
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,399	$1,419	$2,554	$3,173	$3,173
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,088	$1,268	$2,283	$2,836	$2,836
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,049	$1,797	$3,234	$4,018	$4,018
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,338	$1,016	$1,829	$2,273	$2,273
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,066	$1,122	$2,019	$2,508	$2,508
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,160	$631	$1,136	$1,411	$1,411
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,021	$1,737	$3,127	$3,885	$3,885
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,021	$1,735	$3,123	$3,880	$3,880
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,045	$1,013	$1,824	$2,266	$2,266
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$5,972	$1,366	$2,459	$3,055	$3,055
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,034	$1,685	$3,033	$3,768	$3,768
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,630	$2,056	$3,701	$4,598	$4,598

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q10

						4Q2010				
						Tariff	**Phase III**	**Jurisdictional**	**SAC**	**STB Maximum**
Origin 1/		**Destination**		**Railroad(s)**	**Commodity**	**Rate 1/**	**Cost 1/**	**Threshold 1/**	**Rate 2/**	**Rate 3/**
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,767	$1,752	$3,154	$3,919	$3,919
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,767	$1,754	$3,157	$3,922	$3,922
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$4,935	$1,055	$1,899	$2,359	$2,359
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,094	$1,308	$2,354	$2,924	$2,924
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,094	$1,308	$2,354	$2,924	$2,924
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,830	$1,538	$2,768	$3,439	$3,439
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,393	$1,884	$3,391	$4,213	$4,213
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$3,995	$783	$1,409	$1,751	$1,751
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,303	$373	$672	$835	$835
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,332	$603	$1,086	$1,349	$1,349
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,335	$635	$1,144	$1,421	$1,421
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,931	$884	$1,592	$1,978	$1,978
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$5,976	$1,404	$2,527	$3,139	$3,139

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q11

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	Tariff Rate 1/ (5)	Phase III Cost 1/ (6)	1Q2011 Jurisdictional Threshold 1/ (7)	SAC Rate 2/ (8)	STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,727	$568	$1,023	$1,020	$1,023
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,507	$1,212	$2,182	$2,175	$2,182
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,912	$1,191	$2,144	$2,138	$2,144
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,015	$1,520	$2,735	$2,727	$2,735
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,729	$665	$1,196	$1,193	$1,196
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,233	$2,792	$5,025	$5,010	$5,025
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,057	$997	$1,794	$1,789	$1,794
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,013	$1,507	$2,712	$2,704	$2,712
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,100	$1,717	$3,091	$3,082	$3,091
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,023	$1,562	$2,812	$2,804	$2,812
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,037	$655	$1,179	$1,175	$1,179
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,343	$1,051	$1,892	$1,887	$1,892
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$7,988	$2,174	$3,914	$3,902	$3,914
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,068	$1,079	$1,942	$1,936	$1,942
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,645	$2,337	$4,207	$4,194	$4,207
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,112	$2,460	$4,428	$4,415	$4,428
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,910	$828	$1,491	$1,486	$1,491
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,603	$1,103	$1,986	$1,980	$1,986
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,912	$1,192	$2,146	$2,140	$2,146
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,556	$1,635	$2,944	$2,935	$2,944
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,826	$1,880	$3,384	$3,373	$3,384
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$4,975	$1,220	$2,195	$2,189	$2,195
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,051	$746	$1,342	$1,338	$1,342
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,082	$1,812	$3,262	$3,252	$3,262
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,029	$1,404	$2,527	$2,519	$2,527
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,483	$1,868	$3,363	$3,353	$3,363
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,779	$1,716	$3,090	$3,080	$3,090
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,631	$751	$1,352	$1,348	$1,352
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,807	$1,180	$2,124	$2,118	$2,124
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,643	$2,108	$3,794	$3,783	$3,794
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,015	$1,507	$2,712	$2,704	$2,712
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,297	$1,580	$2,845	$2,836	$2,845
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,695	$2,247	$4,045	$4,033	$4,045
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,015	$1,509	$2,716	$2,708	$2,716
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,015	$1,516	$2,729	$2,720	$2,729
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,161	$1,249	$2,248	$2,241	$2,248
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$7,970	$2,293	$4,127	$4,115	$4,127
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,009	$1,462	$2,632	$2,624	$2,632
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,491	$1,362	$2,451	$2,444	$2,451
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,526	$978	$1,761	$1,755	$1,761
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,037	$655	$1,179	$1,176	$1,179
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,575	$1,589	$2,861	$2,852	$2,861
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,460	$436	$785	$782	$785
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,807	$1,180	$2,124	$2,118	$2,124
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,058	$1,003	$1,806	$1,800	$1,806
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,695	$2,238	$4,029	$4,017	$4,029
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$9,827	$3,049	$5,488	$5,472	$5,488
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,643	$2,108	$3,794	$3,783	$3,794
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,448	$2,025	$3,644	$3,633	$3,644
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,898	$1,134	$2,042	$2,036	$2,042
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,818	$1,952	$3,514	$3,503	$3,514
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$4,960	$1,122	$2,020	$2,014	$2,020
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,885	$1,713	$3,083	$3,074	$3,083
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,894	$1,779	$3,202	$3,193	$3,202
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,889	$1,751	$3,151	$3,142	$3,151
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,037	$655	$1,179	$1,175	$1,179
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,467	$1,192	$2,145	$2,139	$2,145
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,112	$1,417	$2,551	$2,544	$2,551
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,196	$1,173	$2,111	$2,105	$2,111
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,237	$1,394	$2,509	$2,502	$2,509
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,015	$1,507	$2,712	$2,704	$2,712
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,479	$3,087	$5,556	$5,539	$5,556
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,010	$827	$1,488	$1,483	$1,488
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,437	$1,518	$2,733	$2,725	$2,733
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,121	$1,355	$2,438	$2,431	$2,438
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,100	$1,931	$3,476	$3,465	$3,476
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,362	$1,081	$1,946	$1,940	$1,946
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,101	$1,213	$2,184	$2,178	$2,184
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,170	$660	$1,189	$1,185	$1,189
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,071	$1,866	$3,359	$3,349	$3,359
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,071	$1,863	$3,354	$3,344	$3,354
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,068	$1,077	$1,939	$1,934	$1,939
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,009	$1,462	$2,632	$2,624	$2,632
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,082	$1,809	$3,256	$3,246	$3,256
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,691	$2,213	$3,983	$3,971	$3,983

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q11

	Origin 1/		Destination		Railroad(s)	Commodity	1Q2011 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,826	$1,880	$3,384	$3,373	$3,384
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,826	$1,882	$3,387	$3,377	$3,387
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$4,960	$1,122	$2,020	$2,014	$2,020
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,129	$1,397	$2,515	$2,508	$2,515
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,129	$1,397	$2,515	$2,508	$2,515
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,872	$1,648	$2,967	$2,958	$2,967
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,448	$2,025	$3,644	$3,633	$3,644
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,010	$826	$1,487	$1,482	$1,487
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,304	$383	$689	$687	$689
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,341	$633	$1,139	$1,136	$1,139
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,345	$668	$1,203	$1,199	$1,203
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,950	$939	$1,690	$1,685	$1,690
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,013	$1,503	$2,705	$2,697	$2,705

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q11

	Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	2Q2011 Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$592	$1,065	$1,062	$1,065
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,581	$1,262	$2,272	$2,265	$2,272
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,971	$1,240	$2,233	$2,226	$2,233
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,097	$1,582	$2,848	$2,840	$2,848
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,752	$692	$1,246	$1,242	$1,246
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,396	$2,907	$5,233	$5,217	$5,233
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,103	$1,038	$1,869	$1,863	$1,869
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,094	$1,569	$2,824	$2,816	$2,824
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,211	$1,788	$3,219	$3,209	$3,219
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,108	$1,627	$2,928	$2,919	$2,928
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,074	$682	$1,228	$1,224	$1,228
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,392	$1,095	$1,971	$1,965	$1,971
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,133	$2,264	$4,076	$4,064	$4,076
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,120	$1,123	$2,022	$2,016	$2,022
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,785	$2,434	$4,381	$4,367	$4,381
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,250	$2,562	$4,611	$4,597	$4,611
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,944	$862	$1,552	$1,548	$1,552
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,657	$1,149	$2,068	$2,062	$2,068
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,971	$1,242	$2,235	$2,228	$2,235
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,646	$1,703	$3,065	$3,056	$3,065
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,951	$1,957	$3,523	$3,513	$3,523
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,037	$1,270	$2,286	$2,279	$2,286
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,093	$777	$1,398	$1,394	$1,398
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,184	$1,887	$3,397	$3,387	$3,397
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,117	$1,462	$2,631	$2,623	$2,631
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,590	$1,946	$3,502	$3,492	$3,502
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,867	$1,787	$3,217	$3,208	$3,217
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,660	$782	$1,408	$1,403	$1,408
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,866	$1,229	$2,212	$2,205	$2,212
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,783	$2,195	$3,951	$3,939	$3,951
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,096	$1,569	$2,825	$2,816	$2,825
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,399	$1,646	$2,962	$2,953	$2,962
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,827	$2,340	$4,212	$4,200	$4,212
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,097	$1,571	$2,828	$2,820	$2,828
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,097	$1,579	$2,841	$2,833	$2,841
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,225	$1,300	$2,341	$2,334	$2,341
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,106	$2,388	$4,298	$4,285	$4,298
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,088	$1,522	$2,740	$2,732	$2,740
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,562	$1,418	$2,552	$2,545	$2,552
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,586	$1,018	$1,833	$1,828	$1,833
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,074	$682	$1,228	$1,224	$1,228
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,661	$1,655	$2,979	$2,970	$2,979
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,466	$454	$817	$815	$817
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,866	$1,229	$2,212	$2,205	$2,212
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,104	$1,045	$1,880	$1,875	$1,880
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,828	$2,331	$4,196	$4,183	$4,196
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,019	$3,175	$5,715	$5,698	$5,715
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,783	$2,195	$3,951	$3,939	$3,951
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,566	$2,108	$3,795	$3,783	$3,795
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,951	$1,181	$2,126	$2,120	$2,126
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,926	$2,033	$3,659	$3,648	$3,659
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,015	$1,169	$2,104	$2,097	$2,104
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,980	$1,784	$3,210	$3,201	$3,210
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,994	$1,853	$3,335	$3,325	$3,335
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,987	$1,823	$3,282	$3,272	$3,282
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,074	$682	$1,228	$1,224	$1,228
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,527	$1,241	$2,234	$2,227	$2,234
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,184	$1,476	$2,657	$2,649	$2,657
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,256	$1,221	$2,199	$2,192	$2,199
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,310	$1,452	$2,613	$2,605	$2,613
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,096	$1,569	$2,825	$2,816	$2,825
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,689	$3,214	$5,786	$5,768	$5,786
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,043	$861	$1,549	$1,545	$1,549
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,520	$1,581	$2,846	$2,838	$2,846
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,192	$1,411	$2,539	$2,531	$2,539
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,211	$2,011	$3,619	$3,608	$3,619
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,413	$1,126	$2,026	$2,020	$2,026
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,177	$1,264	$2,274	$2,268	$2,274
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,192	$688	$1,238	$1,234	$1,238
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,179	$1,944	$3,498	$3,488	$3,498
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,179	$1,940	$3,493	$3,482	$3,493
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,120	$1,122	$2,020	$2,014	$2,020
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,088	$1,522	$2,740	$2,732	$2,740
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,184	$1,884	$3,391	$3,381	$3,391
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,822	$2,304	$4,148	$4,135	$4,148

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q11

Origin 1/		Destination		Railroad(s)	Commodity	2Q2011 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,951	$1,957	$3,523	$3,513	$3,523
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,951	$1,960	$3,527	$3,517	$3,527
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,015	$1,169	$2,104	$2,097	$2,104
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,203	$1,455	$2,619	$2,611	$2,619
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,203	$1,455	$2,619	$2,611	$2,619
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,962	$1,716	$3,089	$3,080	$3,089
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,566	$2,108	$3,795	$3,783	$3,795
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,043	$860	$1,548	$1,544	$1,548
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$399	$718	$715	$718
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,360	$659	$1,186	$1,183	$1,186
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,366	$696	$1,252	$1,249	$1,252
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,991	$978	$1,760	$1,755	$1,760
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,094	$1,565	$2,817	$2,809	$2,817

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q11

	Origin 1/		Destination		Railroad(s)	Commodity	3Q2011 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$590	$1,062	$1,059	$1,062
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,596	$1,259	$2,266	$2,260	$2,266
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,983	$1,237	$2,227	$2,220	$2,227
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,113	$1,579	$2,841	$2,833	$2,841
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,756	$690	$1,243	$1,239	$1,243
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,429	$2,900	$5,220	$5,205	$5,220
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,112	$1,036	$1,864	$1,858	$1,864
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,110	$1,565	$2,817	$2,809	$2,817
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,233	$1,784	$3,211	$3,201	$3,211
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,126	$1,623	$2,921	$2,912	$2,921
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,081	$680	$1,225	$1,221	$1,225
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,402	$1,092	$1,966	$1,960	$1,966
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,162	$2,259	$4,066	$4,054	$4,066
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,130	$1,121	$2,017	$2,011	$2,017
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,814	$2,428	$4,370	$4,357	$4,370
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,277	$2,556	$4,600	$4,586	$4,600
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,951	$860	$1,548	$1,544	$1,548
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,668	$1,146	$2,063	$2,057	$2,063
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,983	$1,239	$2,230	$2,223	$2,230
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,665	$1,699	$3,058	$3,049	$3,058
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,976	$1,953	$3,515	$3,504	$3,515
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,049	$1,267	$2,281	$2,274	$2,281
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,102	$775	$1,394	$1,390	$1,394
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,205	$1,883	$3,389	$3,379	$3,389
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,135	$1,458	$2,625	$2,617	$2,625
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,612	$1,941	$3,494	$3,483	$3,494
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,885	$1,783	$3,209	$3,200	$3,209
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,666	$780	$1,404	$1,400	$1,404
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,878	$1,226	$2,207	$2,200	$2,207
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,811	$2,190	$3,941	$3,929	$3,941
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,113	$1,565	$2,818	$2,809	$2,818
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,419	$1,642	$2,955	$2,946	$2,955
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,854	$2,335	$4,202	$4,190	$4,202
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,113	$1,568	$2,822	$2,813	$2,822
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,113	$1,575	$2,834	$2,826	$2,834
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,238	$1,297	$2,335	$2,328	$2,335
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,133	$2,382	$4,287	$4,275	$4,287
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,104	$1,519	$2,734	$2,726	$2,734
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,576	$1,414	$2,546	$2,538	$2,546
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,598	$1,016	$1,829	$1,823	$1,829
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,081	$680	$1,225	$1,221	$1,225
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,679	$1,651	$2,972	$2,963	$2,972
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,467	$453	$815	$813	$815
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,878	$1,226	$2,207	$2,200	$2,207
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,114	$1,042	$1,876	$1,870	$1,876
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,855	$2,325	$4,186	$4,173	$4,186
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,057	$3,167	$5,701	$5,684	$5,701
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,811	$2,190	$3,941	$3,929	$3,941
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,590	$2,103	$3,786	$3,774	$3,786
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,961	$1,178	$2,121	$2,115	$2,121
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,948	$2,028	$3,650	$3,639	$3,650
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,026	$1,166	$2,099	$2,092	$2,099
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,999	$1,779	$3,203	$3,193	$3,203
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,015	$1,848	$3,327	$3,317	$3,327
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,006	$1,819	$3,274	$3,264	$3,274
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,081	$680	$1,225	$1,221	$1,225
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,539	$1,238	$2,228	$2,222	$2,228
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,199	$1,472	$2,650	$2,642	$2,650
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,268	$1,219	$2,193	$2,187	$2,193
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,325	$1,448	$2,607	$2,599	$2,607
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,113	$1,565	$2,818	$2,809	$2,818
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,731	$3,207	$5,772	$5,754	$5,772
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,050	$859	$1,546	$1,541	$1,546
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,536	$1,577	$2,839	$2,831	$2,839
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,207	$1,407	$2,533	$2,525	$2,533
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,233	$2,006	$3,610	$3,600	$3,610
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,424	$1,123	$2,021	$2,015	$2,021
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,193	$1,260	$2,269	$2,262	$2,269
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,196	$686	$1,235	$1,231	$1,235
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,201	$1,939	$3,490	$3,479	$3,490
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,201	$1,936	$3,484	$3,474	$3,484
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,130	$1,119	$2,015	$2,009	$2,015
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,104	$1,519	$2,734	$2,726	$2,734
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,205	$1,879	$3,383	$3,372	$3,383
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,849	$2,299	$4,138	$4,125	$4,138

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q11

	Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
							3Q2011				
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,976	$1,953	$3,515	$3,504	$3,515
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,976	$1,955	$3,519	$3,508	$3,519
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,026	$1,166	$2,099	$2,092	$2,099
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,218	$1,452	$2,613	$2,605	$2,613
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,218	$1,452	$2,613	$2,605	$2,613
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,980	$1,712	$3,082	$3,073	$3,082
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,590	$2,103	$3,786	$3,774	$3,786
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,050	$858	$1,545	$1,540	$1,545
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,306	$398	$716	$714	$716
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,364	$657	$1,183	$1,180	$1,183
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,370	$694	$1,249	$1,246	$1,249
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$5,000	$975	$1,756	$1,750	$1,756
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,110	$1,561	$2,810	$2,802	$2,810

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q11

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	Tariff Rate 1/ (5)	Phase III Cost 1/ (6)	4Q2011 Jurisdictional Threshold 1/ (7)	SAC Rate 2/ (8)	STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$586	$1,055	$1,052	$1,055
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,576	$1,250	$2,251	$2,244	$2,251
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,967	$1,229	$2,212	$2,205	$2,212
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,091	$1,568	$2,822	$2,813	$2,822
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,750	$686	$1,234	$1,231	$1,234
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,385	$2,880	$5,184	$5,169	$5,184
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,100	$1,028	$1,851	$1,846	$1,851
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,088	$1,554	$2,798	$2,790	$2,798
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,203	$1,772	$3,189	$3,179	$3,189
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,103	$1,612	$2,901	$2,892	$2,901
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,071	$676	$1,216	$1,213	$1,216
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,388	$1,085	$1,952	$1,946	$1,952
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,123	$2,243	$4,038	$4,026	$4,038
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,116	$1,113	$2,003	$1,997	$2,003
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,776	$2,411	$4,340	$4,327	$4,340
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,240	$2,538	$4,568	$4,555	$4,568
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,941	$854	$1,538	$1,533	$1,538
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,653	$1,138	$2,049	$2,043	$2,049
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,967	$1,230	$2,214	$2,208	$2,214
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,640	$1,687	$3,037	$3,028	$3,037
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,943	$1,939	$3,491	$3,480	$3,491
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,033	$1,258	$2,265	$2,258	$2,265
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,091	$769	$1,385	$1,381	$1,385
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,177	$1,870	$3,365	$3,355	$3,365
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,111	$1,448	$2,607	$2,599	$2,607
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,583	$1,928	$3,470	$3,459	$3,470
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,861	$1,771	$3,187	$3,178	$3,187
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,658	$775	$1,395	$1,390	$1,395
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,862	$1,217	$2,191	$2,185	$2,191
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,773	$2,174	$3,914	$3,902	$3,914
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,091	$1,555	$2,798	$2,790	$2,798
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,392	$1,630	$2,935	$2,926	$2,935
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,819	$2,318	$4,173	$4,161	$4,173
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,091	$1,557	$2,802	$2,794	$2,802
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,091	$1,564	$2,815	$2,807	$2,815
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,221	$1,288	$2,319	$2,312	$2,319
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,097	$2,365	$4,258	$4,245	$4,258
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,083	$1,508	$2,715	$2,707	$2,715
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,557	$1,405	$2,528	$2,521	$2,528
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,582	$1,009	$1,816	$1,811	$1,816
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,071	$676	$1,216	$1,213	$1,216
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,656	$1,640	$2,952	$2,943	$2,952
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,465	$450	$809	$807	$809
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,862	$1,217	$2,191	$2,185	$2,191
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,101	$1,035	$1,863	$1,857	$1,863
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,819	$2,309	$4,157	$4,144	$4,157
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,006	$3,146	$5,662	$5,645	$5,662
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,773	$2,174	$3,914	$3,902	$3,914
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,558	$2,089	$3,760	$3,748	$3,760
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,947	$1,170	$2,106	$2,100	$2,106
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,919	$2,014	$3,625	$3,614	$3,625
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,011	$1,158	$2,084	$2,078	$2,084
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,974	$1,767	$3,180	$3,171	$3,180
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,988	$1,835	$3,304	$3,294	$3,304
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,980	$1,806	$3,251	$3,241	$3,251
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,071	$676	$1,216	$1,213	$1,216
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,523	$1,229	$2,213	$2,206	$2,213
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,179	$1,462	$2,632	$2,624	$2,632
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,252	$1,210	$2,178	$2,172	$2,178
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,305	$1,438	$2,589	$2,581	$2,589
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,091	$1,555	$2,798	$2,790	$2,798
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,675	$3,184	$5,732	$5,715	$5,732
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,041	$853	$1,535	$1,530	$1,535
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,514	$1,566	$2,820	$2,811	$2,820
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,188	$1,397	$2,515	$2,508	$2,515
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,203	$1,992	$3,586	$3,575	$3,586
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,410	$1,115	$2,007	$2,001	$2,007
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,172	$1,252	$2,253	$2,247	$2,253
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,190	$681	$1,226	$1,223	$1,226
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,172	$1,925	$3,466	$3,455	$3,466
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,172	$1,922	$3,460	$3,450	$3,460
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,116	$1,112	$2,001	$1,995	$2,001
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,083	$1,508	$2,715	$2,707	$2,715
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,177	$1,866	$3,359	$3,349	$3,359
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,814	$2,283	$4,109	$4,097	$4,109

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q11

	Origin 1/		Destination		Railroad(s)	Commodity	4Q2011 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,943	$1,939	$3,491	$3,480	$3,491
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,943	$1,941	$3,495	$3,484	$3,495
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,011	$1,158	$2,084	$2,078	$2,084
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,198	$1,442	$2,595	$2,587	$2,595
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,198	$1,442	$2,595	$2,587	$2,595
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,956	$1,700	$3,061	$3,051	$3,061
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,558	$2,089	$3,760	$3,748	$3,760
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,041	$852	$1,534	$1,529	$1,534
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$395	$711	$709	$711
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,359	$653	$1,175	$1,172	$1,175
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,364	$689	$1,241	$1,237	$1,241
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,989	$969	$1,744	$1,738	$1,744
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,088	$1,551	$2,791	$2,783	$2,791

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q12

	Origin 1/		Destination		Railroad(s)	Commodity	1Q2012 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$590	$1,062	$1,029	$1,062
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,586	$1,270	$2,287	$2,214	$2,287
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,975	$1,245	$2,241	$2,170	$2,241
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,102	$1,588	$2,858	$2,768	$2,858
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,753	$695	$1,251	$1,211	$1,251
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,407	$2,917	$5,250	$5,083	$5,250
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,106	$1,042	$1,876	$1,816	$1,876
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,099	$1,574	$2,834	$2,744	$2,834
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,218	$1,798	$3,236	$3,134	$3,236
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,114	$1,633	$2,939	$2,846	$2,939
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,076	$688	$1,239	$1,200	$1,239
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,395	$1,099	$1,978	$1,915	$1,978
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,142	$2,276	$4,096	$3,967	$4,096
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,123	$1,127	$2,030	$1,965	$2,030
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,795	$2,442	$4,396	$4,256	$4,396
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,259	$2,571	$4,628	$4,481	$4,628
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,946	$866	$1,558	$1,509	$1,558
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,660	$1,153	$2,076	$2,010	$2,076
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,975	$1,246	$2,243	$2,172	$2,243
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,652	$1,709	$3,076	$2,979	$3,076
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,959	$1,965	$3,537	$3,425	$3,537
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,041	$1,275	$2,295	$2,222	$2,295
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,096	$783	$1,410	$1,365	$1,410
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,191	$1,894	$3,409	$3,301	$3,409
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,123	$1,470	$2,647	$2,563	$2,647
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,597	$1,952	$3,514	$3,403	$3,514
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,873	$1,794	$3,229	$3,127	$3,229
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,662	$785	$1,413	$1,369	$1,413
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,870	$1,233	$2,220	$2,150	$2,220
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,792	$2,206	$3,971	$3,845	$3,971
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,102	$1,575	$2,835	$2,745	$2,835
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,405	$1,655	$2,979	$2,885	$2,979
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,836	$2,348	$4,227	$4,093	$4,227
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,102	$1,577	$2,839	$2,749	$2,839
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,102	$1,584	$2,851	$2,761	$2,851
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,229	$1,305	$2,349	$2,275	$2,349
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,115	$2,396	$4,312	$4,176	$4,312
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,093	$1,528	$2,750	$2,663	$2,750
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,567	$1,423	$2,561	$2,480	$2,561
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,590	$1,026	$1,847	$1,788	$1,847
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,076	$689	$1,239	$1,200	$1,239
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,667	$1,661	$2,990	$2,895	$2,990
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,466	$456	$821	$795	$821
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,870	$1,233	$2,220	$2,150	$2,220
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,107	$1,049	$1,888	$1,828	$1,888
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,837	$2,339	$4,210	$4,077	$4,210
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,031	$3,186	$5,735	$5,553	$5,735
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,792	$2,206	$3,971	$3,845	$3,971
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,574	$2,116	$3,808	$3,687	$3,808
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,954	$1,185	$2,134	$2,066	$2,134
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,933	$2,041	$3,673	$3,557	$3,673
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,019	$1,173	$2,112	$2,045	$2,112
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,986	$1,790	$3,222	$3,119	$3,222
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,001	$1,859	$3,346	$3,240	$3,346
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,993	$1,830	$3,293	$3,189	$3,293
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,076	$688	$1,239	$1,200	$1,239
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,531	$1,246	$2,242	$2,171	$2,242
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,189	$1,481	$2,666	$2,582	$2,666
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,260	$1,226	$2,207	$2,137	$2,207
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,315	$1,457	$2,622	$2,539	$2,622
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,102	$1,575	$2,835	$2,745	$2,835
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,703	$3,229	$5,812	$5,628	$5,812
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,046	$864	$1,555	$1,506	$1,555
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,525	$1,587	$2,856	$2,766	$2,856
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,197	$1,416	$2,548	$2,468	$2,548
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,218	$2,018	$3,632	$3,517	$3,632
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,417	$1,130	$2,034	$1,969	$2,034
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,182	$1,272	$2,289	$2,217	$2,289
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,193	$691	$1,243	$1,204	$1,243
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,186	$1,950	$3,511	$3,399	$3,511
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,186	$1,947	$3,505	$3,394	$3,505
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,123	$1,126	$2,027	$1,963	$2,027
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,093	$1,528	$2,750	$2,663	$2,750
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,191	$1,890	$3,403	$3,295	$3,403
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,831	$2,312	$4,162	$4,030	$4,162

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q12

						1Q2012				
						Tariff	Phase III	Jurisdictional	SAC	STB Maximum
Origin 1/		Destination		Railroad(s)	Commodity	Rate 1/	Cost 1/	Threshold 1/	Rate 2/	Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,959	$1,965	$3,537	$3,425	$3,537
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,959	$1,967	$3,541	$3,429	$3,541
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,019	$1,173	$2,112	$2,045	$2,112
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,208	$1,460	$2,629	$2,545	$2,629
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,208	$1,460	$2,629	$2,545	$2,629
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,968	$1,722	$3,100	$3,002	$3,100
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,574	$2,116	$3,808	$3,687	$3,808
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,046	$864	$1,554	$1,505	$1,554
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$400	$721	$698	$721
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,361	$662	$1,191	$1,153	$1,191
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,367	$698	$1,257	$1,217	$1,257
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,994	$981	$1,766	$1,710	$1,766
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,099	$1,571	$2,827	$2,738	$2,827

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q12

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	2Q2012 Tariff Rate 1/ (5)	2Q2012 Phase III Cost 1/ (6)	2Q2012 Jurisdictional Threshold 1/ (7)	2Q2012 SAC Rate 2/ (8)	2Q2012 STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$599	$1,078	$1,044	$1,078
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,606	$1,289	$2,319	$2,246	$2,319
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$4,990	$1,263	$2,273	$2,201	$2,273
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,124	$1,611	$2,899	$2,807	$2,899
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,759	$705	$1,269	$1,229	$1,269
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,451	$2,959	$5,325	$5,157	$5,325
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,118	$1,057	$1,903	$1,842	$1,903
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,121	$1,597	$2,875	$2,784	$2,875
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,248	$1,824	$3,283	$3,179	$3,283
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,137	$1,656	$2,981	$2,887	$2,981
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,086	$698	$1,257	$1,217	$1,257
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,408	$1,115	$2,006	$1,943	$2,006
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,181	$2,309	$4,155	$4,024	$4,155
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,137	$1,144	$2,059	$1,994	$2,059
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,832	$2,477	$4,459	$4,318	$4,459
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,295	$2,608	$4,694	$4,546	$4,694
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,955	$878	$1,581	$1,531	$1,581
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,675	$1,170	$2,106	$2,039	$2,106
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$4,990	$1,264	$2,275	$2,203	$2,275
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,677	$1,734	$3,121	$3,022	$3,121
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,993	$1,994	$3,588	$3,475	$3,588
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,057	$1,293	$2,328	$2,254	$2,328
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,108	$794	$1,430	$1,385	$1,430
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,218	$1,921	$3,458	$3,348	$3,458
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,147	$1,492	$2,685	$2,600	$2,685
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,626	$1,981	$3,565	$3,452	$3,565
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,897	$1,820	$3,276	$3,172	$3,276
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,669	$796	$1,434	$1,388	$1,434
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,885	$1,251	$2,252	$2,181	$2,252
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,829	$2,238	$4,028	$3,901	$4,028
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,123	$1,597	$2,875	$2,784	$2,875
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,433	$1,679	$3,022	$2,926	$3,022
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,872	$2,382	$4,288	$4,152	$4,288
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,124	$1,600	$2,879	$2,788	$2,879
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,124	$1,607	$2,892	$2,801	$2,892
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,247	$1,324	$2,383	$2,308	$2,383
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,151	$2,430	$4,374	$4,236	$4,374
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,114	$1,550	$2,790	$2,701	$2,790
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,585	$1,443	$2,598	$2,516	$2,598
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,605	$1,041	$1,873	$1,814	$1,873
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,086	$698	$1,257	$1,217	$1,257
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,690	$1,685	$3,033	$2,937	$3,033
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,468	$462	$832	$806	$832
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,885	$1,251	$2,252	$2,181	$2,252
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,120	$1,064	$1,915	$1,854	$1,915
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,872	$2,373	$4,271	$4,135	$4,271
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,083	$3,232	$5,817	$5,633	$5,817
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,829	$2,238	$4,028	$3,901	$4,028
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,606	$2,146	$3,863	$3,741	$3,863
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$4,968	$1,203	$2,165	$2,096	$2,165
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$5,962	$2,070	$3,726	$3,608	$3,726
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,033	$1,190	$2,142	$2,074	$2,142
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$6,012	$1,816	$3,268	$3,164	$3,268
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,028	$1,886	$3,394	$3,287	$3,394
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,019	$1,856	$3,341	$3,235	$3,341
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,086	$698	$1,257	$1,217	$1,257
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,547	$1,264	$2,274	$2,202	$2,274
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,208	$1,502	$2,704	$2,619	$2,704
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,276	$1,244	$2,239	$2,168	$2,239
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,335	$1,478	$2,660	$2,576	$2,660
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,123	$1,597	$2,875	$2,784	$2,875
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,758	$3,275	$5,896	$5,709	$5,896
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,054	$877	$1,578	$1,528	$1,578
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,547	$1,610	$2,897	$2,806	$2,897
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,216	$1,436	$2,585	$2,503	$2,585
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,248	$2,047	$3,684	$3,567	$3,684
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,576	$1,146	$2,063	$1,997	$2,063
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,203	$1,290	$2,322	$2,249	$2,322
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,199	$700	$1,261	$1,221	$1,261
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,215	$1,978	$3,561	$3,448	$3,561
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,215	$1,975	$3,555	$3,443	$3,555
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,137	$1,142	$2,056	$1,991	$2,056
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,114	$1,550	$2,790	$2,701	$2,790
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,218	$1,918	$3,452	$3,342	$3,452
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,866	$2,346	$4,222	$4,088	$4,222
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,993	$1,994	$3,588	$3,475	$3,588
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,993	$1,996	$3,592	$3,479	$3,592

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q12

	Origin 1/		Destination		Railroad(s)	Commodity	2Q2012 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,033	$1,190	$2,142	$2,074	$2,142
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,228	$1,481	$2,667	$2,582	$2,667
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,228	$1,481	$2,667	$2,582	$2,667
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,991	$1,747	$3,145	$3,045	$3,145
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,606	$2,146	$3,863	$3,741	$3,863
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,054	$876	$1,577	$1,527	$1,577
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,306	$406	$731	$708	$731
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,367	$671	$1,208	$1,170	$1,208
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,373	$708	$1,275	$1,235	$1,275
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$5,005	$995	$1,792	$1,735	$1,792
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,121	$1,593	$2,868	$2,777	$2,868

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q12

	Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	3Q2012 Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$590	$1,062	$1,028	$1,062
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,576	$1,270	$2,286	$2,213	$2,286
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,058	$1,244	$2,240	$2,169	$2,240
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$6,292	$1,587	$2,857	$2,767	$2,857
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,750	$695	$1,251	$1,211	$1,251
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,385	$2,916	$5,248	$5,082	$5,248
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,222	$1,042	$1,875	$1,816	$1,875
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$6,289	$1,574	$2,833	$2,743	$2,833
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$7,400	$1,797	$3,235	$3,133	$3,235
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$6,303	$1,632	$2,938	$2,845	$2,938
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,194	$688	$1,239	$1,200	$1,239
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$4,523	$1,098	$1,977	$1,914	$1,977
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,252	$2,275	$4,095	$3,965	$4,095
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,239	$1,127	$2,029	$1,965	$2,029
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,776	$2,441	$4,394	$4,255	$4,394
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,240	$2,570	$4,626	$4,480	$4,626
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,941	$866	$1,558	$1,509	$1,558
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,653	$1,153	$2,075	$2,009	$2,075
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,058	$1,246	$2,242	$2,171	$2,242
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,640	$1,709	$3,075	$2,978	$3,075
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,943	$1,965	$3,536	$3,424	$3,536
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,033	$1,274	$2,294	$2,221	$2,294
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,213	$783	$1,409	$1,365	$1,409
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$7,373	$1,893	$3,408	$3,300	$3,408
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$6,312	$1,470	$2,646	$2,562	$2,646
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,583	$1,952	$3,513	$3,402	$3,513
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$3,971	$1,793	$3,228	$3,126	$3,228
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$3,722	$785	$1,413	$1,368	$1,413
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,862	$1,233	$2,220	$2,149	$2,220
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,773	$2,206	$3,970	$3,844	$3,970
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$6,291	$1,574	$2,834	$2,744	$2,834
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,392	$1,655	$2,978	$2,884	$2,978
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$7,945	$2,348	$4,226	$4,092	$4,226
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$6,292	$1,576	$2,838	$2,748	$2,838
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$6,292	$1,584	$2,851	$2,760	$2,851
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$5,456	$1,305	$2,349	$2,274	$2,349
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,226	$2,395	$4,311	$4,174	$4,311
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$6,283	$1,527	$2,749	$2,662	$2,749
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,557	$1,423	$2,561	$2,479	$2,561
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,582	$1,026	$1,846	$1,788	$1,846
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,194	$688	$1,239	$1,200	$1,239
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,656	$1,660	$2,989	$2,894	$2,989
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,465	$456	$820	$794	$820
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,862	$1,233	$2,220	$2,149	$2,220
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,224	$1,048	$1,887	$1,827	$1,887
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$7,946	$2,338	$4,209	$4,075	$4,209
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,006	$3,185	$5,733	$5,551	$5,733
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,773	$2,206	$3,970	$3,844	$3,970
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,558	$2,115	$3,807	$3,686	$3,807
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,038	$1,185	$2,133	$2,066	$2,133
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,090	$2,040	$3,672	$3,556	$3,672
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,011	$1,173	$2,111	$2,044	$2,111
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,974	$1,789	$3,221	$3,119	$3,221
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$5,988	$1,858	$3,345	$3,239	$3,345
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$5,980	$1,829	$3,292	$3,188	$3,292
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,194	$688	$1,239	$1,200	$1,239
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,523	$1,245	$2,241	$2,170	$2,241
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,302	$1,481	$2,665	$2,581	$2,665
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$3,386	$1,226	$2,206	$2,136	$2,206
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,305	$1,456	$2,622	$2,539	$2,622
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$6,291	$1,574	$2,834	$2,744	$2,834
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,675	$3,228	$5,810	$5,626	$5,810
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,041	$864	$1,555	$1,506	$1,555
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,514	$1,586	$2,855	$2,765	$2,855
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,188	$1,415	$2,548	$2,467	$2,548
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$7,400	$2,017	$3,631	$3,516	$3,631
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,594	$1,129	$2,033	$1,968	$2,033
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,172	$1,271	$2,289	$2,216	$2,289
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,190	$690	$1,243	$1,203	$1,243
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$6,372	$1,950	$3,509	$3,398	$3,509
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$6,372	$1,947	$3,504	$3,393	$3,504
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,239	$1,126	$2,027	$1,962	$2,027
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$6,283	$1,527	$2,749	$2,662	$2,749
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$7,373	$1,890	$3,402	$3,294	$3,402
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$7,940	$2,312	$4,161	$4,029	$4,161
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,943	$1,965	$3,536	$3,424	$3,536
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,943	$1,967	$3,540	$3,428	$3,540

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q12

	Origin 1/		Destination		Railroad(s)	Commodity	3Q2012 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,011	$1,173	$2,111	$2,044	$2,111
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,198	$1,460	$2,628	$2,545	$2,628
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,198	$1,460	$2,628	$2,545	$2,628
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,956	$1,722	$3,099	$3,001	$3,099
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,558	$2,115	$3,807	$3,686	$3,807
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,041	$863	$1,554	$1,505	$1,554
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$400	$720	$698	$720
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,359	$661	$1,190	$1,153	$1,190
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,364	$698	$1,257	$1,217	$1,257
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,989	$981	$1,766	$1,710	$1,766
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$6,289	$1,570	$2,826	$2,737	$2,826

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q12

	Origin 1/		Destination		Railroad(s)	Commodity	4Q2012 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$599	$1,078	$1,044	$1,078
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,606	$1,289	$2,321	$2,248	$2,321
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,516	$1,264	$2,275	$2,203	$2,275
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$7,278	$1,612	$2,901	$2,809	$2,901
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,759	$706	$1,270	$1,230	$1,270
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,451	$2,961	$5,329	$5,160	$5,329
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,823	$1,058	$1,904	$1,844	$1,904
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$7,275	$1,598	$2,877	$2,786	$2,877
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$8,376	$1,825	$3,285	$3,181	$3,285
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$7,291	$1,657	$2,983	$2,888	$2,983
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,791	$699	$1,258	$1,218	$1,258
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$5,181	$1,115	$2,008	$1,944	$2,008
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,923	$2,310	$4,158	$4,027	$4,158
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,842	$1,145	$2,060	$1,995	$2,060
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,832	$2,479	$4,462	$4,321	$4,462
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,295	$2,610	$4,698	$4,549	$4,698
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,955	$879	$1,582	$1,532	$1,582
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,675	$1,171	$2,107	$2,040	$2,107
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,516	$1,265	$2,277	$2,205	$2,277
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,677	$1,735	$3,123	$3,024	$3,123
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,993	$1,995	$3,591	$3,477	$3,591
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,057	$1,294	$2,329	$2,255	$2,329
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,813	$795	$1,431	$1,386	$1,431
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$8,346	$1,922	$3,460	$3,350	$3,460
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$7,301	$1,493	$2,687	$2,602	$2,687
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,626	$1,982	$3,567	$3,454	$3,567
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$4,112	$1,821	$3,278	$3,174	$3,278
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$4,035	$797	$1,435	$1,389	$1,435
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,885	$1,252	$2,254	$2,182	$2,254
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,829	$2,240	$4,031	$3,903	$4,031
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$7,277	$1,599	$2,877	$2,786	$2,877
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,433	$1,680	$3,024	$2,928	$3,024
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$8,600	$2,384	$4,291	$4,155	$4,291
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$7,278	$1,601	$2,881	$2,790	$2,881
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$7,278	$1,608	$2,894	$2,803	$2,894
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$6,599	$1,325	$2,385	$2,309	$2,385
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,893	$2,432	$4,377	$4,239	$4,377
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$7,268	$1,551	$2,792	$2,703	$2,792
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,585	$1,444	$2,600	$2,518	$2,600
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,605	$1,041	$1,875	$1,815	$1,875
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,791	$699	$1,258	$1,218	$1,258
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,690	$1,686	$3,035	$2,939	$3,035
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,468	$463	$833	$807	$833
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,885	$1,252	$2,254	$2,182	$2,254
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,825	$1,065	$1,916	$1,855	$1,916
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$8,600	$2,374	$4,274	$4,138	$4,274
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,083	$3,234	$5,821	$5,637	$5,821
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,829	$2,239	$4,031	$3,903	$4,031
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,606	$2,148	$3,866	$3,743	$3,866
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,494	$1,203	$2,166	$2,097	$2,166
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,297	$2,071	$3,729	$3,610	$3,729
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,033	$1,191	$2,143	$2,076	$2,143
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$6,012	$1,817	$3,270	$3,167	$3,270
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,028	$1,887	$3,397	$3,289	$3,397
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,019	$1,857	$3,343	$3,237	$3,343
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,791	$699	$1,258	$1,218	$1,258
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,547	$1,264	$2,276	$2,204	$2,276
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,913	$1,503	$2,706	$2,620	$2,706
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$4,048	$1,245	$2,240	$2,169	$2,240
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,335	$1,479	$2,662	$2,578	$2,662
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$7,277	$1,599	$2,877	$2,786	$2,877
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,758	$3,278	$5,900	$5,713	$5,900
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,054	$877	$1,579	$1,529	$1,579
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,547	$1,611	$2,899	$2,808	$2,899
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,216	$1,437	$2,587	$2,505	$2,587
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$8,376	$2,048	$3,687	$3,570	$3,687
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,614	$1,147	$2,064	$1,999	$2,064
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,203	$1,291	$2,324	$2,250	$2,324
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,199	$701	$1,262	$1,222	$1,262
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$7,369	$1,980	$3,564	$3,451	$3,564
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$7,369	$1,977	$3,558	$3,445	$3,558
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,842	$1,143	$2,058	$1,993	$2,058
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$7,268	$1,551	$2,792	$2,703	$2,792
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$8,346	$1,919	$3,454	$3,345	$3,454
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$8,594	$2,347	$4,225	$4,091	$4,225
105.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,993	$1,995	$3,591	$3,477	$3,591
106.	New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,993	$1,997	$3,595	$3,481	$3,595

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q12

	Origin 1/		Destination		Railroad(s)	Commodity	4Q2012 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
108.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,033	$1,191	$2,143	$2,076	$2,143
109.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,228	$1,482	$2,668	$2,584	$2,668
110.	Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,228	$1,482	$2,668	$2,584	$2,668
112.	New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,991	$1,748	$3,147	$3,047	$3,147
113.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,606	$2,148	$3,866	$3,743	$3,866
115.	Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,054	$877	$1,578	$1,528	$1,578
116.	Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,306	$406	$731	$708	$731
117.	Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,367	$671	$1,209	$1,170	$1,209
118.	Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,373	$709	$1,276	$1,236	$1,276
119.	Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$5,005	$996	$1,793	$1,736	$1,793
120.	New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$7,275	$1,594	$2,870	$2,779	$2,870

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q13

	Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	1Q2013 Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,728	$595	$1,071	$953	$1,071
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,596	$1,281	$2,305	$2,051	$2,305
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,509	$1,255	$2,259	$2,010	$2,259
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$7,267	$1,601	$2,882	$2,564	$2,882
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,756	$701	$1,261	$1,122	$1,261
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,429	$2,941	$5,293	$4,709	$5,293
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,817	$1,051	$1,891	$1,683	$1,891
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$7,264	$1,587	$2,857	$2,542	$2,857
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$8,361	$1,813	$3,263	$2,903	$3,263
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$7,280	$1,646	$2,963	$2,636	$2,963
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,786	$694	$1,249	$1,112	$1,249
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$5,175	$1,108	$1,994	$1,774	$1,994
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,904	$2,295	$4,130	$3,675	$4,130
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,835	$1,137	$2,046	$1,821	$2,046
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,814	$2,462	$4,432	$3,943	$4,432
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,277	$2,592	$4,666	$4,151	$4,666
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,951	$873	$1,571	$1,398	$1,571
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,668	$1,163	$2,093	$1,862	$2,093
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,509	$1,256	$2,262	$2,012	$2,262
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,665	$1,723	$3,102	$2,760	$3,102
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,976	$1,981	$3,567	$3,173	$3,567
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,049	$1,285	$2,314	$2,058	$2,314
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,807	$790	$1,421	$1,265	$1,421
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$8,333	$1,909	$3,437	$3,058	$3,437
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$7,289	$1,483	$2,669	$2,374	$2,669
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,612	$1,969	$3,543	$3,153	$3,543
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$4,100	$1,809	$3,256	$2,897	$3,256
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$4,032	$792	$1,425	$1,268	$1,425
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,878	$1,244	$2,239	$1,992	$2,239
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,811	$2,224	$4,004	$3,562	$4,004
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$7,267	$1,588	$2,858	$2,543	$2,858
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,419	$1,669	$3,004	$2,673	$3,004
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$8,582	$2,368	$4,262	$3,792	$4,262
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$7,267	$1,590	$2,862	$2,546	$2,862
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$7,267	$1,597	$2,875	$2,558	$2,875
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$6,590	$1,316	$2,369	$2,107	$2,369
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,875	$2,416	$4,348	$3,868	$4,348
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$7,258	$1,540	$2,773	$2,467	$2,773
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,576	$1,435	$2,582	$2,298	$2,582
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,598	$1,034	$1,862	$1,657	$1,862
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,786	$694	$1,250	$1,112	$1,250
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,679	$1,675	$3,014	$2,682	$3,014
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,467	$460	$827	$736	$827
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,878	$1,244	$2,239	$1,992	$2,239
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,819	$1,057	$1,903	$1,693	$1,903
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$8,583	$2,358	$4,245	$3,777	$4,245
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,057	$3,212	$5,782	$5,144	$5,782
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,811	$2,224	$4,004	$3,562	$4,004
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,590	$2,133	$3,840	$3,416	$3,840
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,487	$1,195	$2,151	$1,914	$2,151
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,283	$2,057	$3,703	$3,295	$3,703
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,026	$1,183	$2,129	$1,894	$2,129
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$5,999	$1,805	$3,248	$2,890	$3,248
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,015	$1,874	$3,374	$3,002	$3,374
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,006	$1,845	$3,320	$2,954	$3,320
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,786	$694	$1,249	$1,112	$1,249
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,539	$1,256	$2,261	$2,011	$2,261
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,904	$1,493	$2,688	$2,392	$2,688
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$4,040	$1,236	$2,225	$1,980	$2,225
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,325	$1,469	$2,644	$2,353	$2,644
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$7,267	$1,588	$2,858	$2,543	$2,858
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,731	$3,256	$5,860	$5,214	$5,860
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,050	$871	$1,568	$1,395	$1,568
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,536	$1,600	$2,880	$2,562	$2,880
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,207	$1,427	$2,569	$2,286	$2,569
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$8,361	$2,034	$3,662	$3,258	$3,662
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,608	$1,139	$2,050	$1,824	$2,050
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,193	$1,282	$2,308	$2,054	$2,308
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,196	$696	$1,253	$1,115	$1,253
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$7,355	$1,966	$3,540	$3,149	$3,540
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$7,355	$1,963	$3,534	$3,144	$3,534
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,835	$1,136	$2,044	$1,819	$2,044
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$7,258	$1,540	$2,773	$2,467	$2,773
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$8,333	$1,906	$3,431	$3,052	$3,431
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$8,577	$2,331	$4,196	$3,734	$4,196

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 1Q13

Origin 1/		Destination		Railroad(s)	Commodity	1Q2013 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,976	$1,981	$3,567	$3,173	$3,567
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,976	$1,984	$3,571	$3,177	$3,571
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,026	$1,183	$2,129	$1,894	$2,129
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,218	$1,472	$2,650	$2,358	$2,650
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,218	$1,472	$2,650	$2,358	$2,650
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$5,980	$1,737	$3,126	$2,781	$3,126
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,590	$2,133	$3,840	$3,416	$3,840
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,050	$871	$1,567	$1,394	$1,567
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,306	$404	$727	$646	$727
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,364	$667	$1,201	$1,068	$1,201
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,370	$704	$1,267	$1,128	$1,267
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$5,000	$989	$1,781	$1,584	$1,781
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$7,264	$1,584	$2,851	$2,536	$2,851

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q13

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	2Q2013 Tariff Rate 1/ (5)	2Q2013 Phase III Cost 1/ (6)	2Q2013 Jurisdictional Threshold 1/ (7)	2Q2013 SAC Rate 2/ (8)	2Q2013 STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,838	$591	$1,064	$947	$1,064
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,601	$1,272	$2,290	$2,038	$2,290
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,512	$1,247	$2,245	$1,997	$2,245
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$7,272	$1,591	$2,863	$2,547	$2,863
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,757	$696	$1,253	$1,115	$1,253
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,440	$2,922	$5,259	$4,679	$5,259
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,820	$1,044	$1,879	$1,672	$1,879
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$7,269	$1,577	$2,839	$2,526	$2,839
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$8,368	$1,801	$3,242	$2,884	$3,242
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$7,285	$1,635	$2,944	$2,619	$2,944
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,788	$690	$1,241	$1,104	$1,241
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$5,178	$1,101	$1,981	$1,763	$1,981
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,913	$2,280	$4,103	$3,651	$4,103
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,838	$1,129	$2,033	$1,809	$2,033
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,823	$2,446	$4,403	$3,918	$4,403
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,286	$2,575	$4,636	$4,124	$4,636
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,953	$867	$1,561	$1,389	$1,561
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,671	$1,155	$2,079	$1,850	$2,079
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,512	$1,248	$2,247	$1,999	$2,247
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,671	$1,712	$3,082	$2,742	$3,082
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,984	$1,969	$3,544	$3,153	$3,544
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,053	$1,277	$2,299	$2,045	$2,299
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,810	$785	$1,412	$1,256	$1,412
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$8,339	$1,897	$3,414	$3,038	$3,414
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$7,295	$1,473	$2,651	$2,359	$2,651
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,619	$1,956	$3,520	$3,132	$3,520
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$4,106	$1,797	$3,235	$2,878	$3,235
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$4,033	$786	$1,416	$1,260	$1,416
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,881	$1,236	$2,224	$1,979	$2,224
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,820	$2,210	$3,978	$3,539	$3,978
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$7,272	$1,577	$2,839	$2,526	$2,839
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,426	$1,658	$2,984	$2,655	$2,984
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$8,591	$2,352	$4,234	$3,767	$4,234
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$7,272	$1,580	$2,843	$2,530	$2,843
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$7,272	$1,587	$2,856	$2,541	$2,856
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$6,594	$1,307	$2,353	$2,094	$2,353
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,884	$2,400	$4,320	$3,843	$4,320
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$7,263	$1,530	$2,755	$2,451	$2,755
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,581	$1,425	$2,566	$2,283	$2,566
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,601	$1,028	$1,850	$1,646	$1,850
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,788	$690	$1,241	$1,105	$1,241
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,684	$1,664	$2,995	$2,665	$2,995
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,467	$457	$822	$731	$822
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,881	$1,236	$2,224	$1,979	$2,224
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,822	$1,050	$1,891	$1,682	$1,891
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$8,591	$2,343	$4,217	$3,752	$4,217
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,070	$3,191	$5,745	$5,111	$5,745
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,820	$2,210	$3,978	$3,539	$3,978
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,598	$2,119	$3,815	$3,394	$3,815
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,491	$1,188	$2,138	$1,902	$2,138
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,290	$2,044	$3,679	$3,274	$3,679
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,030	$1,175	$2,115	$1,882	$2,115
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$6,570	$1,793	$3,227	$2,871	$3,227
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,586	$1,862	$3,352	$2,982	$3,352
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,577	$1,833	$3,299	$2,935	$3,299
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,788	$690	$1,241	$1,104	$1,241
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,543	$1,248	$2,246	$1,998	$2,246
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,908	$1,484	$2,671	$2,376	$2,671
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$4,044	$1,228	$2,211	$1,967	$2,211
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,330	$1,459	$2,627	$2,337	$2,627
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$7,272	$1,577	$2,839	$2,526	$2,839
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,744	$3,234	$5,822	$5,180	$5,822
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,052	$866	$1,558	$1,386	$1,558
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,542	$1,590	$2,861	$2,546	$2,861
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,211	$1,418	$2,553	$2,271	$2,553
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$8,368	$2,021	$3,638	$3,237	$3,638
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,829	$1,132	$2,037	$1,812	$2,037
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,198	$1,274	$2,293	$2,040	$2,293
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,197	$692	$1,245	$1,108	$1,245
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$7,362	$1,954	$3,517	$3,129	$3,517
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$7,362	$1,950	$3,511	$3,124	$3,511
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,838	$1,128	$2,031	$1,807	$2,031
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$7,263	$1,530	$2,755	$2,451	$2,755
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$8,339	$1,894	$3,408	$3,033	$3,408
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$8,585	$2,316	$4,169	$3,710	$4,169

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 2Q13

Origin 1/		Destination		Railroad(s)	Commodity	2Q2013 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,984	$1,969	$3,543	$3,153	$3,543
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,984	$1,971	$3,548	$3,156	$3,548
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,030	$1,175	$2,115	$1,882	$2,115
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,223	$1,463	$2,633	$2,343	$2,633
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,223	$1,463	$2,633	$2,343	$2,633
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$6,550	$1,725	$3,105	$2,763	$3,105
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,598	$2,119	$3,815	$3,394	$3,815
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,052	$865	$1,557	$1,385	$1,557
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,306	$401	$722	$642	$722
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,365	$663	$1,193	$1,061	$1,193
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,371	$700	$1,259	$1,120	$1,259
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$5,002	$983	$1,769	$1,574	$1,769
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$7,269	$1,573	$2,832	$2,520	$2,832

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q13

	Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	3Q2013 Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
	(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,892	$595	$1,071	$953	$1,071
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,581	$1,281	$2,305	$2,051	$2,305
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,497	$1,255	$2,259	$2,010	$2,259
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$7,251	$1,601	$2,881	$2,564	$2,881
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,752	$701	$1,261	$1,122	$1,261
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,396	$2,940	$5,292	$4,709	$5,292
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,808	$1,050	$1,891	$1,682	$1,891
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$7,248	$1,587	$2,857	$2,542	$2,857
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$8,339	$1,813	$3,263	$2,903	$3,263
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$7,262	$1,646	$2,962	$2,636	$2,962
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,779	$694	$1,249	$1,112	$1,249
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$5,165	$1,108	$1,994	$1,774	$1,994
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,875	$2,294	$4,130	$3,674	$4,130
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,825	$1,137	$2,046	$1,820	$2,046
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,785	$2,462	$4,431	$3,943	$4,431
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,250	$2,592	$4,665	$4,151	$4,665
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,944	$873	$1,571	$1,398	$1,571
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,657	$1,163	$2,093	$1,862	$2,093
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,497	$1,256	$2,261	$2,012	$2,261
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,646	$1,723	$3,101	$2,759	$3,101
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,951	$1,981	$3,566	$3,173	$3,566
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,037	$1,285	$2,313	$2,058	$2,313
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,798	$790	$1,421	$1,264	$1,421
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$8,312	$1,909	$3,436	$3,057	$3,436
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$7,271	$1,482	$2,668	$2,374	$2,668
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,590	$1,968	$3,543	$3,152	$3,543
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$4,082	$1,809	$3,255	$2,896	$3,255
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$4,026	$791	$1,425	$1,268	$1,425
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,866	$1,243	$2,238	$1,991	$2,238
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,783	$2,224	$4,003	$3,562	$4,003
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$7,250	$1,587	$2,857	$2,542	$2,857
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,399	$1,669	$3,003	$2,672	$3,003
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$8,555	$2,367	$4,261	$3,791	$4,261
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$7,251	$1,590	$2,861	$2,546	$2,861
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$7,251	$1,597	$2,874	$2,557	$2,874
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$6,577	$1,316	$2,368	$2,107	$2,368
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,848	$2,415	$4,347	$3,868	$4,347
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$7,242	$1,540	$2,772	$2,467	$2,772
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,562	$1,434	$2,582	$2,297	$2,582
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,586	$1,034	$1,862	$1,656	$1,862
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,779	$694	$1,249	$1,112	$1,249
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,661	$1,674	$3,014	$2,681	$3,014
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,466	$460	$827	$736	$827
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,866	$1,243	$2,238	$1,991	$2,238
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,809	$1,057	$1,903	$1,693	$1,903
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$8,556	$2,358	$4,244	$3,776	$4,244
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,019	$3,212	$5,781	$5,144	$5,781
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,783	$2,224	$4,003	$3,562	$4,003
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,566	$2,133	$3,839	$3,416	$3,839
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,477	$1,195	$2,151	$1,914	$2,151
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,261	$2,057	$3,703	$3,294	$3,703
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,015	$1,183	$2,129	$1,894	$2,129
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$6,822	$1,804	$3,248	$2,889	$3,248
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,836	$1,874	$3,373	$3,001	$3,373
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,829	$1,844	$3,320	$2,954	$3,320
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,779	$694	$1,249	$1,111	$1,249
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,527	$1,256	$2,260	$2,011	$2,260
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,889	$1,493	$2,688	$2,391	$2,688
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$4,028	$1,236	$2,225	$1,979	$2,225
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,310	$1,469	$2,644	$2,352	$2,644
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$7,250	$1,587	$2,857	$2,542	$2,857
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,689	$3,255	$5,859	$5,213	$5,859
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,043	$871	$1,568	$1,395	$1,568
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,520	$1,600	$2,879	$2,562	$2,879
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,192	$1,427	$2,569	$2,286	$2,569
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$8,339	$2,034	$3,661	$3,257	$3,661
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,923	$1,139	$2,050	$1,824	$2,050
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,177	$1,282	$2,308	$2,053	$2,308
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,192	$696	$1,253	$1,115	$1,253
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$7,333	$1,966	$3,539	$3,149	$3,539
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$7,333	$1,963	$3,533	$3,144	$3,533
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,825	$1,135	$2,044	$1,818	$2,044
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$7,242	$1,540	$2,772	$2,467	$2,772
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$8,312	$1,906	$3,430	$3,052	$3,430
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$8,550	$2,331	$4,196	$3,733	$4,196

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 3Q13

Origin 1/		Destination		Railroad(s)	Commodity	3Q2013 Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,951	$1,981	$3,566	$3,173	$3,566
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,951	$1,983	$3,570	$3,176	$3,570
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,015	$1,183	$2,129	$1,894	$2,129
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,203	$1,472	$2,650	$2,358	$2,650
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,203	$1,472	$2,650	$2,358	$2,650
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$6,804	$1,736	$3,125	$2,781	$3,125
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,566	$2,133	$3,839	$3,416	$3,839
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,043	$871	$1,567	$1,394	$1,567
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$404	$726	$646	$726
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,360	$667	$1,200	$1,068	$1,200
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,366	$704	$1,267	$1,127	$1,267
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,991	$989	$1,780	$1,584	$1,780
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$7,248	$1,583	$2,850	$2,536	$2,850

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q13

	Origin 1/ (1)		Destination (2)		Railroad(s) (3)	Commodity (4)	Tariff Rate 1/ (5)	Phase III Cost 1/ (6)	4Q2013 Jurisdictional Threshold 1/ (7)	SAC Rate 2/ (8)	STB Maximum Rate 3/ (9)
Exhibit A											
2.	Clinton	IN	Atherton	IN	CSXT	2821139	$2,892	$592	$1,066	$948	$1,066
Exhibit B											
1.	Memphis	TN	Social Circle	GA	BNSF MEMPH CSXT SOCIR GRWR	2821139	$5,591	$1,274	$2,294	$2,041	$2,294
2.	Memphis	TN	Evansville	IN	BNSF MEMPH CSXT	2821139	$5,505	$1,249	$2,248	$2,000	$2,248
3.	New Orleans	LA	Covington	GA	CN NEWOR CSXT	2821140	$7,262	$1,593	$2,867	$2,551	$2,867
4.	Chicago	IL	Clinton	IN	BNSF CHGO CSXT	2821139	$3,755	$697	$1,255	$1,117	$1,255
5.	New Orleans	LA	Ampthill	VA	BNSF NEWOR CSXT	2821142	$9,418	$2,926	$5,266	$4,685	$5,266
6.	Memphis	TN	Bowling Green	KY	BNSF MEMPH CSXT	2821139	$5,814	$1,045	$1,882	$1,674	$1,882
7.	New Orleans	LA	Conyers	GA	CN NEWOR CSXT	2821140	$7,259	$1,579	$2,843	$2,529	$2,843
8.	New Orleans	LA	Barnett	GA	BNSF NEWOR CSXT BRNET GWRC	2821139	$8,354	$1,804	$3,246	$2,888	$3,246
9.	New Orleans	LA	Athens	GA	BNSF NEWOR CSXT	2821139	$7,274	$1,638	$2,948	$2,623	$2,948
10.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821139	$5,784	$691	$1,243	$1,106	$1,243
11.	New Orleans	LA	Hope Hull	AL	CN NEWOR CSXT	2821140	$5,171	$1,102	$1,984	$1,765	$1,984
12.	New Orleans	LA	Oneco	FL	BNSF NEWOR CSXT ONECO SGLR	2821139	$8,894	$2,283	$4,109	$3,656	$4,109
13.	Memphis	TN	Glasgow	KY	CN MEMPH CSXT	2821140	$5,832	$1,131	$2,036	$1,811	$2,036
15.	Chicago	IL	Orangeburg	NY	BNSF CHGO CSXT	2821142	$7,804	$2,450	$4,409	$3,923	$4,409
16.	New Orleans	LA	Galloway	FL	CN NEWOR CSXT	2818342	$7,268	$2,579	$4,642	$4,130	$4,642
17.	Chicago	IL	Anderson	IN	BNSF CHGO CSXT	2821139	$3,948	$868	$1,563	$1,391	$1,563
18.	Chicago	IL	Cincinnati	OH	BNSF CHGO CSXT	2821142	$4,664	$1,157	$2,082	$1,853	$2,082
19.	Memphis	TN	Evansville	IN	CN MEMPH CSXT	2821140	$5,505	$1,250	$2,250	$2,002	$2,250
20.	Chicago	IL	Cumberland	MD	BNSF CHGO CSXT	2821139	$6,658	$1,714	$3,086	$2,746	$3,086
21.	New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821139	$6,968	$1,971	$3,548	$3,157	$3,548
22.	Chicago	IL	Mentor	OH	BNSF CHGO CSXT	2821139	$5,045	$1,279	$2,302	$2,048	$2,302
25.	Memphis	TN	Guthrie	KY	CN MEMPH CSXT GUTHR RJCM	2821140	$5,804	$786	$1,414	$1,258	$1,414
26.	New Orleans	LA	Beech Island	SC	CN NEWOR CSXT	2821140	$8,326	$1,900	$3,419	$3,042	$3,419
28.	New Orleans	LA	Social Circle	GA	BNSF NEWOR CSXT SOCIR GRWR	2821139	$7,283	$1,475	$2,655	$2,362	$2,655
29.	Memphis	TN	Piqua	OH	CN MEMPH CSXT	2821140	$6,604	$1,958	$3,525	$3,137	$3,525
30.	East St. Louis	IL	Painesville	OH	UP ESTL CSXT	2911315	$4,094	$1,800	$3,239	$2,882	$3,239
32.	Effingham	IL	Terre Haute	IN	CN EFHAM CSXT	2821140	$4,030	$788	$1,418	$1,261	$1,418
33.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821142	$3,874	$1,237	$2,227	$1,982	$2,227
34.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821139	$7,801	$2,213	$3,984	$3,544	$3,984
35.	New Orleans	LA	Cartersville	GA	BNSF NEWOR CSXT	2821139	$7,261	$1,580	$2,843	$2,530	$2,843
37.	New Orleans	LA	Laurens	SC	BNSF NEWOR CSXT LAURN CPDR	2821139	$7,412	$1,660	$2,989	$2,659	$2,989
38.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821139	$8,573	$2,356	$4,240	$3,772	$4,240
39.	New Orleans	LA	Lawrenceville	GA	BNSF NEWOR CSXT	2821142	$7,262	$1,582	$2,847	$2,533	$2,847
43.	New Orleans	LA	Covington	GA	BNSF NEWOR CSXT	2821139	$7,262	$1,589	$2,860	$2,545	$2,860
44.	East St. Louis	IL	Sidney	OH	BNSF ESTL CSXT	2821139	$6,586	$1,309	$2,357	$2,097	$2,357
46.	New Orleans	LA	Lakeland	FL	CN NEWOR CSXT	2821140	$8,866	$2,403	$4,326	$3,849	$4,326
48.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821139	$7,252	$1,533	$2,759	$2,455	$2,759
51.	Memphis	TN	Gallaway	TN	CN MEMPH CSXT	2821140	$4,571	$1,427	$2,569	$2,286	$2,569
52.	Memphis	TN	Bridgeport	AL	CN MEMPH CSXT BRDGL SQVR	2821140	$5,594	$1,029	$1,852	$1,648	$1,852
53.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,784	$691	$1,243	$1,106	$1,243
54.	New Orleans	LA	LaGrange	GA	BNSF NEWOR CSXT	2821139	$5,673	$1,666	$2,999	$2,668	$2,999
55.	New Orleans	LA	Ansley	MS	CN NEWOR CSXT	2821140	$5,467	$457	$823	$732	$823
56.	Chicago	IL	Terre Haute	IN	BNSF CHGO CSXT	2821139	$3,874	$1,237	$2,227	$1,982	$2,227
57.	Memphis	TN	Hopkinsville	KY	BNSF MEMPH CSXT	2821142	$5,815	$1,052	$1,893	$1,685	$1,893
58.	New Orleans	LA	Orlando	FL	BNSF NEWOR CSXT	2821142	$8,574	$2,346	$4,223	$3,758	$4,223
60.	New Orleans	LA	Baltimore	MD	BNSF NEWOR CSXT	2821142	$10,044	$3,196	$5,753	$5,118	$5,753
61.	Chicago	IL	Utica	NY	BNSF CHGO CSXT UTICA MHWA	2821142	$7,801	$2,213	$3,984	$3,544	$3,984
62.	Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821139	$6,582	$2,122	$3,820	$3,399	$3,820
63.	Memphis	TN	Madisonville	KY	BNSF MEMPH CSXT	2821139	$5,484	$1,189	$2,141	$1,904	$2,141
64.	New Orleans	LA	Atlanta	GA	UP NEWOR CSXT	2911315	$6,275	$2,047	$3,685	$3,278	$3,685
67.	Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821139	$5,022	$1,177	$2,118	$1,885	$2,118
70.	New Orleans	LA	Chattanooga	TN	BNSF NEWOR CSXT	2821139	$6,835	$1,795	$3,232	$2,875	$3,232
71.	New Orleans	LA	Eton	GA	BNSF NEWOR CSXT	2821139	$6,850	$1,865	$3,357	$2,987	$3,357
72.	New Orleans	LA	Tyner	TN	BNSF NEWOR CSXT	2821139	$6,842	$1,835	$3,303	$2,939	$3,303
74.	Memphis	TN	Vine Hill	TN	BNSF MEMPH CSXT VINHI NERR	2821142	$5,784	$691	$1,243	$1,106	$1,243
75.	Memphis	TN	Jackson	TN	BNSF MEMPH CSXT	2821139	$4,535	$1,249	$2,249	$2,001	$2,249
76.	Memphis	TN	Lewisburg	TN	BNSF MEMPH CSXT	2821139	$5,899	$1,486	$2,674	$2,379	$2,674
77.	New Orleans	LA	Evergreen	AL	BNSF NEWOR CSXT	2821142	$4,036	$1,230	$2,214	$1,970	$2,214
78.	New Orleans	LA	Helena	AL	BNSF NEWOR CSXT	2821139	$5,320	$1,461	$2,631	$2,341	$2,631
79.	New Orleans	LA	Newnan	GA	BNSF NEWOR CSXT	2821139	$7,261	$1,580	$2,843	$2,530	$2,843
80.	New Orleans	LA	Green Spring	WV	BNSF NEWOR CSXT GRESP SBVR	2821139	$9,717	$3,239	$5,830	$5,187	$5,830
81.	Chicago	IL	Indianapolis	IN	CN CHGO CSXT	2821140	$4,048	$867	$1,560	$1,388	$1,560
83.	Chicago	IL	Lockport	NY	BNSF CHGO CSXT	2821139	$6,531	$1,592	$2,865	$2,549	$2,865
84.	Chicago	IL	Wapakoneta	OH	BNSF CHGO CSXT	2821139	$4,202	$1,420	$2,556	$2,274	$2,556
86.	New Orleans	LA	Thomson	GA	BNSF NEWOR CSXT	2821142	$8,354	$2,024	$3,643	$3,241	$3,643
89.	Memphis	TN	Horse Cave	KY	CN MEMPH CSXT	2821140	$5,930	$1,133	$2,040	$1,815	$2,040
93.	Chicago	IL	North Vernon	IN	BNSF CHGO CSXT NVERN CMPA	2821142	$4,187	$1,276	$2,296	$2,043	$2,296
96.	Chicago	IL	Francesville	IN	BNSF CHGO CSXT	2821142	$4,195	$693	$1,247	$1,109	$1,247
97.	New Orleans	LA	Jefferson	GA	CN NEWOR CSXT	2821140	$7,347	$1,956	$3,521	$3,133	$3,521
98.	New Orleans	LA	Jefferson	GA	BNSF NEWOR CSXT	2821139	$7,347	$1,953	$3,516	$3,128	$3,516
101.	Memphis	TN	Glasgow	KY	BNSF MEMPH CSXT	2821139	$5,832	$1,130	$2,034	$1,809	$2,034
102.	New Orleans	LA	Ackerman	GA	BNSF NEWOR CSXT	2821142	$7,252	$1,533	$2,759	$2,455	$2,759
103.	New Orleans	LA	Beech Island	SC	BNSF NEWOR CSXT	2821139	$8,326	$1,896	$3,413	$3,037	$3,413
104.	New Orleans	LA	De land	FL	BNSF NEWOR CSXT	2821142	$8,568	$2,320	$4,175	$3,715	$4,175

Comparison of CSX Tariff Rates and
Maximum Rates Per Car for TPI Movements - 4Q13

						4Q2013				
Origin 1/		Destination		Railroad(s)	Commodity	Tariff Rate 1/	Phase III Cost 1/	Jurisdictional Threshold 1/	SAC Rate 2/	STB Maximum Rate 3/
(1)		(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
105. New Orleans	LA	Hamlet	NC	BNSF NEWOR CSXT	2821142	$6,968	$1,971	$3,548	$3,157	$3,548
106. New Orleans	LA	Hamlet	NC	CN NEWOR CSXT	2821140	$6,968	$1,974	$3,552	$3,161	$3,552
108. Chicago	IL	Akron	OH	BNSF CHGO CSXT	2821142	$5,022	$1,177	$2,118	$1,885	$2,118
109. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821142	$4,213	$1,465	$2,637	$2,346	$2,637
110. Chicago	IL	Lima	OH	BNSF CHGO CSXT	2821139	$4,213	$1,465	$2,637	$2,346	$2,637
112. New Orleans	LA	Dalton	GA	BNSF NEWOR CSXT	2821139	$6,816	$1,728	$3,110	$2,767	$3,110
113. Chicago	IL	Clarksburg	WV	BNSF CHGO CSXT	2821142	$6,582	$2,122	$3,820	$3,399	$3,820
115. Chicago	IL	Indianapolis	IN	BNSF CHGO CSXT	2821139	$4,048	$866	$1,559	$1,387	$1,559
116. Social Circle	GA	Covington	GA	GRWR SOCIR CSXT	2821139	$3,305	$402	$723	$643	$723
117. Social Circle	GA	Athens	GA	GRWR SOCIR CSXT	2821139	$3,363	$664	$1,194	$1,063	$1,194
118. Social Circle	GA	Conyers	GA	GRWR SOCIR CSXT	2821139	$3,369	$700	$1,261	$1,122	$1,261
119. Chicago	IL	Evansville	IN	BRC CHGO CSXT	2821140	$4,997	$984	$1,772	$1,576	$1,772
120. New Orleans	LA	Conyers	GA	BNSF NEWOR CSXT	2821139	$7,259	$1,576	$2,836	$2,523	$2,836

1/ Source: Opening workpaper "TPI Opening II-A 1-16 Exhibits.xlsx"
2/ MMM Ratio from Exhibit III-H-3 x Column (6)
3/ Greater of Column (7) or Column (8)