

## **2011 UNIFORM RAILROAD COSTING SYSTEM PHASE III DATA SUBSTITUTIONS**

We substituted replacement data in the URCS Phase III data bases where the values calculated by Phase II of URCS do not appear to be reasonable. In the past, we substituted data more liberally. However, this year we only made substitutions where it is clear the data is incorrect because the car types are being phased out or URCS does not calculate values. We took the substitute values from what, we believe, are the best alternative data available. Listed below are the procedures we used. See the Appendix for adjustments to E tables made in accordance with these procedures.

### **PHASE III DATA SUBSTITUTIONS PART 1**

**We made the following substitutions for all railroads in the Phase III data tables.**

#### **Unit Costs - 40 Foot Box Cars**

We substituted 50 foot box car unit costs for 40 foot box car unit cost at both the individual railroad and regional levels. We made this substitution because few 40-foot boxcars are in service. We substituted E1, Part 2, line 201, columns 1 to 12 with E1, Part 2, line 202, columns 1 to 12.

#### **Operating Statistics - 40 Foot Box Cars**

We substituted 50 foot box car operating statistics for the three empty to loaded ratios and the miles between interchanges for those of 40-foot boxcars at both the individual railroad and regional levels. We made this substitution because few 40-foot boxcars are in service. We substituted E2, Part 1, line 101, columns 2, 3, 4, and 24 with E2, Part 1, line 102, columns 2, 3, 4, and 24.

## **PHASE III DATA SUBSTITUTIONS PART 2**

**We made the following substitutions if the values calculated by URCS Phase II were questionable. Note regional substitutions are made before individual carrier substitutions.**

### **Unit Costs - Car-Mile Running - Privately Owned Cars**

We substituted regional rental unit cost per car-mile for individual railroad rental cost per car-mile that are negative or zero. We made this substitution because all railroads do not have rental cost for each private car type. We made substitutions in E1, Part 2, column 13, for all lines as required.

### **Empty to Loaded Ratio - Privately Owned Freight Cars**

We substituted for privately owned cars the applicable regional empty to loaded ratio for the individual railroad's empty to loaded ratio that is not between 1.0 and 3.0. We made this substitution because all railroads do not provide service for each private car type. We made substitutions in E2, Part 1, column 3 as required.

## **PHASE III DATA SUBSTITUTIONS PART 3**

**We made the following substitutions to insert in the URCS Phase III data base values that the URCS Phase II program calculates. The values are derived from URCS workpapers and STB decisions. We made the following substitutions for all railroads in the Phase III data tables.**

### **Intermodal (TOFC/COFC) Load Factors - Carrier and Regional**

The current URCS Phase II program does not allow for individual Intermodal load factors. We replaced the national value in Worktable E2 Part 2 line 202 column 1 with the individual railroad or regional load factor.

### **Tank Cars - Unit Costs**

We substituted the regional private line rental cost per mile for railroad ownership costs for tank cars. We made this substitution because the STB does not collect cost data on railroad owned Tank Cars. We set E1, Part 2 lines 215 and 216 column 2 to the applicable regional value in E1 Part 2 lines 215 and 216 column 13. All other columns are zero.

### **Tank Cars - Operating Statistics**

We substituted All Other Freight car operating statistics for Tank car operating statistics with the exception of column 1, average tare weight, column 3, the empty to loaded ratio, and column 4, the spotted and pulled ratio, for privately owned tank cars. Columns 3 and 4 are calculated by URCS. Column 1 is taken from the Tare Weight Worksheet. Line 115 is 32.6 and line 216 is 38.9. We made this substitution because the STB does not collect data on Tank cars, except as noted above. We made substitutions in E2, Part 1, lines 115 and 116 as follows: With the exception of columns 1, 3 and 4 all columns in lines 115 and 116 were replaced by the values in the corresponding columns for line 117.

### **Intermodal (TOFC/COFC) Operating Factors - Carrier and Regional**

We substituted an I&I switching factor of 4,162 miles for intermodal cars for all carriers and regions. We substituted the empty return ratio as a proxy for the spotted-to-pulled ratio. Both of these substitutions are made in accordance with the STB's decision served in Ex Parte No. 431 (Sub-No. 2), December 12, 1997. We made the I&I substitution in E2 Part 1, line 111 column 23. We made the spotted-to-pulled ratio substitution in E2 Part 1, line 111 column 8, which was set to E2 Part 1, line 111 column 4.

## Appendix

### URCS Phase III Data Substitutions Made in Region 4

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                         | <b>Description</b>                                       |
|-----------------------|---|--|--|
| Region 4              | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                  | National Tank Tare Weight Value.                         |
| Region 4              | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                  | National Tank Tare Weight Value.                         |
| Region 4              | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29 | No Tank Operating Statistics calculated for these items. |
| Region 4              | E2 P1 Line 111 Column 23                          | 4162                                       | Intermodal Factor by STB Decision.                       |
| Region 4              | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                    | Intermodal Factor by STB Decision.                       |
| Region 4              | E2 P2 Line 202 Column 1                           | 4.53                                       | Intermodal Load Factor.                                  |
| Region 4              | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All columns                 | Box 40 Phased out.                                       |
| Region 4              | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24    | Box 40 Phased out.                                       |
| Region 4              | E2 P1 Line 113 Column 3                           | Region 7 E2 P1 Line 113<br>Column 3        | Private Line Empty to Loaded Ratio is 3.3                |
| Region 4              | E1 P2 Lines 217 Column 13                         | Region 7 E1 P2 Lines 217<br>Column 13      | Private Line Rental Region 4 value is zero or negative.  |
| Region 4              | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                   | No costs calculated for Tank Cars.                       |
| Region 4              | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                   | No costs calculated for Tank Cars.                       |

**URCS Phase III Data Substitutions  
Made in Region 7**

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                          | <b>Description</b>  |
|-----------------------|---|---|---|
| Region 7              | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                   | National Tank Tare Weight Value.                            |
| Region 7              | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                   | National Tank Tare Weight Value.                            |
| Region 7              | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29  | No Tank Operating Statistics<br>calculated for these items. |
| Region 7              | E2 P1 Line 111 Column 23                          | 4162  | Intermodal Factor by STB<br>Decision.                       |
| Region 7              | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                     | Intermodal Factor by STB<br>Decision.                       |
| Region 7              | E2 P2 Line 202 Column 1                           | 5.28  | Intermodal Load Factor.                                     |
| Region 7              | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All columns                  | Box 40 Phased out.  |
| Region 7              | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24     | Box 40 Phased out.  |
| Region 7              | E1 P2 Lines 205 & 216<br>Column 13                | Region 4 E1 P2 Lines 205 &<br>216 Column 13 | Private Line Rental Region 7<br>value is zero or negative.  |
| Region 7              | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                    | No costs calculated for Tank<br>Cars.                       |
| Region 7              | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                    | No costs calculated for Tank<br>Cars.                       |

**URCS Phase III Data Substitutions  
Made in BNSF**

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                          | <b>Description</b>  |
|-----------------------|---|---|---|
| BNSF                  | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                   | National Tank Tare Weight Value.                            |
| BNSF                  | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                   | National Tank Tare Weight Value.                            |
| BNSF                  | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29  | No Tank Operating Statistics<br>calculated for these items. |
| BNSF                  | E2 P1 Line 111 Column 23                          | 4162  | Intermodal Factor by STB<br>Decision.                       |
| BNSF                  | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                     | Intermodal Factor by STB<br>Decision.                       |
| BNSF                  | E2 P2 Line 202 Column 1                           | 5.76  | Intermodal Load Factor                                      |
| BNSF                  | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All<br>columns               | Box 40 Phased out.  |
| BNSF                  | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24     | Box 40 Phased out.  |
| BNSF                  | E2 P1 Lines 113, 117 Column<br>3                  | Region 7 E2 P1 Lines 113,<br>117 Column 3   | Private Line Empty to Loaded<br>Ratios are 5.4 & 3.4.       |
| BNSF                  | E1 P2 Lines 209 & 210<br>Column 13                | Region 7 E1 P2 Lines 209<br>& 210 Column 13 | Private Line Rental value is<br>zero or negative.           |
| BNSF                  | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                    | No costs calculated for Tank<br>Cars.                       |
| BNSF                  | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                    | No costs calculated for Tank<br>Cars.                       |

**URCS Phase III Data Substitutions  
Made in CSXT**

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                          | <b>Description</b>  |
|-----------------------|---|---|---|
| CSXT                  | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                   | National Tank Tare Weight Value.                            |
| CSXT                  | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                   | National Tank Tare Weight Value.                            |
| CSXT                  | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29  | No Tank Operating Statistics<br>calculated for these items. |
| CSXT                  | E2 P1 Line 111 Column 23                          | 4162  | Intermodal Factor by STB<br>Decision.                       |
| CSXT                  | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                     | Intermodal Factor by STB<br>Decision.                       |
| CSXT                  | E2 P2 Line 202 Column 1                           | 4.6   | Intermodal Load Factor.                                     |
| CSXT                  | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All columns                  | Box 40 Phased out.  |
| CSXT                  | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24     | Box 40 Phased out.  |
| CSXT                  | E2 P1 Line 113 Column 3                           | Region 4 E2 P1 Line 113<br>Column 3         | Private Line Empty to<br>Loaded Ratio is zero.              |
| CSXT                  | E1 P2 Lines 208, 217, & 218<br>Column 13          | Region 4 E1 P2 208, 217, &<br>218 Column 13 | Private Car Rental Costs are<br>zero or negative            |
| CSXT                  | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                    | No costs calculated for Tank<br>Cars.                       |
| CSXT                  | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                    | No costs calculated for Tank<br>Cars.                       |

**URCS Phase III Data Substitutions  
Made in GTC (CN)**

| <b>Carrier/Region</b> | <b>E Table Location</b>  | <b>Replaced By</b>  | <b>Description</b>                                       |
|-----------------------|--|---|--|
| GTC (CN)              | E2 P1 Line 115 Column 1  | Line 115 Column 1 is 32.6   | National Tank Tare Weight Value.                         |
| GTC (CN)              | E2 P1 Line 116 Column 1  | Line 116 Column 1 is 38.9   | National Tank Tare Weight Value.                         |
| GTC (CN)              | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29                        | E2 P1 Line 117 Columns 2<br>& 5 through 29  | No Tank Operating Statistics calculated for these items. |
| GTC (CN)              | E2 P1 Line 111 Column 23   | 4162  | Intermodal Factor by STB Decision.                       |
| GTC (CN)              | E2 P1 Line 111 Column 8  | E2 P1 Line 111 Column 4   | Intermodal Factor by STB Decision.                       |
| GTC (CN)              | E2 P2 Line 202 Column 1  | 4.46  | Intermodal Load Factor.                                  |
| GTC (CN)              | E1 P2 Line 201 All Columns   | E1 P2 Line 202 All columns  | Box 40 Phased out.                                       |
| GTC (CN)              | E2 P1 Line 101 Columns 2, 3,<br>4, & 24                                  | E2 P1 Line 102 Columns 2,<br>3, 4, & 24   | Box 40 Phased out.                                       |
| GTC (CN)              | E1 P2 Lines 205, 206, 207,<br>208, 209, 210, 215, 216 &<br>217 Column 13 | Region 4 E1 P2 Lines 205,<br>206, 207, 208, 209, 210, 215,<br>216 & 217 Column 13 | Private Car Rental Costs are zero.                       |
| GTC (CN)              | E2 P1 Line 113 Column 3  | Region 4 E2 P1 Line 113<br>Column 3   | Private Line Empty to Loaded Ratio is 3.7.               |
| GTC (CN)              | E1 P2 Line 215 Column 2  | E1 P2 Line 215 Column 13  | No costs calculated for Tank Cars.                       |
| GTC (CN)              | E1 P2 Line 216 Column 2  | E1 P2 Line 216 Column 13  | No costs calculated for Tank Cars.                       |



**URCS Phase III Data Substitutions  
Made in KCS**

| <b>Carrier/Region</b> | <b>E Table Location</b>   | <b>Replaced By</b>   | <b>Description</b>                                       |
|-----------------------|---|--|--|
| KCS                   | E2 P1 Line 115 Column 1   | Line 115 Column 1 is 32.6  | National Tank Tare Weight Value.                         |
| KCS                   | E2 P1 Line 116 Column 1   | Line 116 Column 1 is 38.9  | National Tank Tare Weight Value.                         |
| KCS                   | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29                   | E2 P1 Line 117 Columns 2<br>& 5 through 29                             | No Tank Operating Statistics calculated for these items. |
| KCS                   | E2 P1 Line 111 Column 23  | 4162   | Intermodal Factor by STB Decision.                       |
| KCS                   | E2 P1 Line 111 Column 8   | E2 P1 Line 111 Column 4  | Intermodal Factor by STB Decision.                       |
| KCS                   | E2 P2 Line 202 Column 1   | 4.71   | Intermodal Load Factor                                   |
| KCS                   | E1 P2 Line 201 All Columns  | E1 P2 Line 202 All columns   | Box 40 Phased out.                                       |
| KCS                   | E2 P1 Line 101 Columns 2, 3,<br>4, & 24                             | E2 P1 Line 102 Columns 2,<br>3, 4, & 24                                | Box 40 Phased out.                                       |
| KCS                   | E1 P2 Lines 205, 207, 208,<br>209, 210, 213, 217 & 218<br>Column 13 | Region 7 E1 P2 205, 207,<br>208, 209, 210, 213, 217 &<br>218 Column 13 | Private Line Rental Costs are zero.                      |
| KCS                   | E2 P1 Lines 110 & 113<br>Column 3                                   | Region 7 E2 P1 Lines 110 &<br>113 Column 3                             | Private Line Empty to Loaded Ratios are zero.            |
| KCS                   | E1 P2 Line 215 Column 2   | E1 P2 Line 215 Column 13   | No costs calculated for Tank Cars.                       |
| KCS                   | E1 P2 Line 216 Column 2   | E1 P2 Line 216 Column 13   | No costs calculated for Tank Cars.                       |

**URCS Phase III Data Substitutions  
Made to NS**

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                         | <b>Description</b>                                       |
|-----------------------|---|--|--|
| NS                    | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                  | National Tank Tare Weight Value.                         |
| NS                    | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                  | National Tank Tare Weight Value.                         |
| NS                    | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29 | No Tank Operating Statistics calculated for these items. |
| NS                    | E2 P1 Line 111 Column 23                          | 4162                                       | Intermodal Factor by STB Decision.                       |
| NS                    | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                    | Intermodal Factor by STB Decision.                       |
| NS                    | E2 P2 Line 202 Column 1                           | 4.47                                       | Intermodal Load Factor.                                  |
| NS                    | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All columns                 | Box 40 Phased out.                                       |
| NS                    | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24    | Box 40 Phased out.                                       |
| NS                    | E1 P2 Line 218 Column 13                          | Region 4 E1 P2 Line 218<br>Column 13       | Private Line Rental Cost is zero.                        |
| NS                    | E2 P1 Line 113 Column 3                           | Region 4 E2 P1 Line 113<br>Column 3        | Private Line Empty to Loaded Ratio is 3.3.               |
| NS                    | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                   | No costs calculated for Tank Cars.                       |
| NS                    | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                   | No costs calculated for Tank Cars.                       |

**URCS Phase III Data Substitutions  
Made to SOO (CP)**

| <b>Carrier/Region</b> | <b>E Table Location</b>                           | <b>Replaced By</b>                                    | <b>Description</b>  |
|-----------------------|---|---|---|
| SOO (CP)              | E2 P1 Line 115 Column 1                           | Line 115 Column 1 is 32.6                             | National Tank Tare Weight Value.                            |
| SOO (CP)              | E2 P1 Line 116 Column 1                           | Line 116 Column 1 is 38.9                             | National Tank Tare Weight Value.                            |
| SOO (CP)              | E2 P1 Lines 115 & 116<br>Columns 2 & 5 through 29 | E2 P1 Line 117 Columns 2<br>& 5 through 29            | No Tank Operating Statistics<br>calculated for these items. |
| SOO (CP)              | E2 P1 Line 111 Column 23                          | 4162  | Intermodal Factor by STB<br>Decision.                       |
| SOO (CP)              | E2 P1 Line 111 Column 8                           | E2 P1 Line 111 Column 4                               | Intermodal Factor by STB<br>Decision.                       |
| SOO (CP)              | E2 P2 Line 202 Column 1                           | 2.68  | Intermodal Load Factor.                                     |
| SOO (CP)              | E1 P2 Line 201 All Columns                        | E1 P2 Line 202 All columns                            | Box 40 Phased out.  |
| SOO (CP)              | E2 P1 Line 101 Columns 2, 3,<br>4, & 24           | E2 P1 Line 102 Columns 2,<br>3, 4, & 24               | Box 40 Phased out.  |
| SOO (CP)              | E2 P1 Line 113 Column 3                           | Region 7 E2 P1 Line 113<br>Column 3                   | Private Line Empty to<br>Loaded Ratio is 5.4.               |
| SOO (CP)              | E1 P2 Lines 205, 207, 208 &<br>209 Column 13      | Region 7 E1 P2 Lines 205,<br>207, 208 & 209 Column 13 | Private Car Rental Costs are<br>zero.                       |
| SOO (CP)              | E1 P2 Line 215 Column 2                           | E1 P2 Line 215 Column 13                              | No costs calculated for Tank<br>Cars.                       |
| SOO (CP)              | E1 P2 Line 216 Column 2                           | E1 P2 Line 216 Column 13                              | No costs calculated for Tank<br>Cars.                       |

**URCS Phase III Data Substitutions  
Made to UP**

| <b>Carrier/Region</b> | <b>E Table Location</b>                             | <b>Replaced By</b>   | <b>Description</b>                                       |
|-----------------------|---|--|--|
| UP                    | E2 P1 Line 115 Column 1                             | Line 115 Column 1 is 32.6                                    | National Tank Tare Weight Value.                         |
| UP                    | E2 P1 Line 116 Column 1                             | Line 116 Column 1 is 38.9                                    | National Tank Tare Weight Value.                         |
| UP                    | E2 P1 Lines 115 & 116 Columns 2 & 5 through 29      | E2 P1 Line 117 Columns 2 & 5 through 29                      | No Tank Operating Statistics calculated for these items. |
| UP                    | E2 P1 Line 111 Column 23                            | 4162   | Intermodal Factor by STB Decision.                       |
| UP                    | E2 P1 Line 111 Column 8                             | E2 P1 Line 111 Column 4                                      | Intermodal Factor by STB Decision.                       |
| UP                    | E2 P2 Line 202 Column 1                             | 4.9  | Intermodal Load Factor.                                  |
| UP                    | E1 P2 Line 201 All Columns                          | E1 P2 Line 202 All columns                                   | Box 40 Phased out.                                       |
| UP                    | E2 P1 Line 101 Columns 2, 3, 4, & 24                | E2 P1 Line 102 Columns 2, 3, 4, & 24                         | Box 40 Phased out.                                       |
| UP                    | E1 P2 Lines 205, 213, 215, 216, 217 & 218 Column 13 | Region 7 E1 P2 Lines 205, 213, 215, 216, 217 & 218 Column 13 | Private Line Rental Costs are zero or negative.          |
| UP                    | E2 P1 Line 117 Column 3                             | Region 7 E2 P1 Line 117 Column 3                             | Private Line Empty to Loaded Ratio is 3.04.              |
| UP                    | E1 P2 Line 215 Column 2                             | E1 P2 Line 215 Column 13                                     | No costs calculated for Tank Cars.                       |
| UP                    | E1 P2 Line 216 Column 2                             | E1 P2 Line 216 Column 13                                     | No costs calculated for Tank Cars.                       |