11 Year Industry Data Trends

The information contained in this supplement is derived from IANA’s Equipment Type, Size and Ownership data file. The Equipment Type, Size and Ownership Data Subscription provides all the underlying aggregate data used in the compilation of the Intermodal Market Trends & Statistics quarterly analysis report including:

- Regional volume flow (excludes intra-region volume)
- Various size and type of equipment
- Equipment ownership: whether private or rail-controlled
- Cumulative data by month

The analysis was provided by T. Prince & Associates, LLC. Please forward any comments to: tara.mullen@intermodal.org.

This analysis aggregates intermodal volume into three equipment segment categories that are based on equipment type (trailer or container) and equipment length.

### Intermodal Segmentation

<table>
<thead>
<tr>
<th>Size</th>
<th>Container</th>
<th>Trailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Marine ISO</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Domestic ≤ 45</td>
<td>Domestic ≤ 45</td>
</tr>
<tr>
<td>40</td>
<td>Marine ISO</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td></td>
<td>Domestic ≥ 48</td>
</tr>
<tr>
<td>57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This chart displays North American intermodal loads (in millions) aggregated by the three segment categories.

Observations:
- Volume for 2012 reflects a 5.5% increase in volume from 2011.
- Volume for 2012 exceeded 2006 volume — the previous peak volume year — by 4.6%.

This chart displays the share of North American intermodal loads by the three segment categories.

Observations:
- Since 2007, the Marine ISO market share has decreased slightly — although it still represents the majority traffic segment.
- Over the entire period, the Domestic ≤ 45 segment has been losing share — and the Domestic ≥ 48 segment has been increasing.
**Volume Growth Since 2002**

This chart displays relative growth since 2002 (which is set at 1.00) for North American intermodal loads aggregated by the three segment categories.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>1.00</td>
<td>1.07</td>
<td>1.17</td>
<td>1.24</td>
<td>1.29</td>
<td>1.28</td>
<td>1.24</td>
<td>1.06</td>
<td>1.22</td>
<td>1.28</td>
<td>1.34</td>
</tr>
<tr>
<td><strong>Marine ISO</strong></td>
<td>1.00</td>
<td>1.10</td>
<td>1.22</td>
<td>1.36</td>
<td>1.47</td>
<td>1.44</td>
<td>1.33</td>
<td>1.03</td>
<td>1.23</td>
<td>1.26</td>
<td>1.28</td>
</tr>
<tr>
<td><strong>Domestic ≤ 45</strong></td>
<td>1.00</td>
<td>0.91</td>
<td>0.93</td>
<td>0.83</td>
<td>0.74</td>
<td>0.72</td>
<td>0.61</td>
<td>0.47</td>
<td>0.40</td>
<td>0.36</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>Domestic ≥ 48</strong></td>
<td>1.00</td>
<td>1.08</td>
<td>1.16</td>
<td>1.17</td>
<td>1.20</td>
<td>1.20</td>
<td>1.28</td>
<td>1.24</td>
<td>1.41</td>
<td>1.54</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Observations:

- The entire industry green bar grew by 34% from 2002 to 2012.
- Through 2006, the Marine ISO segment (blue line) was the industry growth driver. It was growing faster than the industry through 2006 — but now lags the overall industry volume growth. It is up 28% in this period — versus 34% for the overall industry.
- Since 2007 the growth driver has been the Domestic ≥ 48 segment (red line.) While it closely tracked the industry through 2007, over the past four years it has grown faster than the overall industry. It is up 67% in this period.
- The Domestic ≤ 45 volume (purple line) has declined 68% in this period.
In 2002, the intermodal business was driven by the Marine ISO segment. The two largest equipment types were 40- and 20-foot containers.

In 2012, the largest equipment type was 53-foot containers (Domestic ≥ 48.)

In 2002, the 48-foot container was still preeminent (by 18%) over the 53-foot container. By 2012, the equipment type had all but disappeared.

Regardless, the intermodal industry seems to have settled on two work horse equipment types — 53-foot domestic and 40-foot marine — both of which are containers and rely on the economic advantage of doublestack transportation.
Marine ISO Volume

This chart analyzes the Marine ISO segment. The left y-axis (and black line) shows the relative volume. (Year 2002 volume is set at 1.00) The right y-axis (and green vertical bars) shows the segment share of volume.

Observations:

This chart indicates the major role of this segment.
- From 2002 to 2006, volume increased by 43% while market share grew from 53% to 60%.
- This was followed by a slight volume decrease in 2007 and precipitous declines in 2008 and 2009.
- Although volume and market share rebounded in 2010, market share declined again in 2011 and 2012 — while volumes increased slightly.

This is still an important segment; however, its share is decreasing because the rest of the intermodal industry is growing at a faster rate.
Marine ISO Volumes by Equipment

This chart analyzes the Marine ISO segment by equipment type. The left y-axis (and green vertical bars) shows the segment’s relative volume. (Year 2002 volume is set at 1.00) The right y-axis (and three lines) shows the market share of that equipment and size within this segment.

Observations:

- The volume (green bar) peaking in 2006 has been previously discussed.
- However, this chart demonstrates a remarkable consistency of market share by equipment size for the entire period — regardless of volume.

This would indicate that customer mix remains static and volume changes impact absolute levels — but do not change customer’s container-loading patterns.
Domestic ≥48’ Volume

This chart analyzes the Domestic ≥ 48 segment. The left y-axis (and black line) shows the relative volume. (Year 2002 volume is set at 1.00) The right y-axis (and green vertical bars) shows the segment share of volume.

Observations:

This chart indicates the increasing prominence of this segment.

- From 2002 to 2012, volume increased by 61% and market share grew from 38% to 46%.
- With the exception of 2009, volume has increased every year.
- The reason for market share shrinkage in 2004-2006 is a reflection of relatively flat volume of this segment — while the Marine ISO segment was growing.
Supplement to Intermodal Market Trends & Statistics

**Domestic ≥48’ by Equipment**

This chart analyzes the Domestic ≥ 48 segment by equipment type. The left y-axis (and green vertical bars) shows the segment relative volume. (Year 2002 volume is set at 1.00) The right y-axis (and four lines) shows the market share of that equipment and size within this segment.

Observations:

This chart indicates the increasing role of this equipment segment. From 2002 to 2012, volume has increased by 61%. Within this group:

- 53-foot containers have grown from 30% to 81% of this segment;
- 53-foot trailers have remained basically unchanged — at 14-15% of this segment — although its share grew as high as 21% in 2005;
- 48-foot containers have shrunk from 36% to <1% of this segment; and,
- 48-foot trailers have shrunk from 20% to 4% of this segment;

While the widespread substitution of 53-foot containers for 48-foot containers is no surprise, it is impossible to discern whether the trailer volume is legacy equipment — or highway conversion. Regardless, both pose the question of whether trailer traffic can be converted into domestic containers.
Geographical Segmentation

This analysis also aggregates intermodal volume into four *geographies* – in addition to intra-regional moves.

<table>
<thead>
<tr>
<th>Geography</th>
<th>Regions From</th>
<th>Regions To</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Coast/Interior</td>
<td>EC, NE, SE</td>
<td>MC, MW, MX, SC</td>
</tr>
<tr>
<td>Trans-Con</td>
<td>EC, NE, SE</td>
<td>NW, SW, WC</td>
</tr>
<tr>
<td>West Coast/Interior</td>
<td>MC, MW, MX, SC</td>
<td>NW, SW, WC</td>
</tr>
<tr>
<td>North-South Case #1</td>
<td>MC, MW, MX, SC</td>
<td></td>
</tr>
<tr>
<td>North-South Case #2</td>
<td>NE, SE, EC</td>
<td></td>
</tr>
<tr>
<td>North-South Case #3</td>
<td>NW, SW, WC</td>
<td></td>
</tr>
</tbody>
</table>

### Region Code States/Provinces Included

<table>
<thead>
<tr>
<th>Region</th>
<th>Code</th>
<th>States/Provinces Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Canada</td>
<td>EC</td>
<td>NB, NF, NS, ON, PE, QC</td>
</tr>
<tr>
<td>Mountain Central</td>
<td>MC</td>
<td>CO, ID, MT, NE, ND, SD, UT, WY</td>
</tr>
<tr>
<td>Midwest</td>
<td>MW</td>
<td>IL, IN, IA, KY, KS, MI, MN, MO, OH, WI</td>
</tr>
<tr>
<td>Northeast</td>
<td>NE</td>
<td>CT, DC, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT, VA, WV</td>
</tr>
<tr>
<td>Northwest</td>
<td>NW</td>
<td>OR, WA</td>
</tr>
<tr>
<td>South Central</td>
<td>SC</td>
<td>AR, LA, NM, OK, TX</td>
</tr>
<tr>
<td>Southeast</td>
<td>SE</td>
<td>AL, FL, GA, MS, NC, SC, TN</td>
</tr>
<tr>
<td>Southwest</td>
<td>SW</td>
<td>AZ, CA, NV</td>
</tr>
<tr>
<td>Western Canada</td>
<td>WC</td>
<td>AB, BC, MB, NT, SK</td>
</tr>
</tbody>
</table>
Volume by Geography and Segment

These charts display the three segment categories within the four geographic corridors.

Observations:

- Marine ISO (blue bar) represents the majority of the business in the West Coast/Interior and Trans-Con corridors. It also has a significant share in the East Coast/Interior corridor.
- Domestic ≥ 48 (red bar) is clearly predominant in the North-South corridor. It became the majority segment in the East Coast/Interior corridor in 2009 (having become the largest segment the prior year.) It also has a large share in the West Coast/Interior and Trans-Con corridors.
- Domestic ≤45 has been steadily decreasing in all corridors; however, it still maintains some presence in the North-South corridor. (22% in 2002; 6% in 2012)

This analysis reinforces the notion that the Marine ISO segment is predominantly an east-west business.
Volume by Geography and Segment

These charts display the share of North American intermodal loads for five geographic corridors within the three segment categories.

Observations:

- While the West Coast/Interior (red bar) is universally the largest share, its predominance is clearest in the Marine ISO segment. (The Marine ISO segment is the only one with a significant Trans-con role.)
- Both the Domestic ≥ 48 and Domestic ≤ 45 segments have similar geographic profiles.
- Both the North/South (green bar) and Intra-Regional (white bar) corridors occupy niches of varying size. (Except for the general lack of North/South Marine ISO volume.)
- It is unknown whether Intra-Region movements – which have been growing this entire period -- are true shorthaul loads or [revenue] empty repositioning.

This analysis indicates some transformation of the intermodal mix. The Marine ISO is still predominantly based on the west coast (Trans-Con and West Coast/Interior); however, both Domestic ≥ 48 and Domestic ≤ 45 segments have over half their volumes in other geographies.
Volume by Region 2002 – 2012

These charts deconstruct 2002 and 2012 volume into their geographical regions. The left y-axis (green bar) represents the number of units; the right y-axis (blue line) is the cumulative market share. (The volume displayed on the left y-axis represents the sum of volume for both origin and destination regions.)

Observations:

- Between them, Midwest and Southwest volume represents almost half of all volume.
- The relative gap between the two largest regions, Midwest and Southwest respectively grew in this period. The Midwest was 21% larger in 2002 and 39% larger in 2012.
- The third and fourth largest regions remained the same; however, their positions reversed. The Northeast was 5% larger than the Southeast in 2002. By 2012, the Southeast was 19% larger than the Northeast.

The [greater] growth of the Midwest over the Southwest is indicative of growing East Coast/Interior volumes.
U.S. WC Intact Movements

This chart analyzes the Marine ISO segment by calculating the percentage of imports discharged on the U.S. West Coast that move inland by intact intermodal. The results are striking:

The percentage of intact 20-foot containers has remained fairly stable.

The percentage of intact 40-foot containers has trended down somewhat — but at a lower level than 20-foot containers.

Intact movement of 45-foot containers has decreased in this period from 44% to 31%.

These numbers show the impact of transloading. The less dense the commodity — and the larger the equipment size — the better the economics of transloading. The intact proportion is inversely related to the ability to transload the cargo.
U.S. WC Import Intermodal Movement

This slide analyzes the intermodal movement of import cargo (discharged on the U.S. West Coast) by destination region. It measures the percentage of cubic feet that move by transloading.

Observations:

- All destinations have seen significant growth in transloading’s share since 2006 and 2007. All destination regions now have transloading as the majority option.
- The Northeast has seen the most significant growth since 2007, whereby transloading is the option for two-thirds of the cargo.

This chart poses a significant challenge to the conventional wisdom of all-water movement to the East Coast. (see previous slide) While intact intermodal movement has decreased, it has been more than offset by transloading activity.

Source: PMA, IANA and TPLLC
Marine ISO Movement from U.S. WC

This slide analyzes the intermodal movement of import containers (discharged on the U.S. West Coast) by destination region. (2002 volume is set at 1.00.)

Observations:

- All three geographic ranges follow the overall volume.
- West Coast/Interior movement has grown the most, followed by East Coast/Interior.
- Trans-con movement has grown the least.

This data would seem to support the belief that cargo for eastern destinations no longer moves by rail — but rather is moved by all-water service. (However, see next chart.)
Equipment Type, Size and Ownership

Now you can receive all the underlying aggregate data used in the compilation of the Intermodal Market Trends & Statistics quarterly analysis report and this supplement. Available by annual subscription, a monthly data file is emailed, furnishing you with the most current information available. Data segmentation is provided in Microsoft Excel® files. Benchmark your company’s performance on a timely basis and make rapid adjustments to keep pace with changing industry trends. Every month you’ll receive a spreadsheet containing a detailed breakdown of monthly traffic:

- Regional volume flow
- Various sizes and types of equipment
- Equipment ownership: whether private or rail-controlled
- Cumulative data by month

Ordering information is available online at http://www.intermodal.org/membership/eweb/store.php or by contacting Tara Mullen at 301-982-3400, ext. 366, or tara.mullen@intermodal.org.