

# Tracking U.S. Grain, Oilseed, and Related Product Exports to Mexico

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## What Is the Issue?

U.S. grain, oilseed, and related product exports to Mexico averaged 22.2 million metric tons (mmt) per year from 2008-2012 with an average annual value of \$7.3 billion. This is twenty percent more volume than the average of the early 2000s and two and a half times the value. Continued trade growth has spurred interest in how these products are transported throughout Mexico and how they are used.

introduction

While much is known about the transportation and uses of U.S. grains and soybeans and related products within the United States, much less is known about how these U.S. commodities are transported within Mexico, their final destinations, and how they are used in Mexico. This study reports the destination, mode of transportation and end uses of U.S. grains, oilseeds, and related products (grain as a group) within the Mexican market.

## What Is the Approach?

This project has four main objectives that will provide valuable information on U.S. grain, oilseeds and related product exports to Mexico:

- Analyze the net grain exports to Mexico in metric tons.
- Determine the main Mexican entry points.
- Identify the modes of transportation used.
- Determine the final Mexican destinations.

The data were gathered from several Mexican and American databases from government agencies, private sector firms, and agricultural organizations. Data from Mexico comes from the statistics division of the Mexican Agricultural Ministry, Servicio de Información y Estadística Agroalimentaria y Pesquera de Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SIAP/SAGARPA), a valuable source of information for determining volumes of Mexican imports of grain from the United States, by both entry point and mode of entry.

Data were also gathered from the main rail transportation providers in Mexico, Ferromex and Kansas City Southern de Mexico. These data revealed how U.S. product was moving within Mexico, and what the destination of these product by volume and origin.

Data were collected from the Global Agricultural Trading System (GATS), U.S. Foreign Agricultural Service (FAS), and World Institute for Strategic Economic Research through their trade data base, WisserTrade. These data were used to validate trade volumes and entry points for exports from the United States into Mexico. Information from various FAS Global Agricultural Information Network reports was reviewed to determine uses for U.S. products covered by this report. Further, data were requested from the U.S. grain organizations in an effort to obtain the fullest picture possible of destinations and uses.

Once the data were gathered, they were organized by the destinations, modes of transportation and uses of U.S. grain within Mexico.

Figure 1 shows the shares U.S. grain, oilseed, and related product exports to Mexico by share of volume.

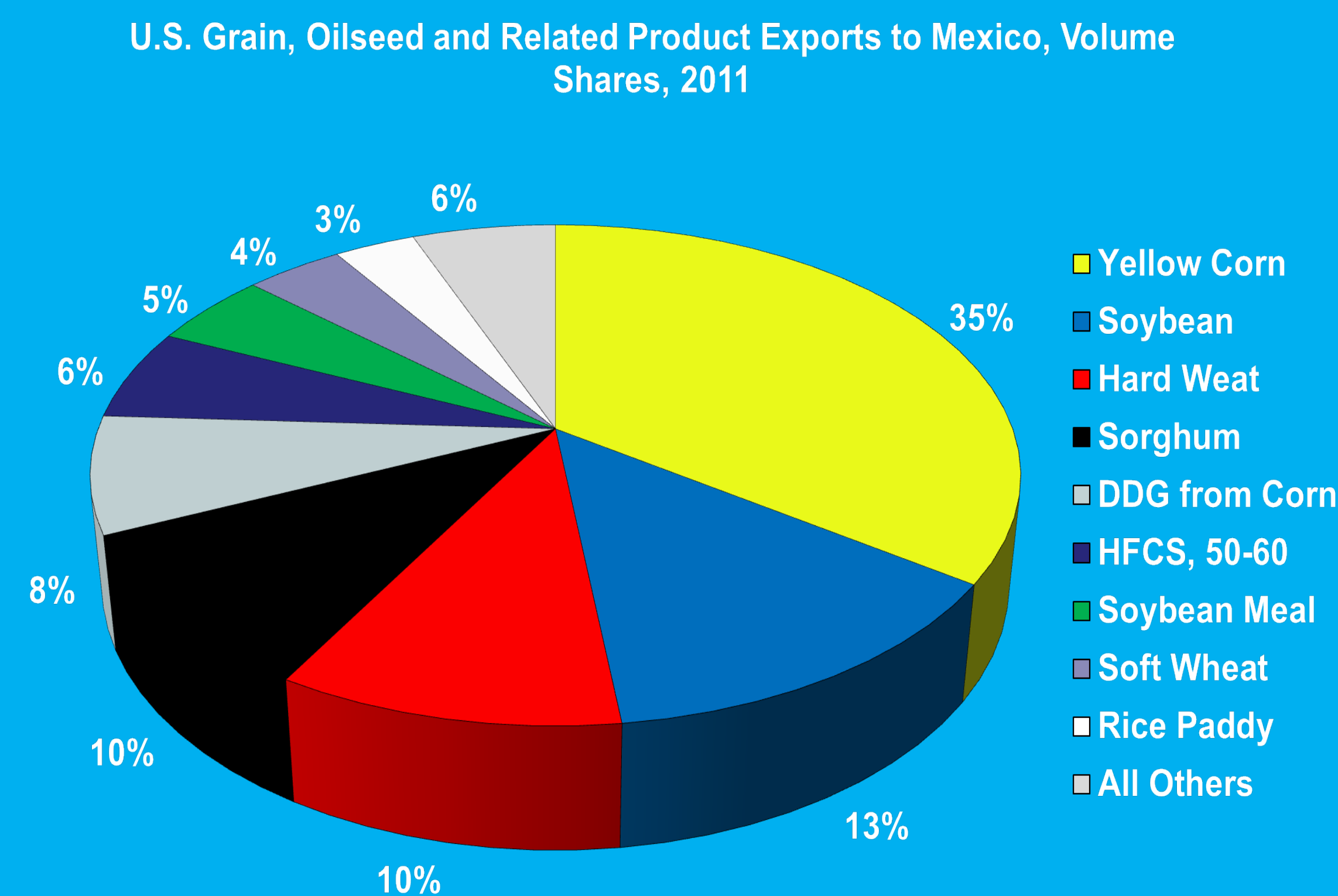


Figure 2 shows the shares U.S. grain, oilseed, and related product exports to Mexico by Entry mode and share of volume.

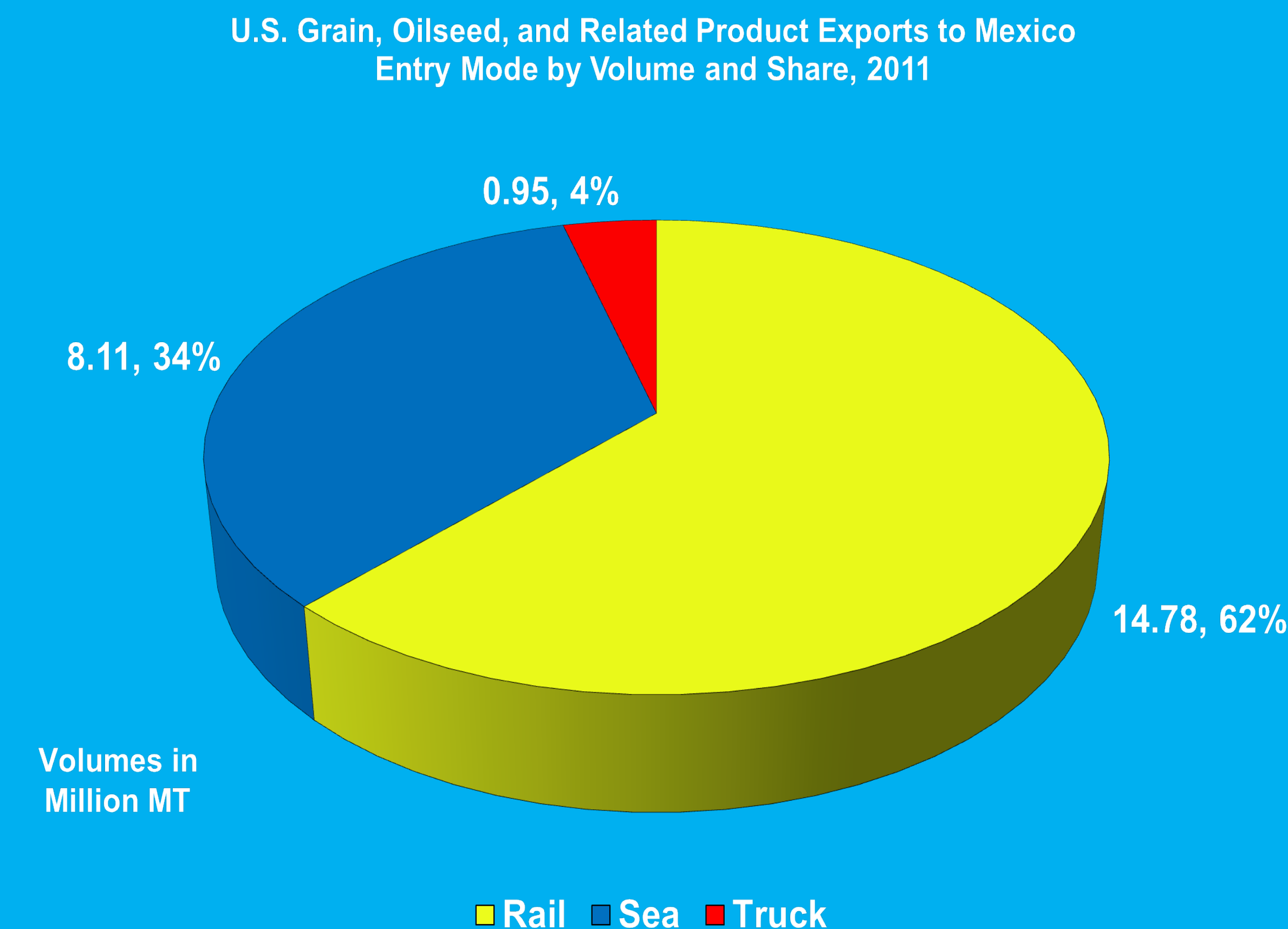


Figure 3 shows the mode of entry into Mexico of top U.S. grain, oilseed, and related product exports to Mexico.

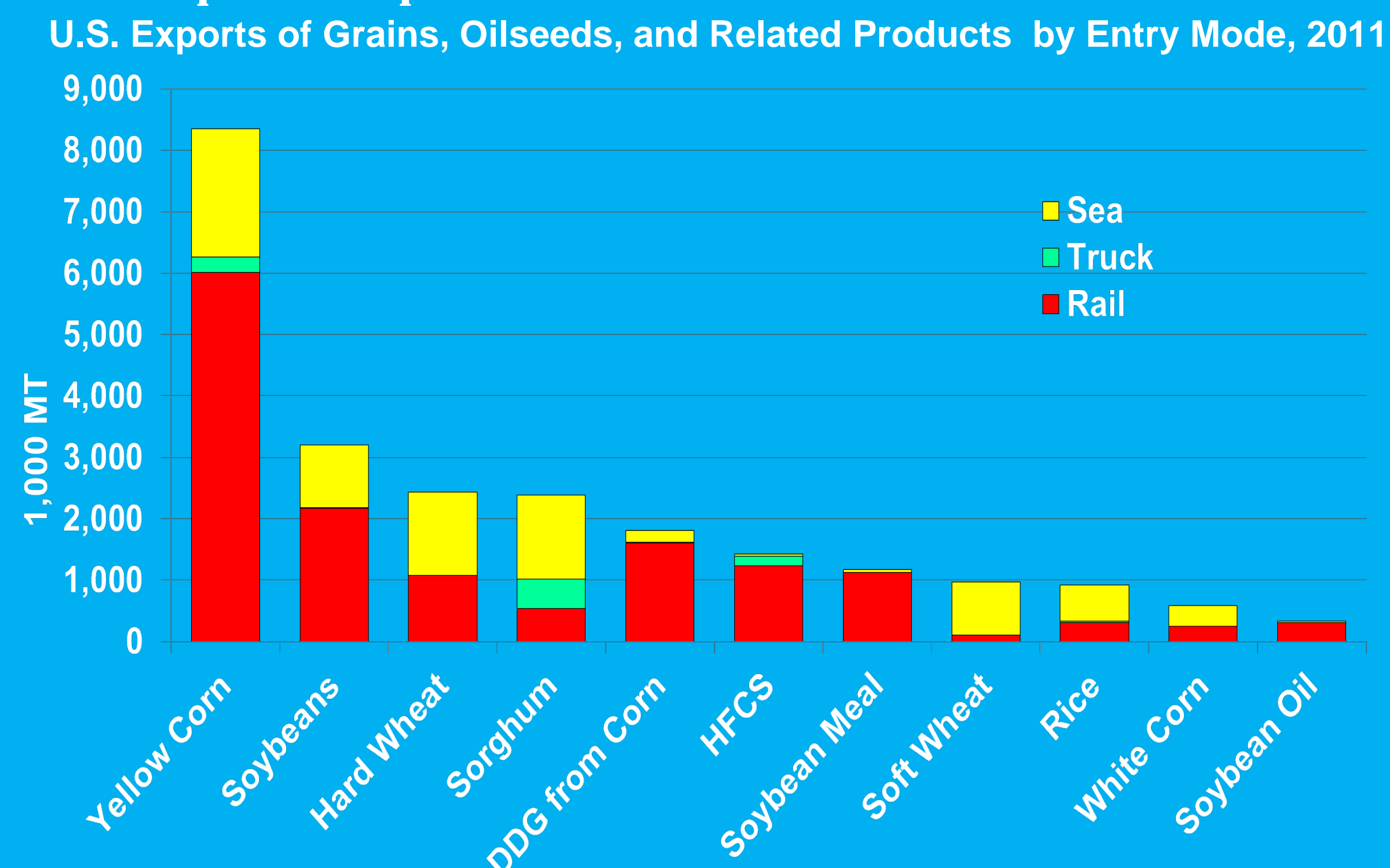
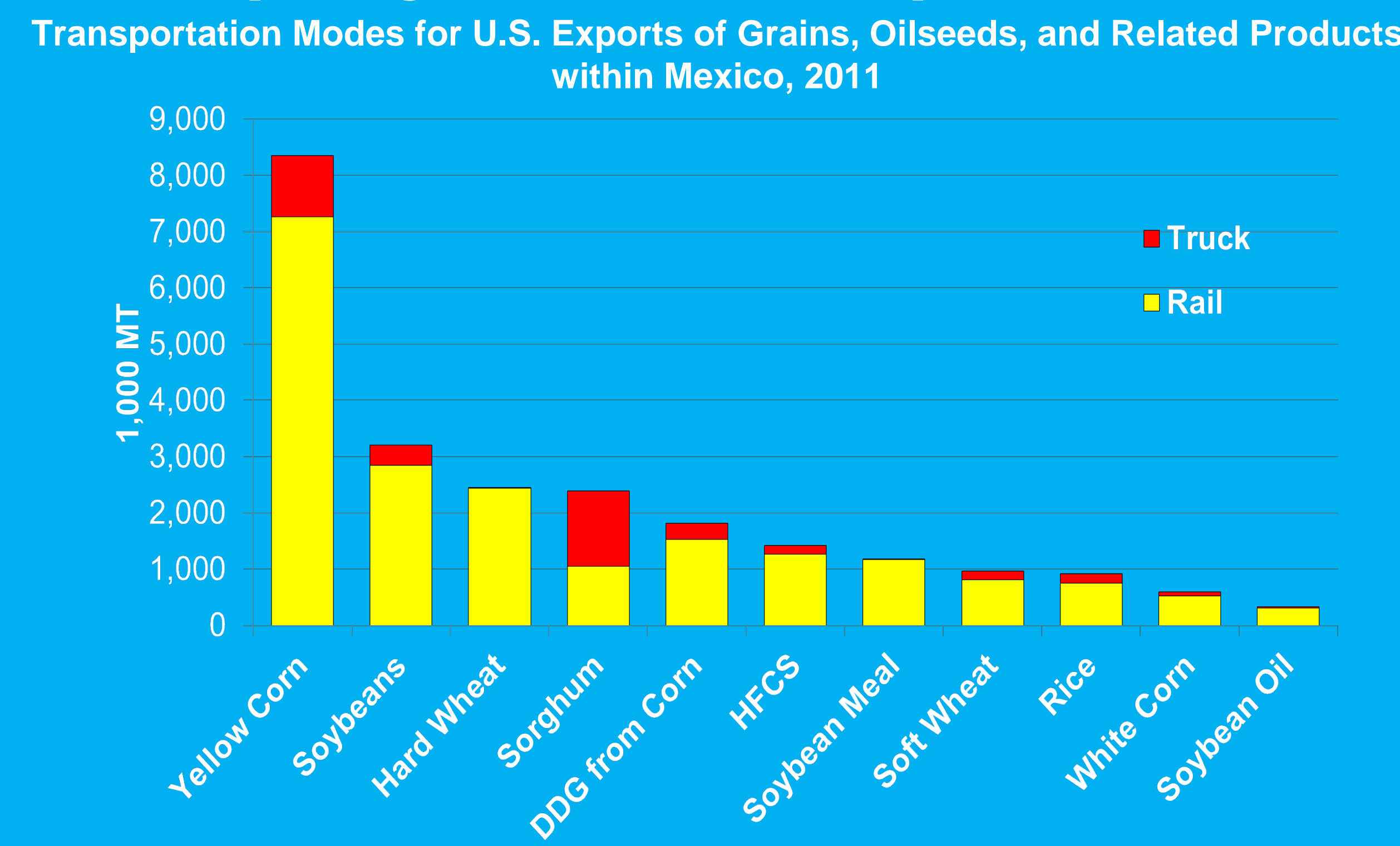


Figure 4 shows the modes of transportation within Mexico of top U.S. exports of grains, oilseeds and related products.



Top Mexican Ports of Entry for U.S. Grains, Oilseeds and Related Products Exported to Mexico, 2011

Border/Port Location	Mexican State	Transport Mode Arriving in Mexico	Transport Mode Leaving Mexican Customs	2011 Volume (1,000 MT)	2011 Value (U.S. \$ Million)
Nuevo Laredo	Tamaulipas	Rail	Rail	5,399.7	\$1,726.6
Veracruz	Veracruz	Sea	Rail/Truck	5,367.3	\$1,803.6
Piedras Negras	Coahuila	Rail	Rail	4,228.0	\$1,478.2
Ciudad Juárez	Chihuahua	Rail	Rail	3,268.0	\$1,036.6
Progreso	Yucatán	Sea	Rail/Truck	1,296.0	\$456.6
Matamoros	Tamaulipas	Rail	Rail	822.7	\$359.0
Coatzacoalcos	Veracruz	Sea	Rail/Truck/Sea	789.6	\$246.0
Nogales	Sonora	Rail	Rail	736.2	\$244.8
Nuevo Progreso	Tamaulipas	Truck	Truck	722.4	\$202.1
Tuxpan	Veracruz	Sea	Truck	545.8	\$166.2
Mexicali Baja	California	Rail	Rail	285.8	\$92.1
<b>TOTAL (includes all others):</b>				<b>23,835.9</b>	<b>\$7,979.3</b>

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## What Did the Study Find?

Yellow corn, used mostly for animal feed and corn starch, is the largest volume export of these product categories, accounting for 35 percent in 2011. Soybeans, crushed for meal and oil, accounted for 13 percent, while hard wheat, used for human consumption, and grain sorghum, used for animal feeding, accounted for ten percent each. These top four products accounted for 68 percent of U.S. grain and oilseeds exports to Mexico. Yellow corn also dominated export values to Mexico with 29 percent during 2011, followed by soybeans (20 percent), hard wheat (10 percent), and sorghum (8 percent).

Outside these top four products are dried distiller's grain (DDG), high fructose corn syrup (HFCS), soybean meal, soft wheat, and rice. While most of the major products exported to Mexico have a long history of presence in the market, the emergence of DDG, HFCS, and soybean meal is relatively recent. In total, fourteen product categories are covered in this report in various degrees of detail, based upon the availability of data.

Four ports of entry handled 77 percent of the total U.S. grain exports by volume in 2011: Nuevo Laredo, Veracruz, Piedras Negras and Ciudad Juárez. The seaports of Progreso in Yucatan and Coatzacoalcos, as well as the land ports of Matamoros, Nogales, and Nuevo Progreso in Tamaulipas are also important gateways.

Rail is the dominant mode of transport for U.S. grain entering Mexico, accounting for 14.78 mmt, or 62 percent of entry. Seaports are the second most dominant mode of entry for U.S. agricultural exports to Mexico, accounting for 8.11 mmt, or 34 percent.

Based upon information from Mexican authorities, at least 42 percent of these imports leave the seaport area via rail while at least 17 percent leave via truck. The remainder falls in a "rail/truck" combination, continues to another Mexican seaport, or the mode of transportation is not identified.

Once inside Mexico, rail shipments of U.S. grains, oilseeds, and related products are handled by the two major Mexican rail companies: Ferromex/Ferrosur and Kansas City Southern de Mexico. At least 18.7 mmt of the 23.8 mmt, or nearly eighty percent, of U.S. exports to Mexico were shipped by rail within Mexico to their final destination. The remainder is shipped by truck. Jalisco was the largest single destination for rail shipments, receiving 3.25 mmt, followed by Queretaro at 2.06 mmt and the Estado de Mexico at 1.87 mmt.

The largest rail origin-destination pairs, those with at least a million metric tons, include Nuevo Laredo-Queretaro (1.91 mmt), Piedras Negras-Jalisco (1.67 mmt), Veracruz-Puebla (1.48 mmt), Nuevo Laredo-Nuevo Leon (1.43 mmt), Nuevo Laredo-Estado de Mexico (1.34 mmt), and Ciudad Juárez-Jalisco (1.28 mmt).

Sources for the above figures and the table are Servicio de Información Agroalimentaria y Pesquera (SIAP), SAGARPA, Mexico., and the Mexican Rail industry.

Reference: Flynn J. Adcock, Juan Villa, Mark Welch, Jose Antonio Perez-Vidales, C. Parr Rosson, III. Tracking U.S. Grain, Oilseed and Related Product Exports in Mexico. CNAS Publication Number 2013-01. November 2013. Posted at <http://cnas.tamu.edu> and <http://dx.doi.org/10.9752/TS144.11-2013>

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methodology & data

results