
EIA's crude-by-rail data



For

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By

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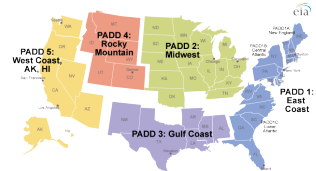
| U.S. Energy Information Administration

Independent Statistics & Analysis | www.eia.gov

Takeaways

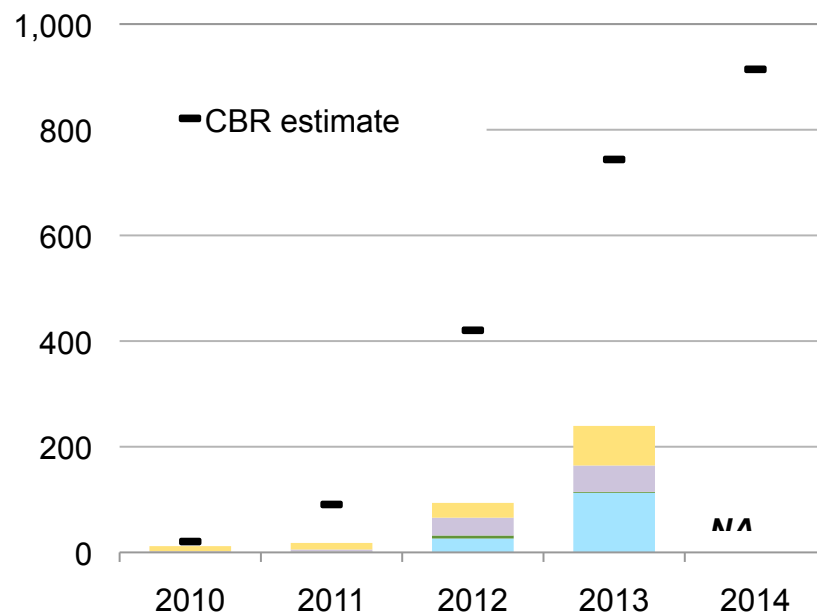
- At the end of March, EIA published monthly crude-by-rail (CBR) data along with its monthly petroleum supply balances
- EIA monthly data provides credible and publicly-available information on CBR movements, including historical monthly data starting in 2010
- Inter-regional CBR movements improve EIA's petroleum balances by reducing unaccounted-for crude oil supply
- By including cross-border and intra-regional CBR data as well as the inter-regional CBR movements, the new data provides insight into total CBR traffic, which is of interest to other agencies and the public

New EIA CBR data vastly improve our understanding of refinery rail receipts



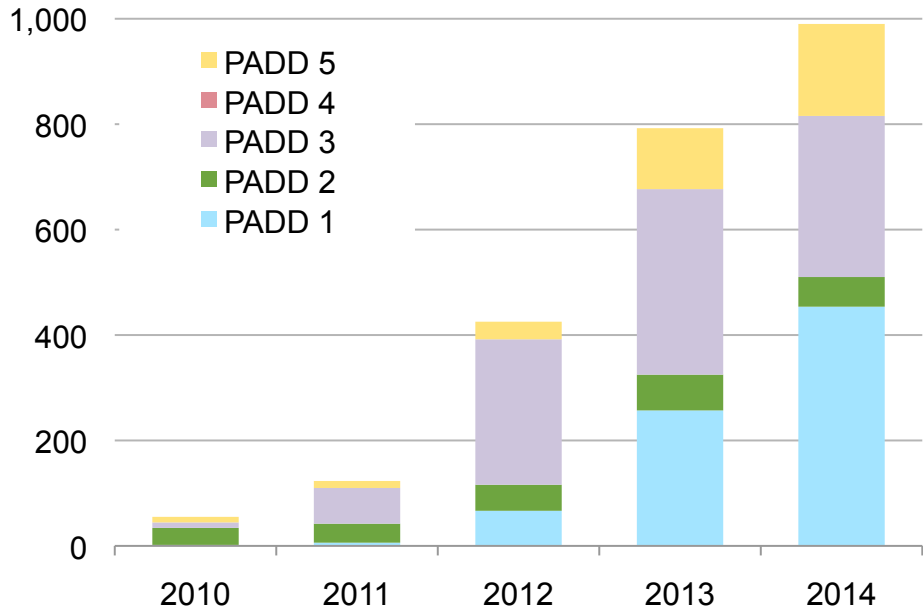
Refinery receipts
thousand barrels per day

Before



Refinery + terminal receipts
thousand barrels per day

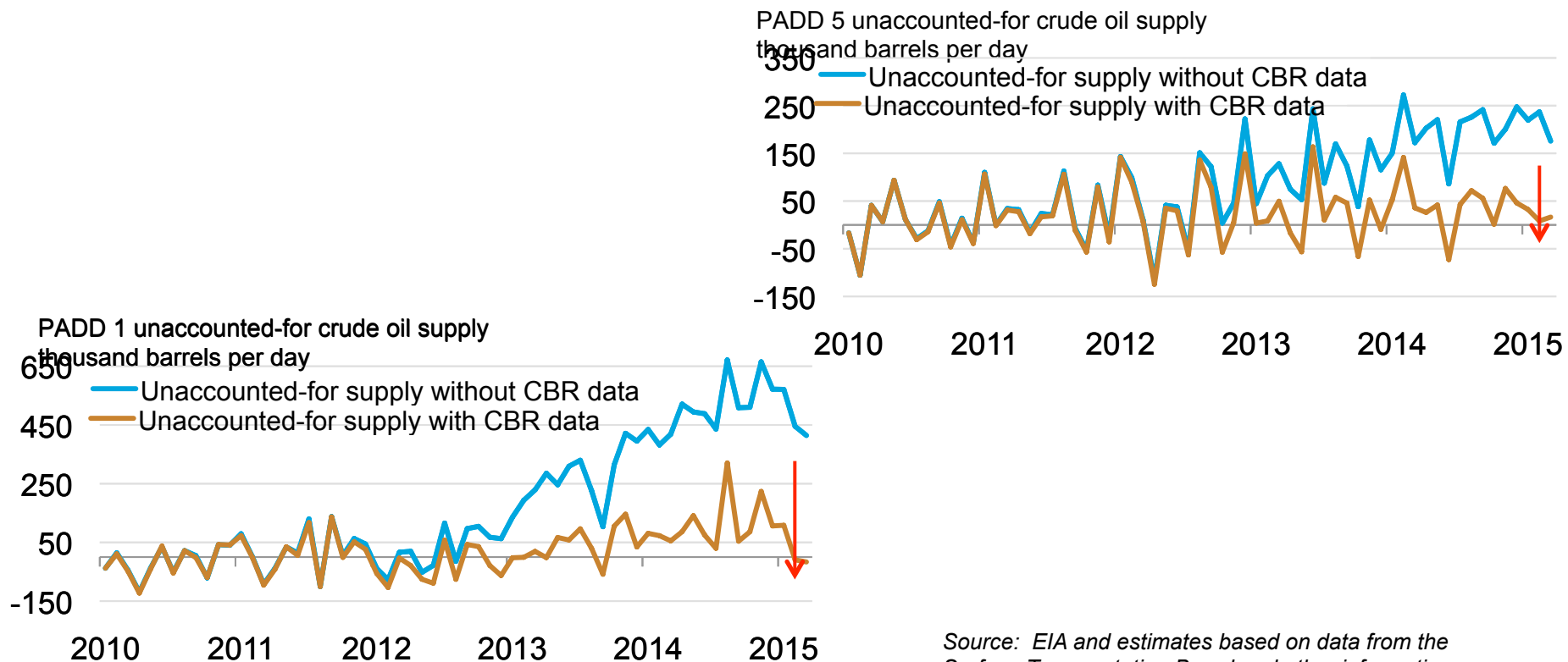
After



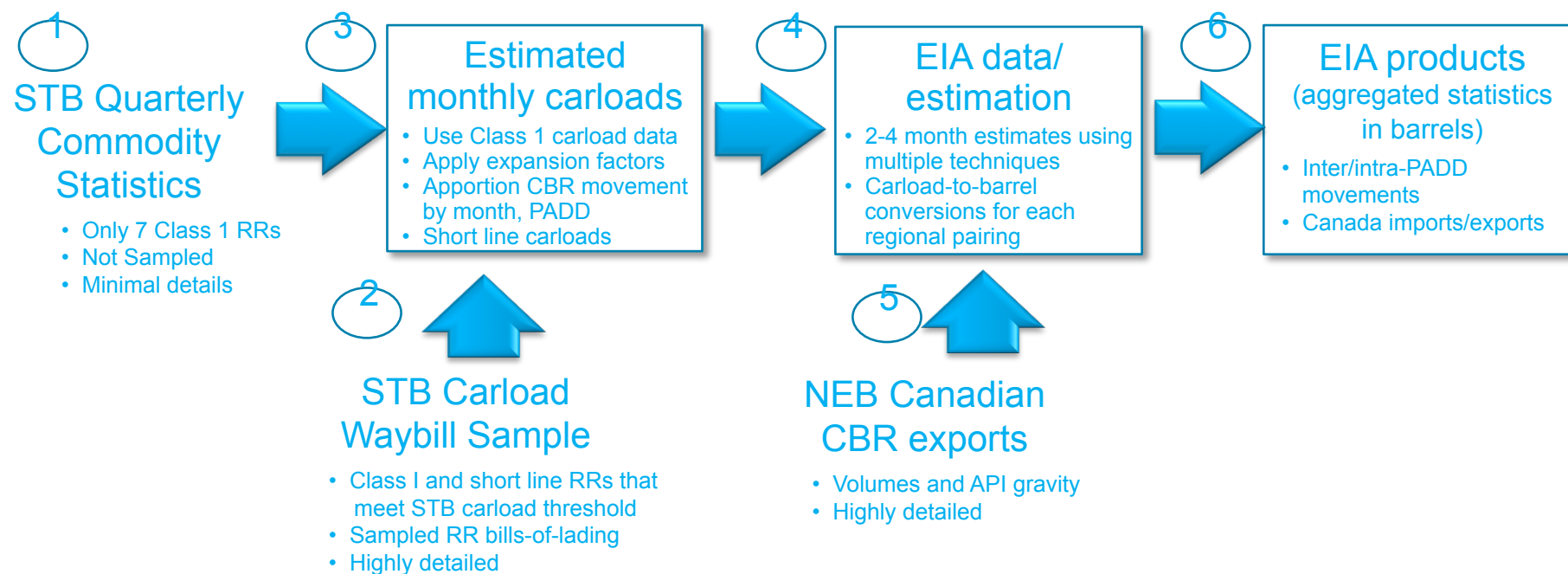
Note: National CBR estimate from EIA using AAR weekly carload data, minus assumed petroleum products.

Source: EIA and estimates based on data from the Surface Transportation Board and others.

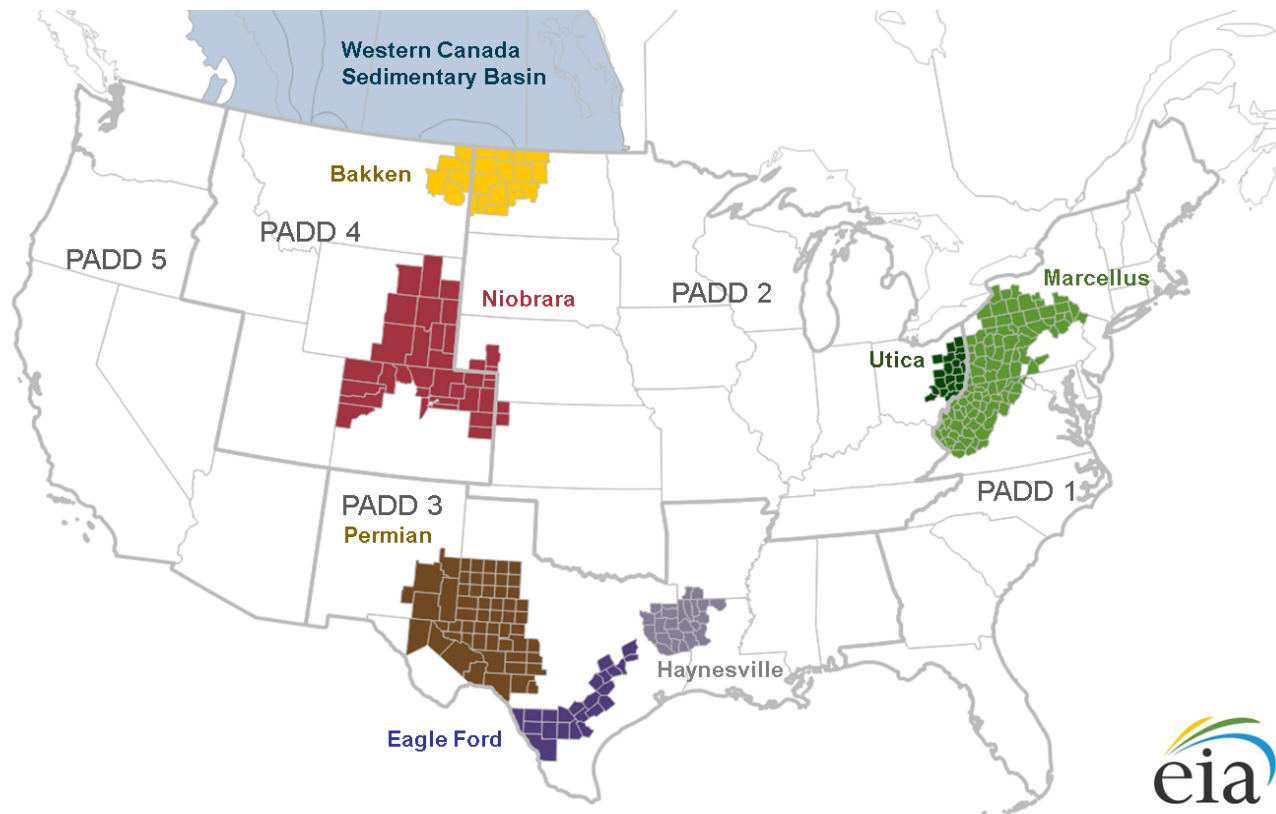
Unaccounted-for crude oil (EIA's adjustment factor) in EIA's regional balances is greatly reduced when CBR data is included



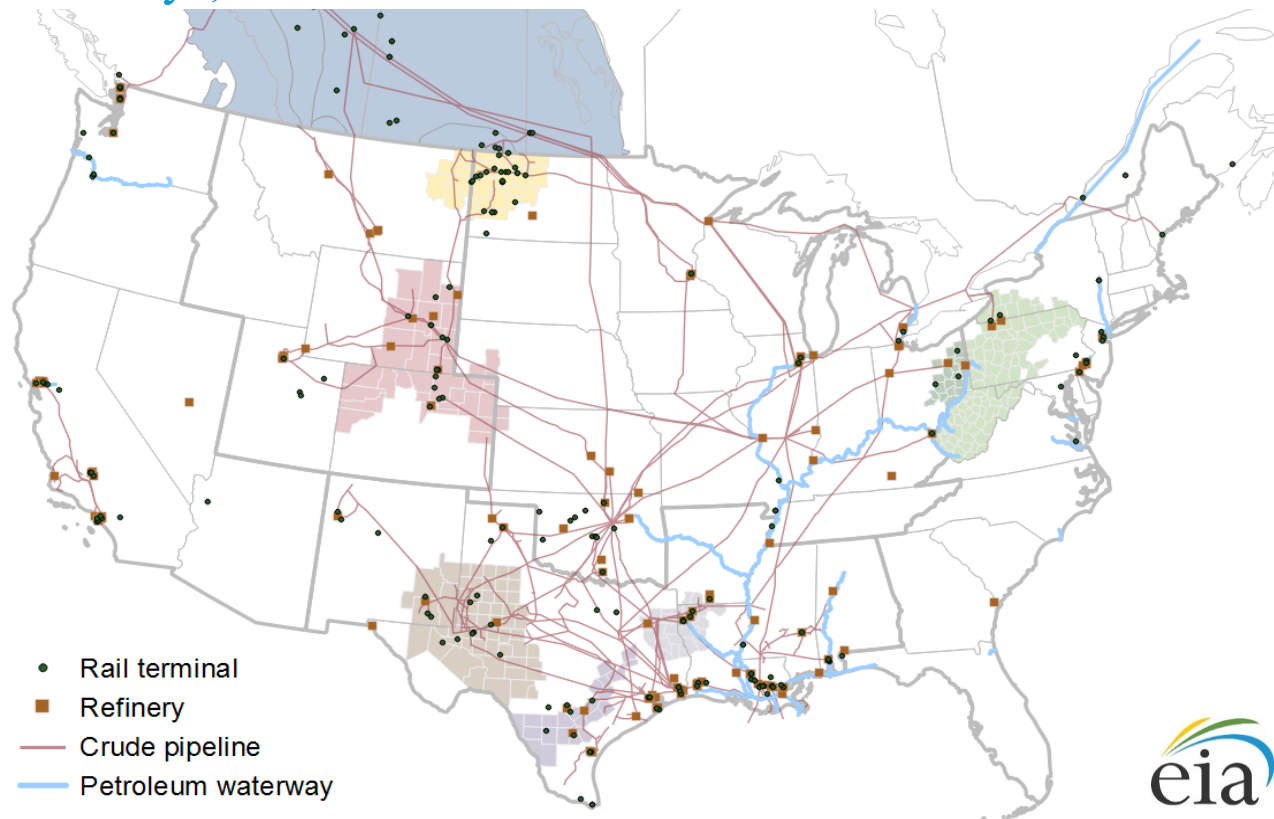
EIA's CBR data process integrates multiple data streams



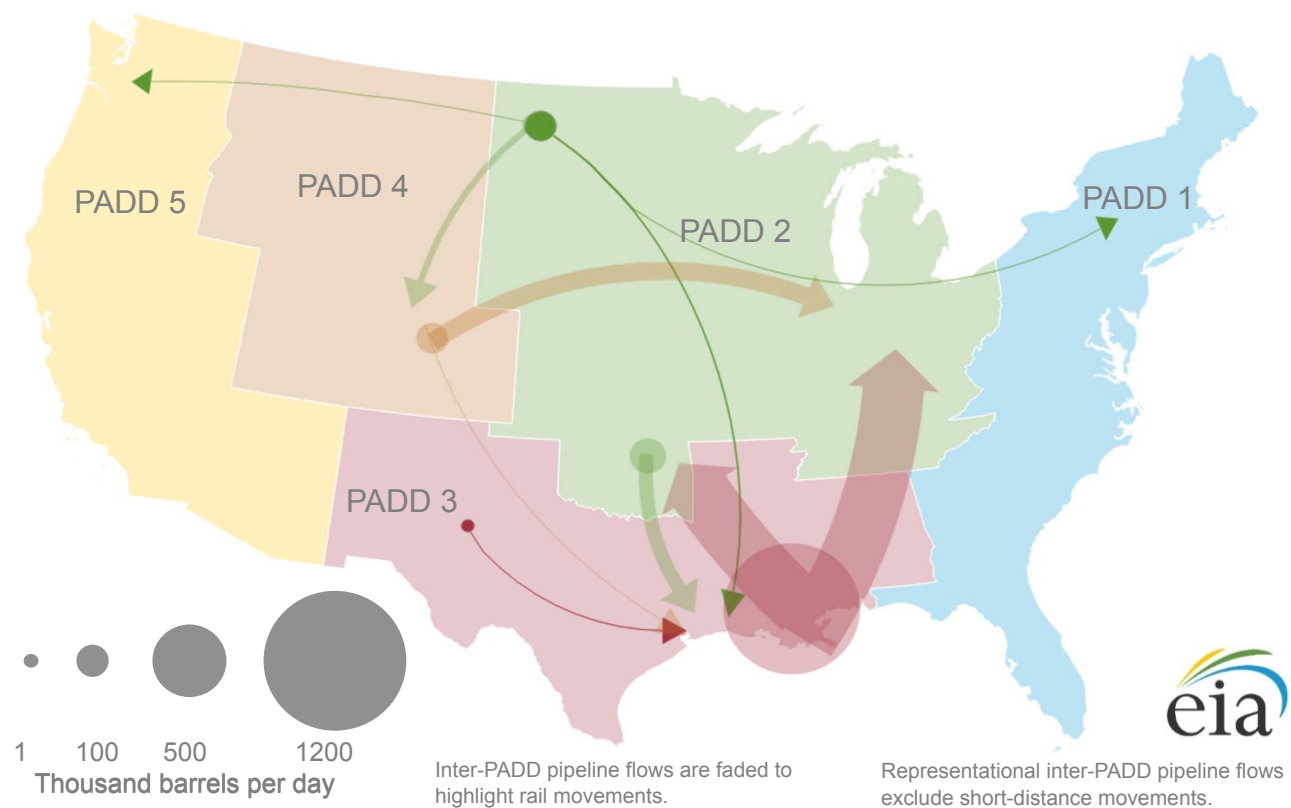
Major shale oil producing areas indicate CBR originations within Petroleum Administration for Defense Districts (PADDs)



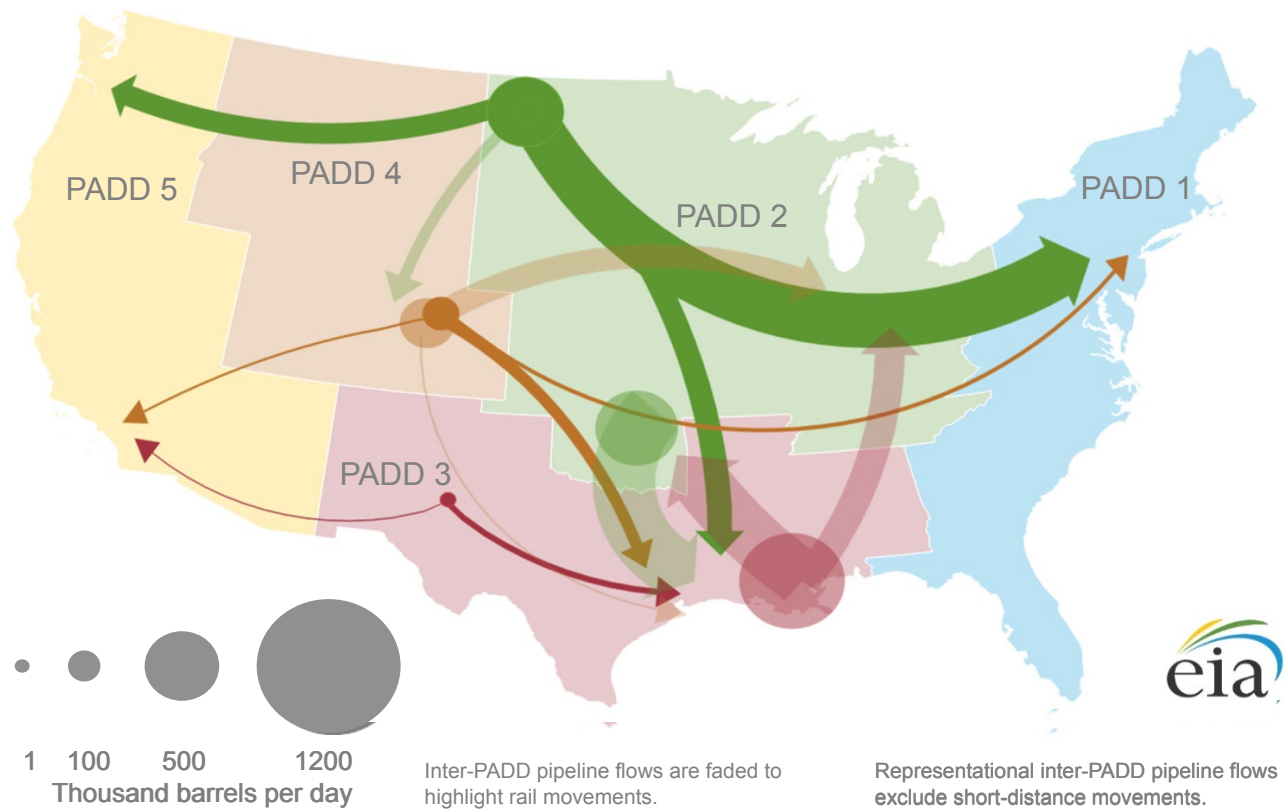
Crude oil infrastructure indicate openings for CBR: refineries, pipelines and waterways, and rail terminals



2010 inter-PADD crude flows: pipeline and rail

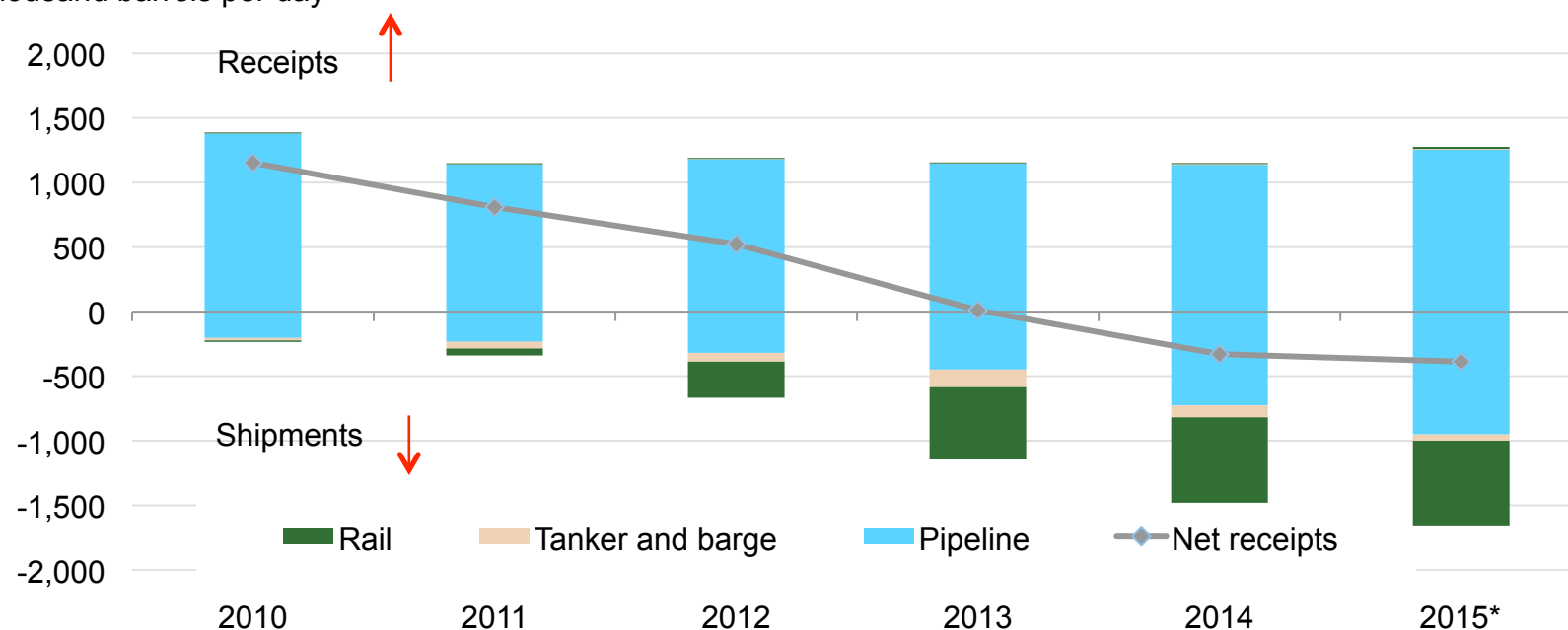


2014 inter-PADD crude flows: pipeline and rail



Crude outbound from PADD 2 continues to grow aided by CBR

PADD 2 shipments and receipts by pipeline and rail
thousand barrels per day

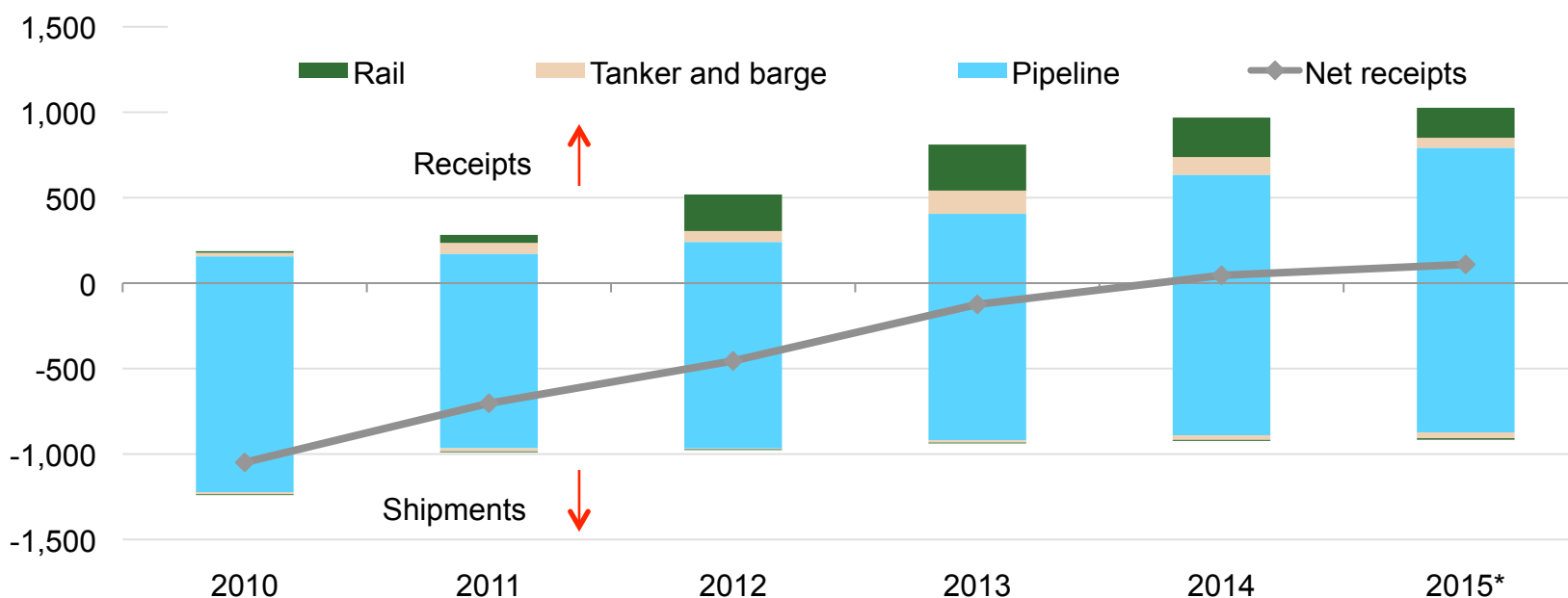


* 2015 data are averaged through March

Source: EIA and estimates based on data from the Surface Transportation Board and other information

PADD 3 is now a net receiver of crude oil aided by CBR

PADD 3 shipments and receipts by mode
thousand barrels per day

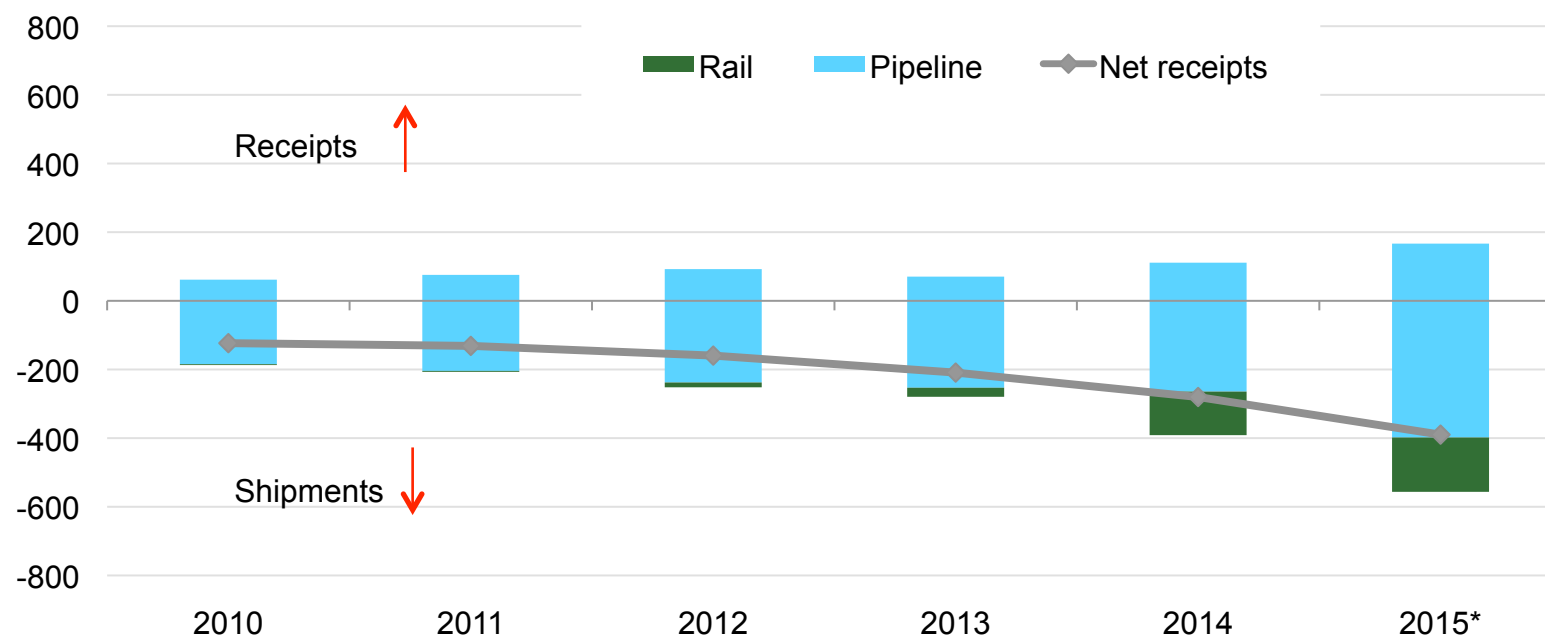


* 2015 data are averaged through March

Source: EIA and estimates based on data from the Surface Transportation Board and other information

Rail enhances PADD 4's takeaway capacity

PADD 4 shipments and receipts by mode
thousand barrels per day

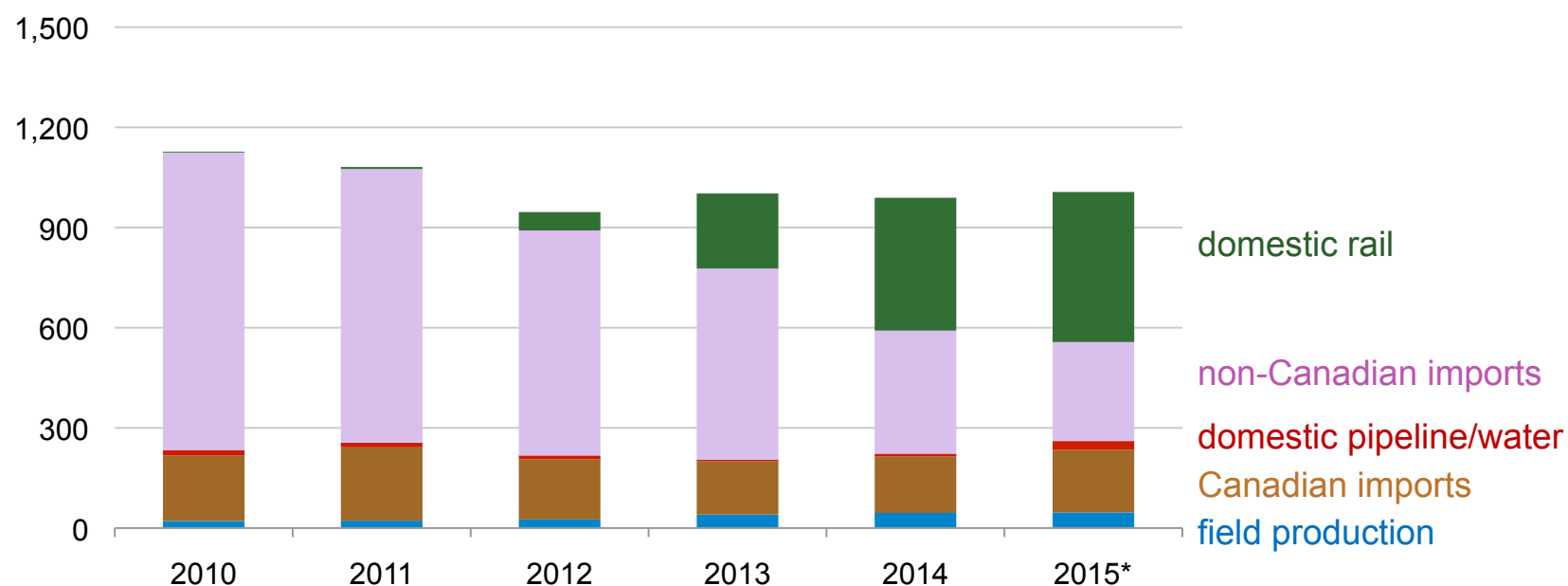


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Source: EIA and estimates based on data from the Surface Transportation Board and other information

CBR receipts in PADD 1 are displacing non-Canadian crude imports

Net crude oil supply to PADD 1 by source
thousand barrels per day

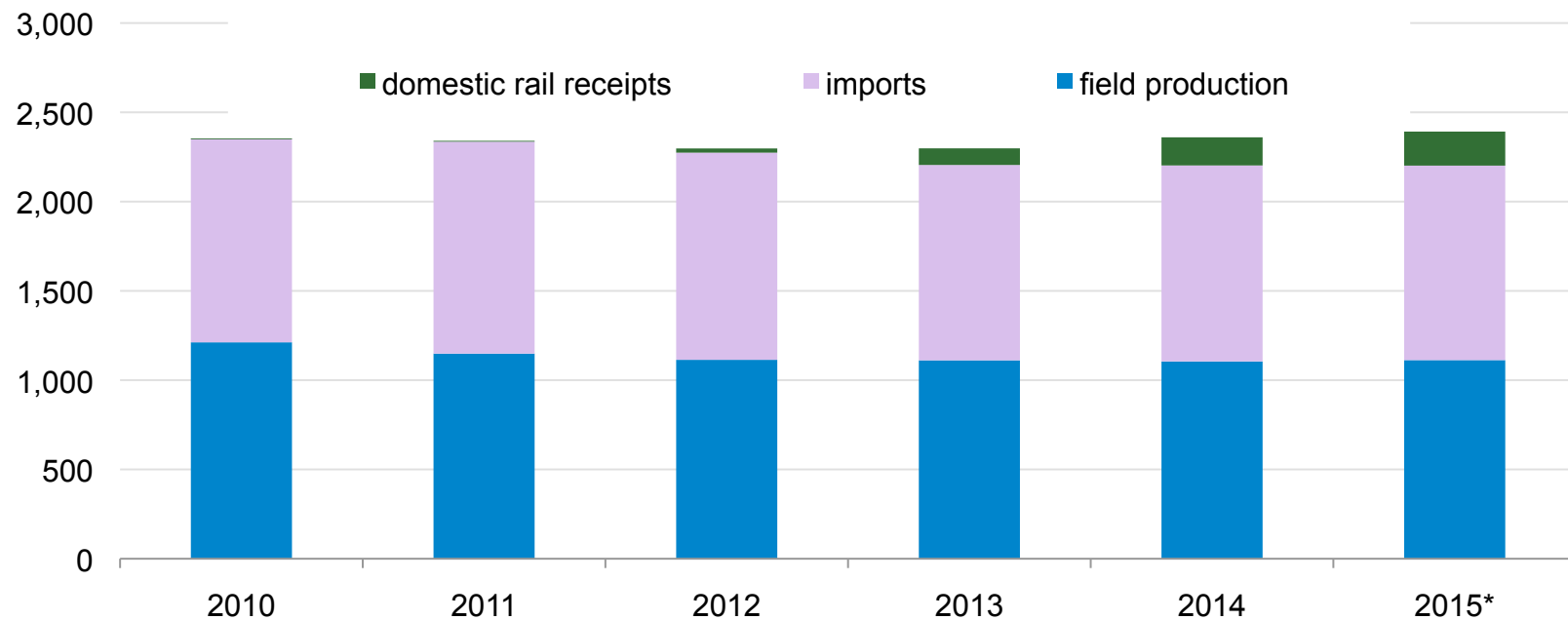


* 2015 data are averaged through March

Source: EIA and estimates based on data from the Surface Transportation Board and other information

PADD 5 CBR receipts and imports substitute for long-term declining domestic production

PADD 5 field production, imports, and domestic rail receipts
thousand barrels per day

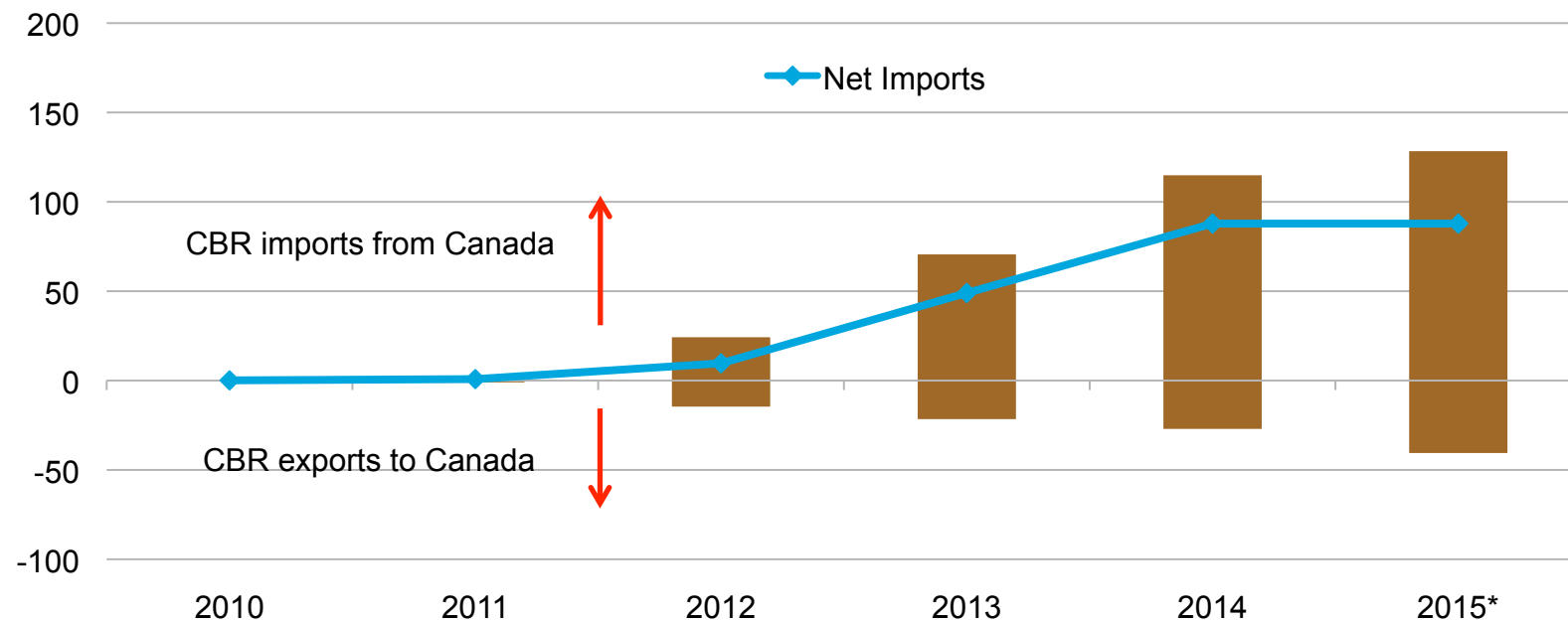


* 2015 data are averaged through March

Source: EIA and estimates based on data from the Surface Transportation Board and other information

Canada-U.S CBR trade is still modest in both directions

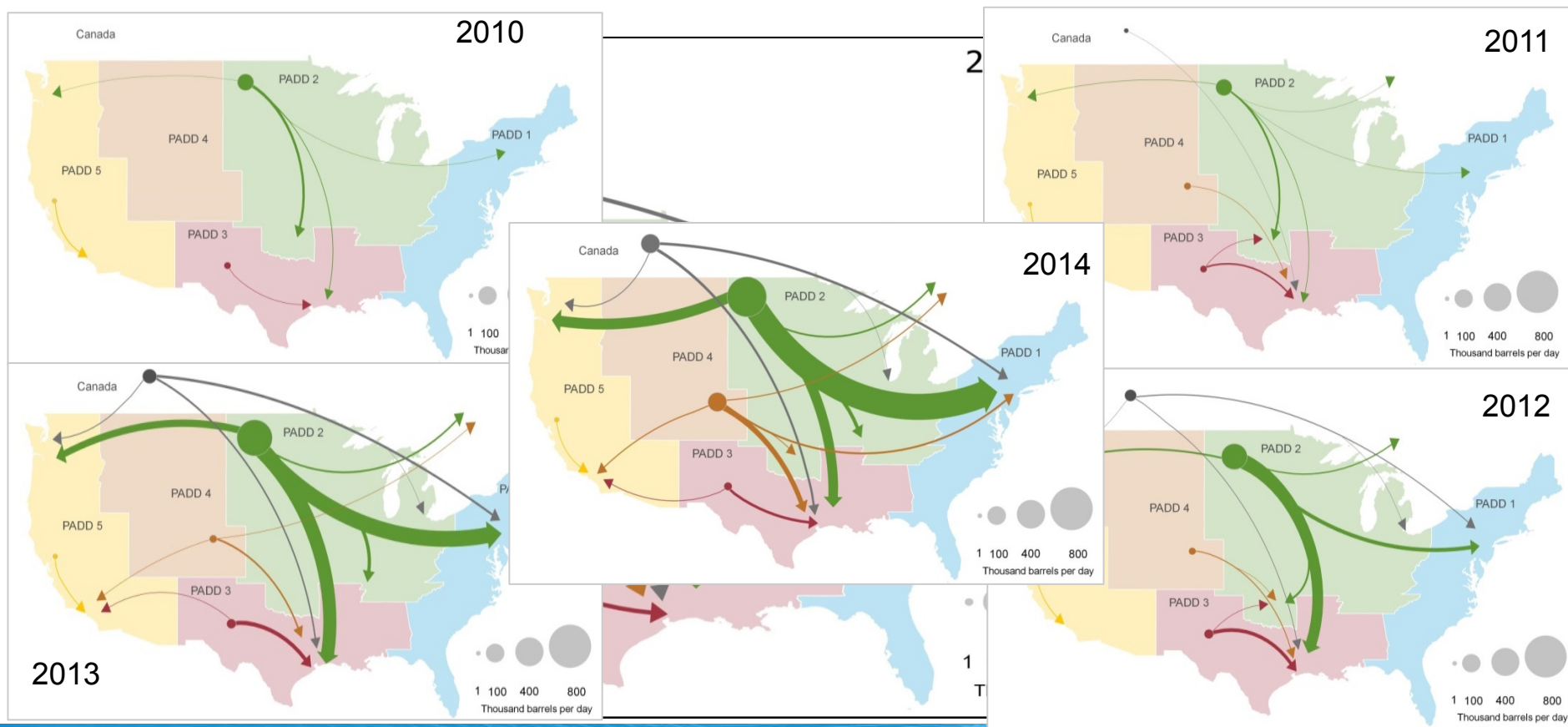
Crude-by rail movements between the U.S. and Canada
thousand barrels per day



* 2015 data are averaged through March

Source: EIA estimates based on data from the Surface Transportation Board and other information

Annual CBR flows, 2010 – 2014



Next up

- EIA is improving the CBR data series
 - Near-month estimation
 - Crude imports from Canada by rail
 - Analysis and processing of data
- EIA plans to extend its rail analysis to other energy commodities
 - Biofuels (ethanol)
 - Natural gas liquids (propane)
 - Petroleum products