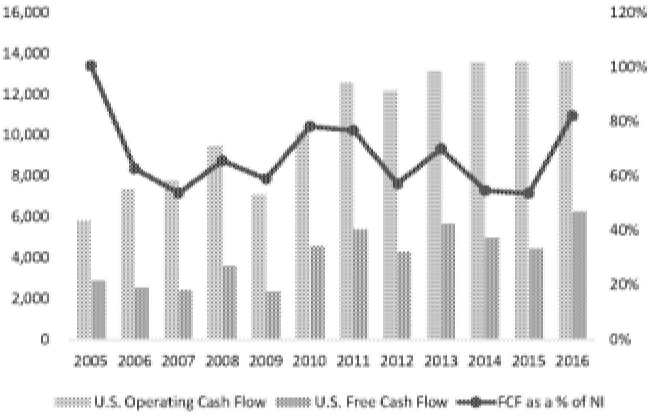
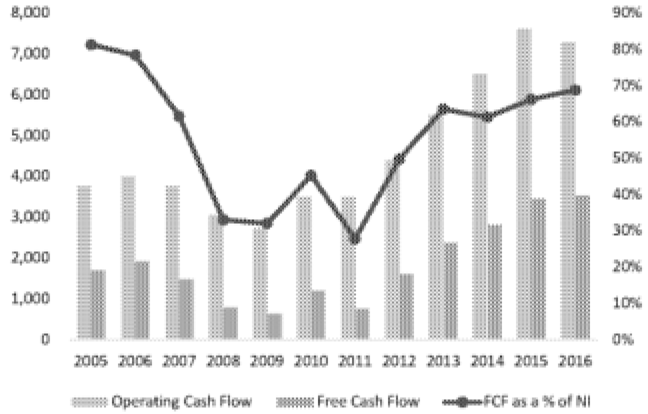
revenue over the last five years, however, driving weaker net income conversion during this time. The vast majority of free cash flow has been used to repurchase stock, with average share counts down about 15% since 2010 (3% CAGR).

Figure 33: Cash Flow Metrics - U.S. Rails (CSX, NSC, UNP cumulative) 2005-16



Source: Deutsche Bank, Company filings

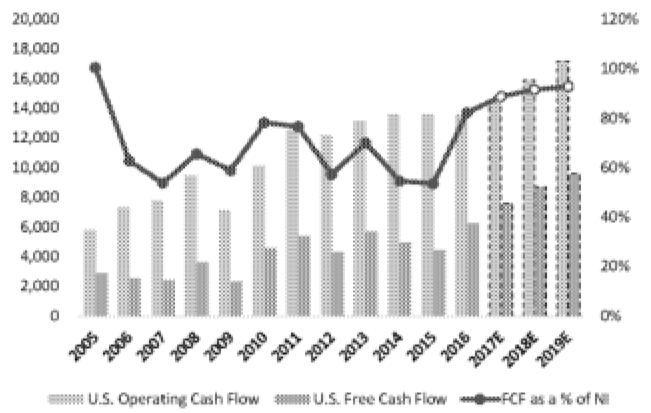
Figure 34: Cash Flow Metrics - Canadian Rails (CNI & CP cumulative) 2005-16



Source: Deutsche Bank, Company filings

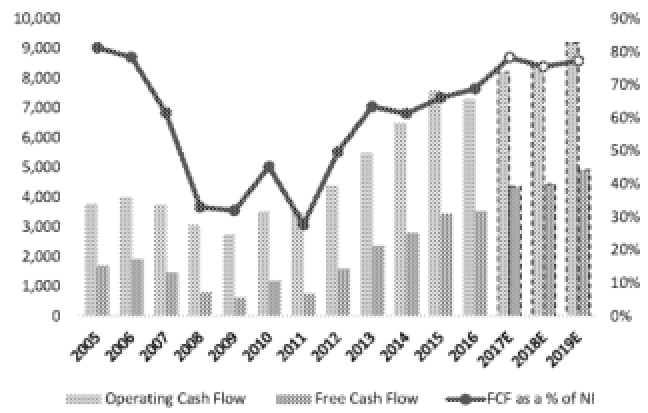
Partly driving the significant capex investment cycle was heavy investment in new locomotives to handle growing energy-related volumes (prior to the decline in oil prices) and Tier 4 emissions requirements which came into effect in 2015. Significant investments have also been made on positive train control systems (PTC), which is a collision avoidance system that was mandated by the U.S. Congress in 2008 to be fully operational on locomotives operating in the U.S. by the end of 2020. We estimate the total cost of PTC at just under $7B for the Class I railroads under our coverage universe with a little over $6B at CSX, NSC, and UNP and $900M at CP and CNI, though the vast majority (~90%) already outlayed. As such, capex appears to have peaked and is poised to decline as a % of sales for the majority of Class I's, with the exception of CNI and CP who are shifting their focus to revenue growth.

Figure 35: U.S. rails are expected to see an improvement in free cash flow conversion



Source: Deutsche Bank, Company Filings

Figure 36: Canadian rails are investing for growth



Source: Deutsche Bank, Company Filings