



## TREND ANALYSIS OF MAJOR REVENUE TYPES

EXECUTIVE APPROPRIATIONS COMMITTEE  
STAFF: THOMAS YOUNG, PH.D.; BRIAN WIKLE, SENIOR ECONOMIST

ISSUE BRIEF

**SUMMARY**

Each year the Office of the Legislative Fiscal Analyst (LFA) and Governor's Office of Management and Budget (GOMB) calculate a fifteen-year trend for revenue collection by major tax type. They then compare point-in-time revenue estimates with the trend to determine to what degree current growth rates might be sustained over time. Legislative rule asks that appropriators consider whether above-trend revenue should be spent on one-time expenses. For fiscal year 2019, the Legislative Fiscal Analyst calculates General and Education Fund point estimates as \$62 million above trend. LFA recommends the Legislature appropriate that amount – plus an additional \$5 million – ongoing to fully-fund in FY 2019 higher education buildings that were phase funded in the 2017 General Session.

**TREND ANALYSIS**

Utah law sections [36-12-13](#) and [63J-1-201](#) require an annual review of the fifteen-year revenue trends associated with major tax types.

Consistent with the 2016 version of this report and based on historical revenue figures, again this year analysts identified a revenue trend or growth in revenue that would have been expected absent any business cycle. They did so using a fifteen-year time series of collections by tax type. Analysts applied a Hodrick-Prescott filter to the data using a prudent lambda value of 25. HP filters help smooth variable data over time, but reflect cycles better than does a straight-line trend. The lambda value determines how flat or wavy an HP trendline might be. Lower lambda values produce flatter lines.

Analysts then compared the trend to FY 2019 consensus revenue estimates, and calculated that \$62 million of projected General and Education Fund revenue is above-trend (\$29 million General Fund and \$33 million Education Fund). Table 2 on the next page summarizes trend and point estimates for each tax type in the General and Education Funds. The figures that follow Table 2 contain the actual or projected revenue by tax type, the associated trend, and the cycle component of the projected revenue. The cycle (bottom bar graphs) is the difference between the point estimate and the trend component of that point estimate.

Our economists also looked at straight-line trends in relation to point forecasts. As Table 2 and the subsequent figures show, using those straight lines, current General and Education Fund estimates would be nearly \$499 million above trend.

**TREATMENT OF ABOVE-TREND REVENUE**

Legislative [Joint Rule 3-2-402](#) directs the Legislature's Executive Appropriations Committee to "consider treating above-trend revenue as one-time."

During the 2017 General Session, appropriators approved construction of three new higher education buildings for which they provided only partial funding. Legislators planned to use future debt service savings and existing ongoing construction budgets to complete these buildings. Of the total \$105 million in estimated construction costs for these buildings, \$27 million was appropriated when the buildings were authorized. Table 1 on the following page details the buildings, their cost, and funding.

**CONCLUSION AND RECOMMENDATION**

Trend analysis methodology consistent with that applied last year suggests that fall estimates for General and Education Fund revenue are \$62 million above trend. Legislators could use that amount, plus about \$5 million, to fund existing building commitments. Doing so would also free-up about \$46 million in debt service savings that could help avoid future debt issuance for the new State Prison. The Legislative Fiscal Analyst recommends the Legislature appropriate \$67 million from new ongoing revenue to Capital Development for these purposes.

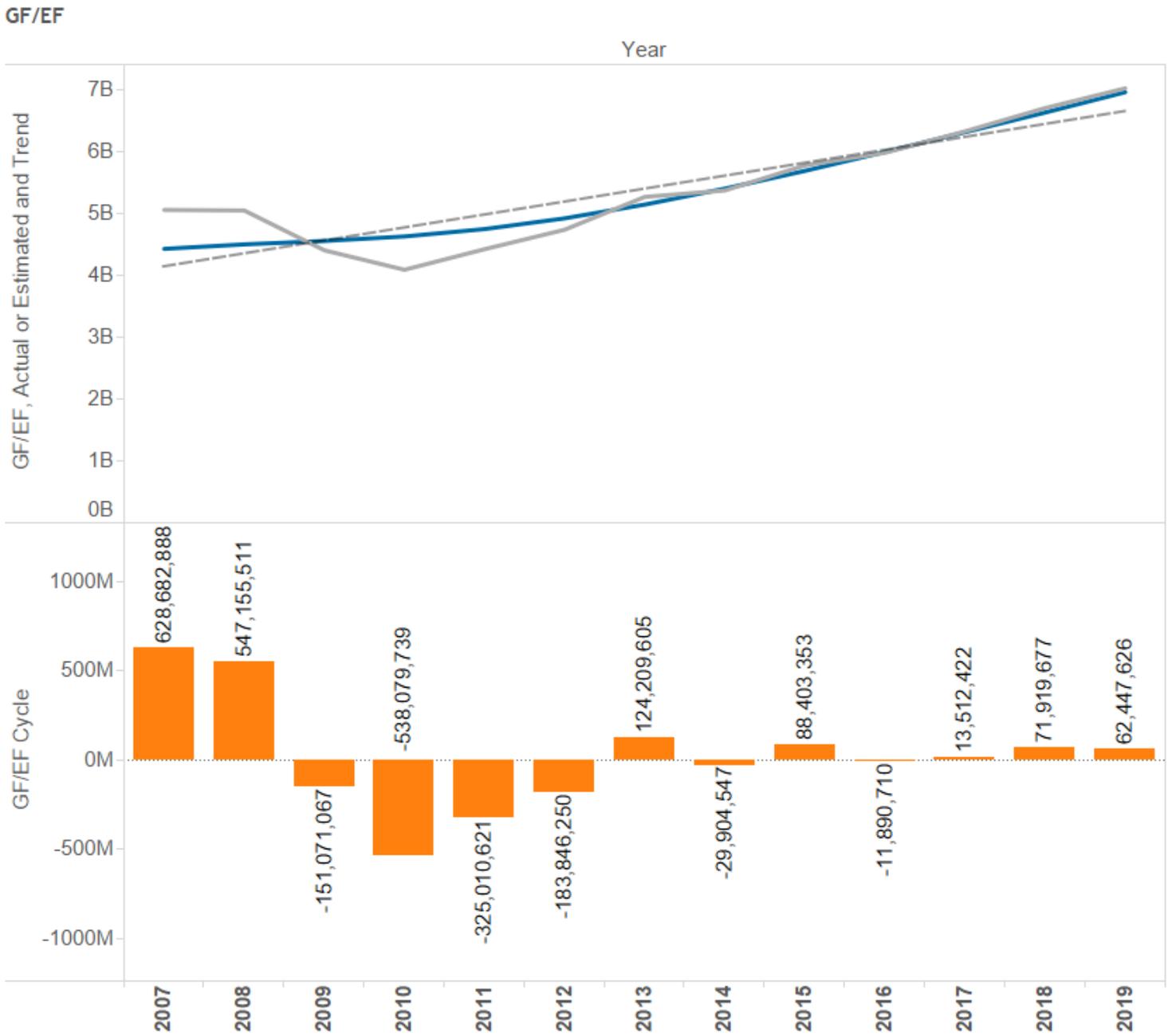
**Table 1 – Phase Funded Buildings from the 2017 General Session**

Project	State Funding Request	FY 2018 Funding	Difference
University of Utah Rehab Hospital	50,000,000	5,000,000	45,000,000
Dixie State University Human Performance Center	25,000,000	8,000,000	17,000,000
Weber Social Science Building	29,940,000	14,000,000	15,940,000

**Table 2 - Business Cycle Component of the Revenue Forecast**

Trend/Cycle of November Consensus	FY 18 Trend FY 18 Cycle FY 19 Trend FY 19 Cycle				FY 18 Trend FY 18 Cycle FY 19 Trend FY 19 Cycle			
	Hodrick-Prescott, Lambda=25				Linear Trend			
<b>General Fund (GF)</b>								
Sales and Use Tax	1,929,883	31,023	2,018,707	18,619	1,809,597	151,309	1,841,536	195,790
Cable/Satellite Excise Tax	31,165	284	31,972	(62)	31,976	(527)	33,020	(1,110)
Liquor Profits	116,215	1,108	123,679	694	113,148	4,175	119,050	5,323
Insurance Premiums	124,021	2,755	131,769	(50)	118,248	8,528	122,663	9,056
Beer, Cigarette, and Tobacco	118,139	(3,231)	117,780	(3,933)	126,486	(11,578)	131,661	(17,814)
Oil and Gas Severance Tax	20,968	(5,628)	12,293	7,794	31,504	(16,164)	28,021	(7,934)
Metal Severance Tax	8,264	(269)	6,536	2,913	11,212	(3,217)	10,336	(887)
Investment Income	12,750	3,307	15,043	2,470	5,046	11,011	2,424	15,089
Other	84,213	(226)	84,604	837	89,355	(5,368)	92,166	(6,725)
Property and Energy Credit	(5,696)	(4)	(5,632)	(135)	(5,834)	134	(5,804)	37
Subtotal General Fund	2,439,923	29,118	2,536,750	29,148	2,330,739	138,302	2,375,073	190,825
<b>Education Fund (EF)</b>								
Individual Income Tax	3,800,948	49,158	4,029,578	31,897	3,622,696	227,410	3,756,067	305,408
Corporate Tax	341,418	(6,418)	345,756	(1,308)	334,075	925	336,361	8,087
Mineral Production Withholding	17,254	(826)	15,260	1,882	20,889	(4,461)	20,500	(3,358)
Escheats & Other	27,940	889	28,729	830	30,196	(1,367)	31,593	(2,034)
Subtotal Education Fund	4,187,561	42,802	4,419,324	33,300	4,007,856	222,507	4,144,522	308,102
Subtotal GF/EF	6,627,484	71,920	6,956,074	62,448	6,338,595	360,809	6,519,595	498,927

Figure 1 - Combined General and Education Fund Sources



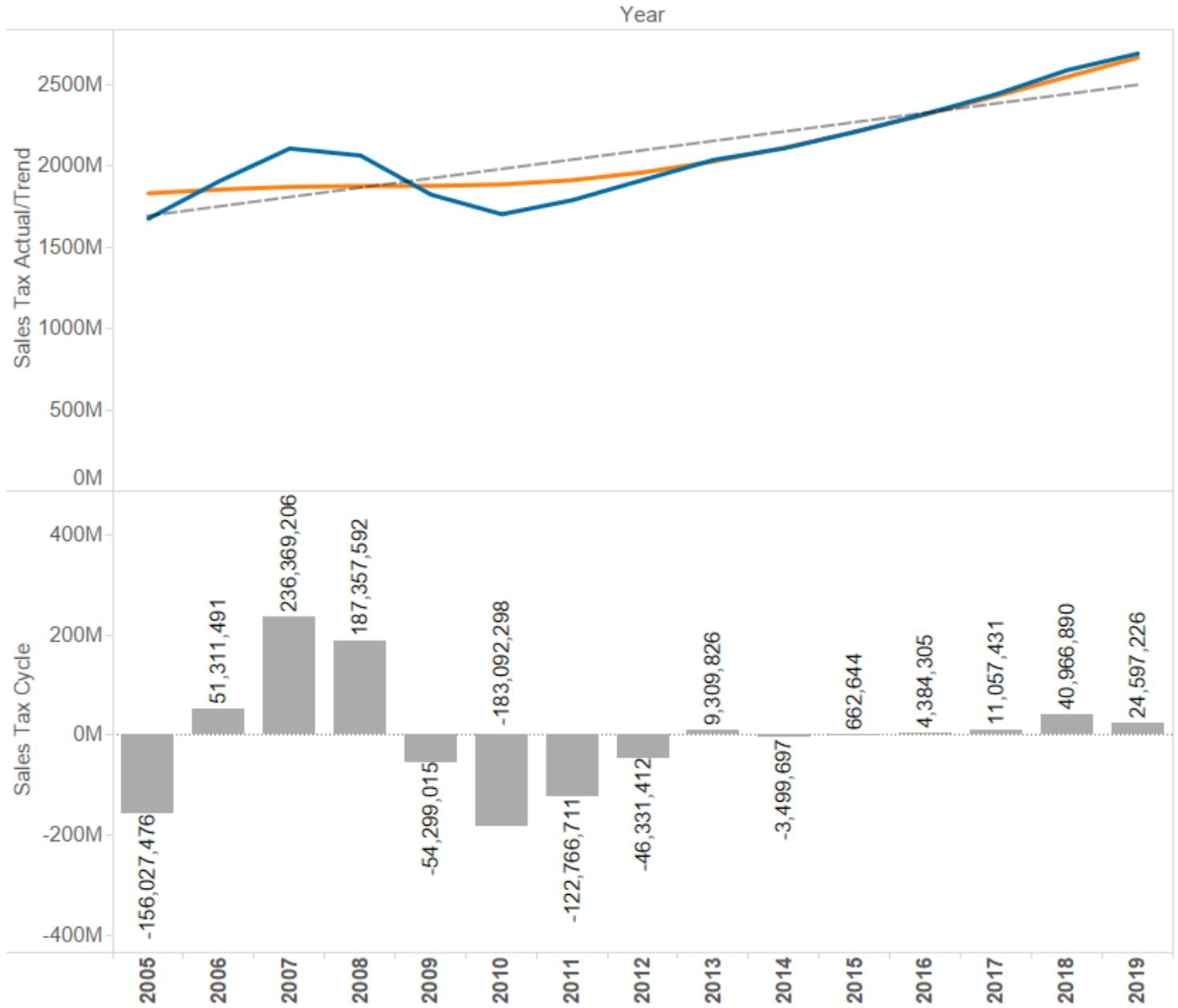
Note: the dotted line represents the linear trend.

**Measure Names**

- GF/EF Actual
- GF/EF Cycle
- GF/EF Trend

Figure 2 - Sales Tax Trend

Sales Tax - Total

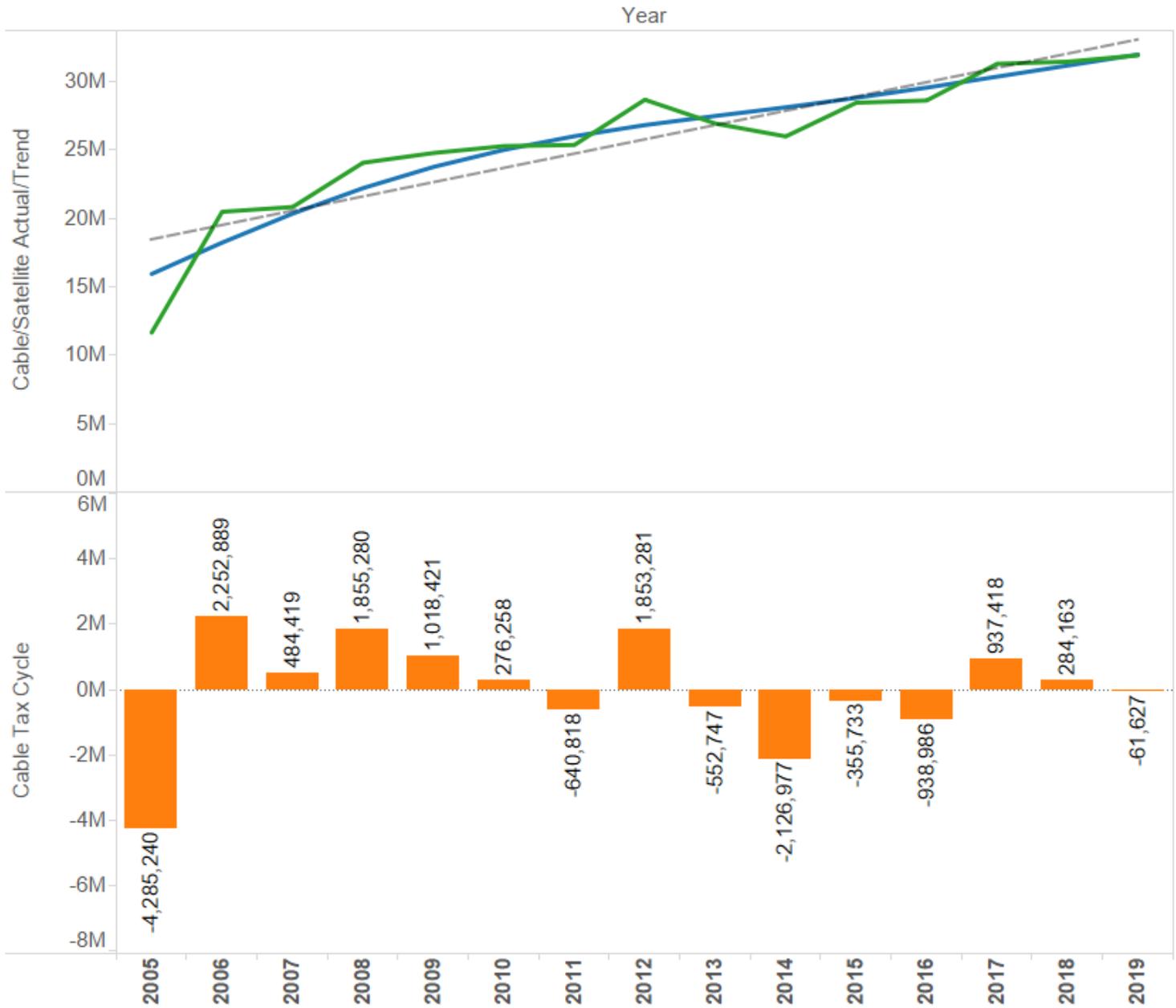


Note: the dotted line represents the linear trend.

- Measure Names**
- Sales Tax Total
  - Sales Tax Cycle
  - Sales Tax Trend

Figure 3 - Cable/Satellite Tax Trend

Cable/Satellite



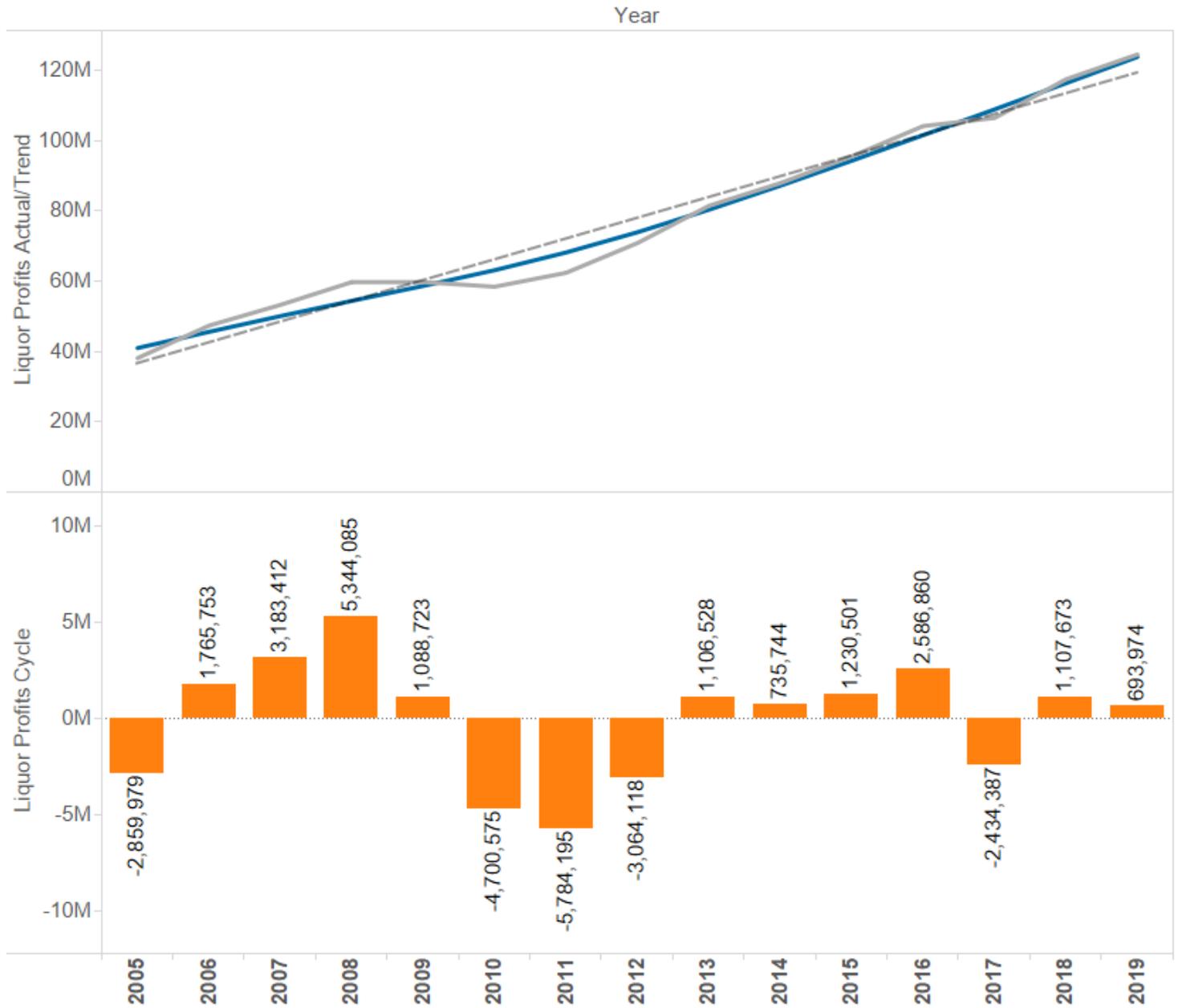
Note: the dotted line represents the linear trend.

Measure Names

- Cable Satellite Excise Tax
- Cable Tax Trend
- Cable Tax Cycle

Figure 4 - Liquor Profits Trend

Liquor Profits



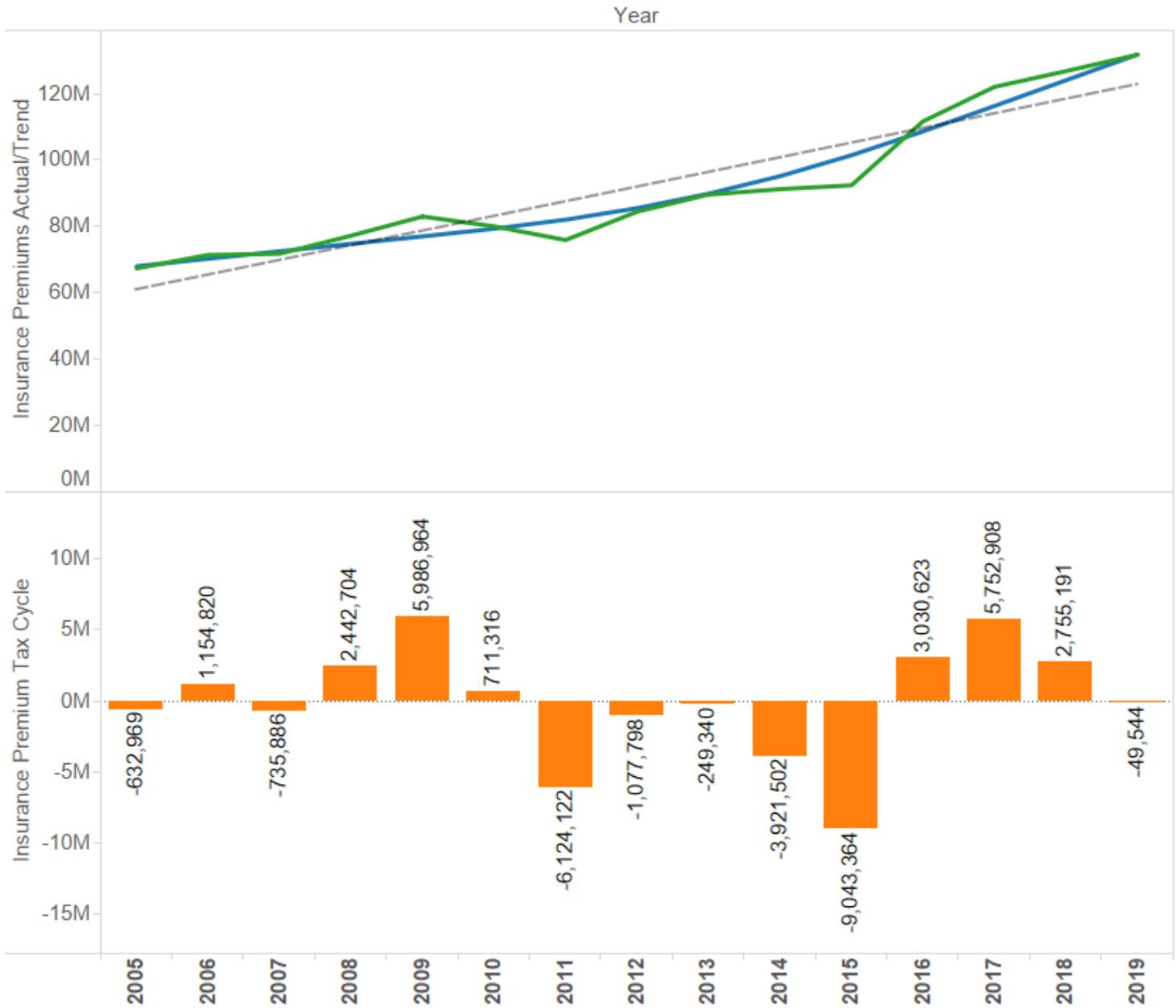
Note: the dotted line represents the linear trend.

Measure Names

- Liquor Profits
- Liquor Profits Cycle
- Liquor Profits Trend

Figure 5 - Insurance Premiums Trend

Insurance Premiums



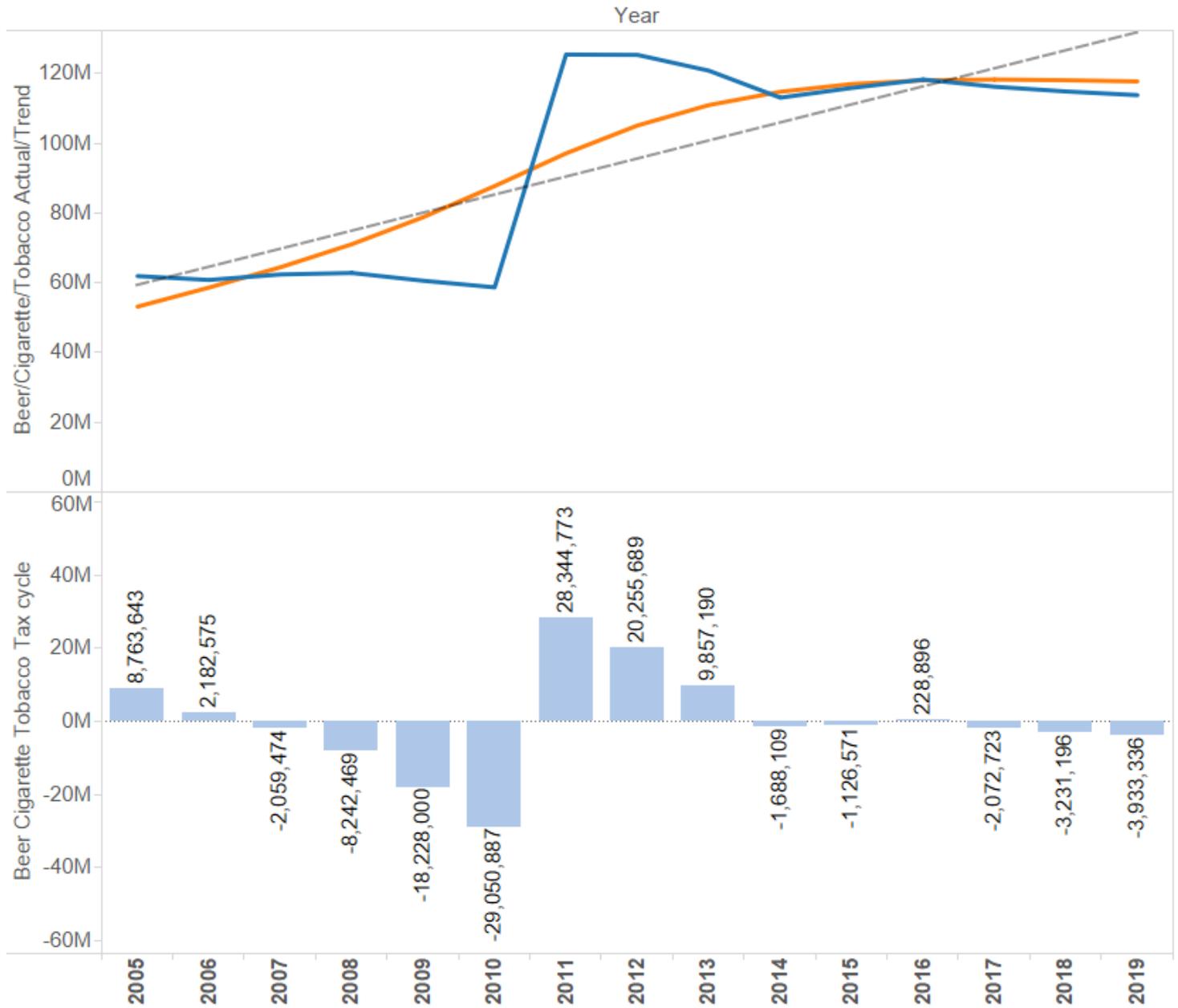
Note: the dotted line represents the linear trend.

Measure Names

- Insurance Premium Tax
- Insurance Premium Tax Cycle
- Insurance Premium Tax Trend

Figure 6 - Beer, Cigarette, and Tobacco Tax Trend

Beer Cigarette Tobacco



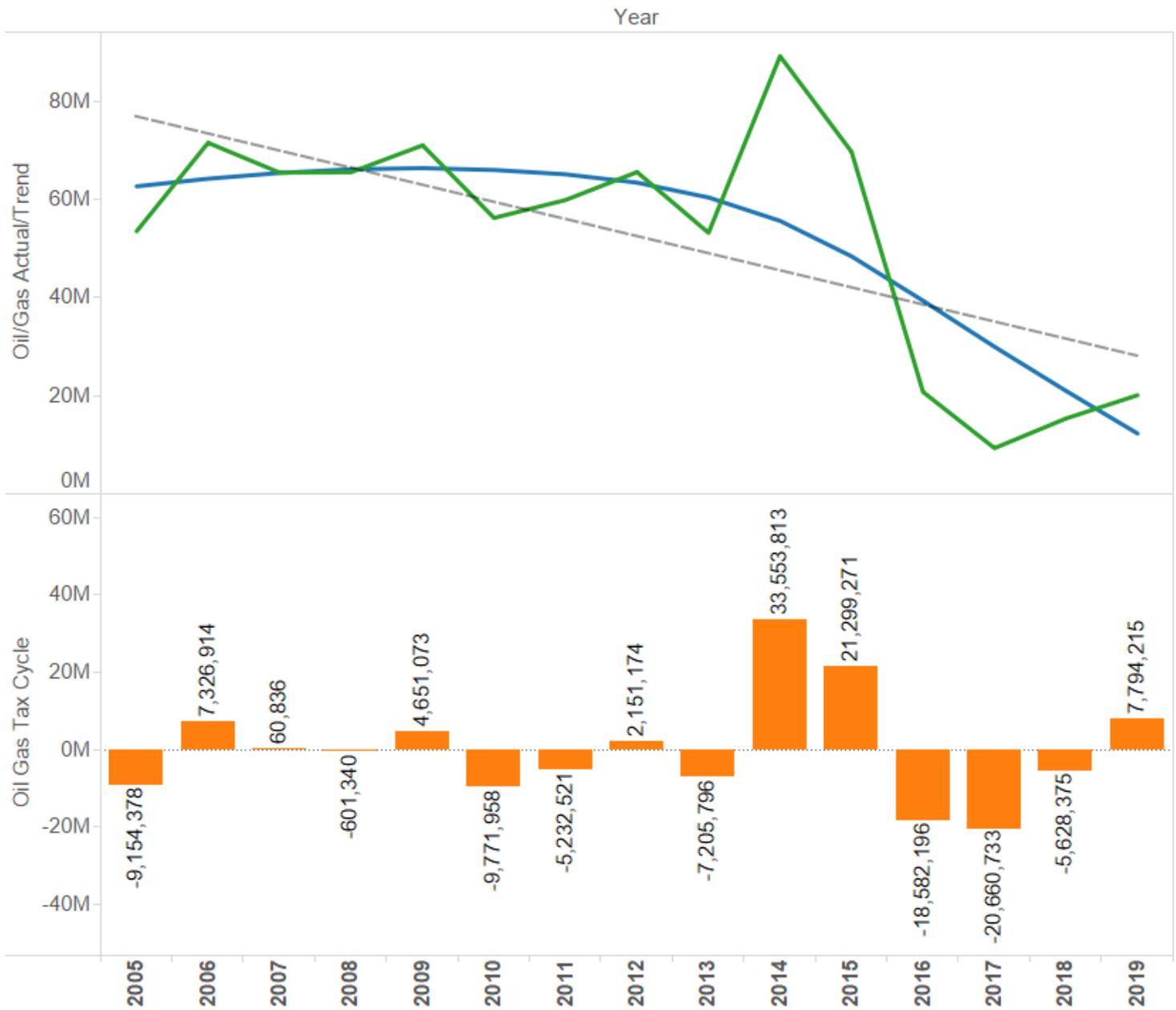
Note: the dotted line represents the linear trend.

Measure Names

- Beer Cigarette Tobacco Tax
- Beer Cigarette Tobacco Tax cycle
- Beer Cigarette Tobacco Tax trend

Figure 7 - Oil and Gas Tax Trend

Oil and Gas Severance Tax



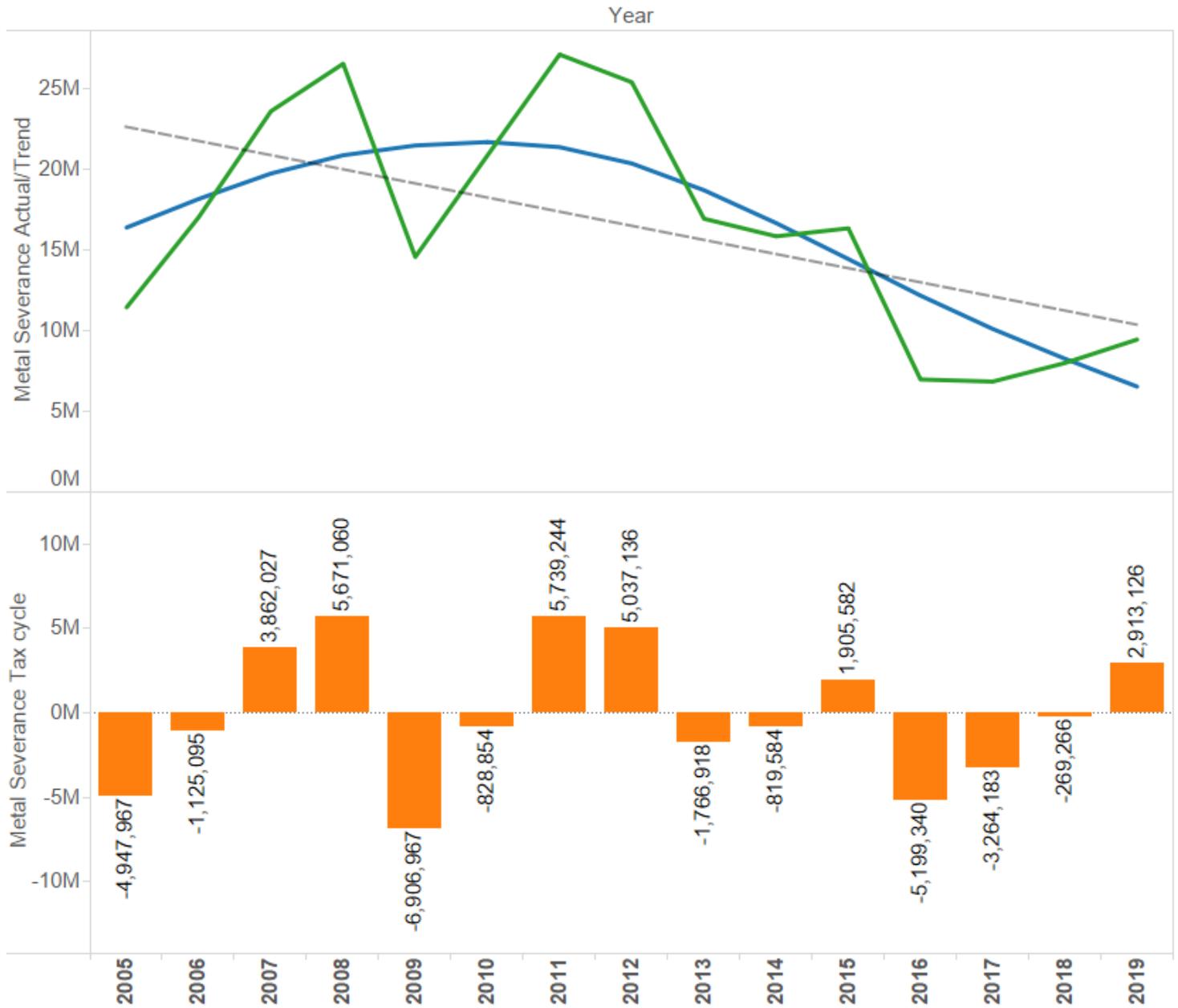
Note: the dotted line represents the linear trend.

Measure Names

- Oil Gas Tax
- Oil Gas Tax Cycle
- Oil Gas Tax Trend

Figure 8 - Metal Severance Tax Trend

Metal Severance Tax



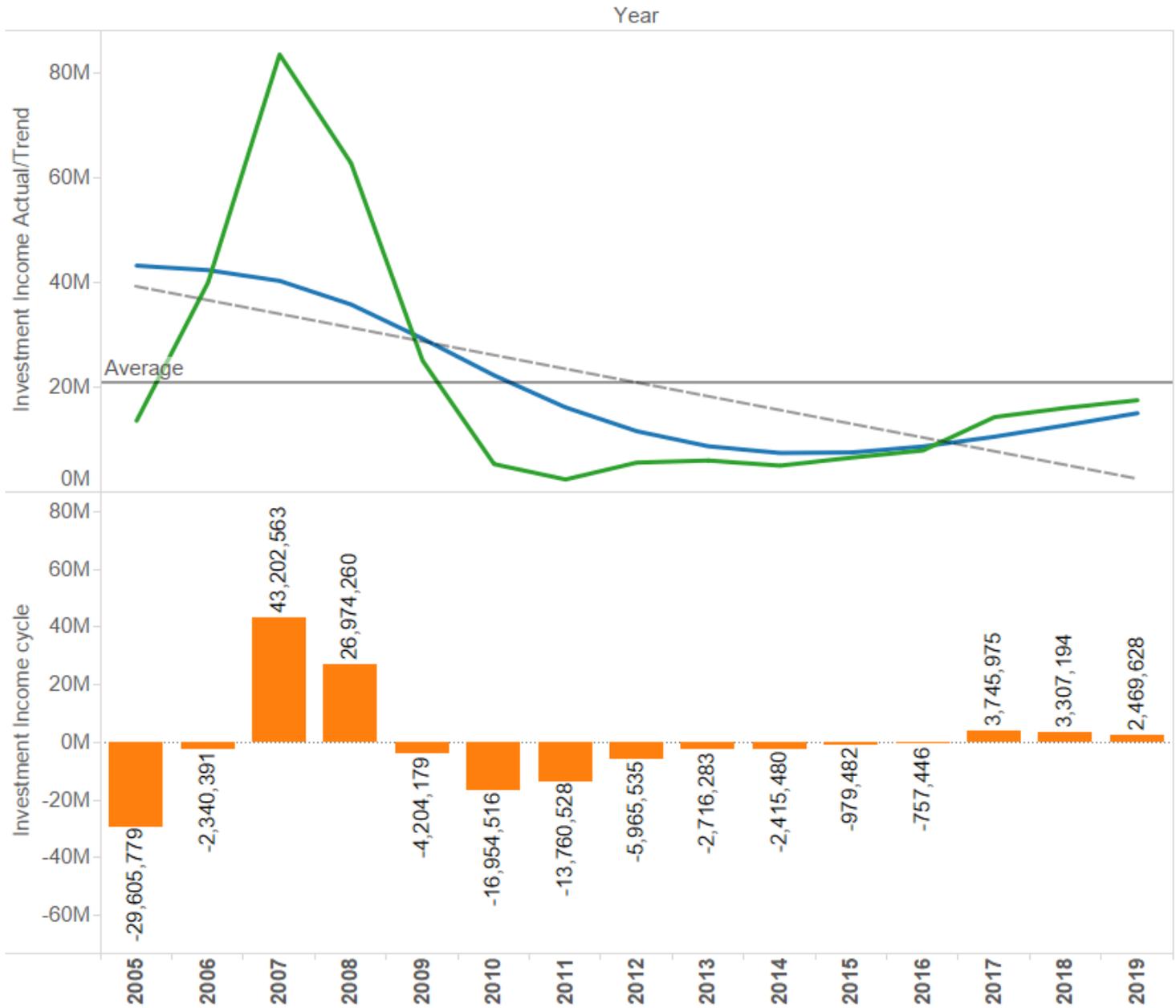
Note: the dotted line represents the linear trend.

Measure Names

- Metal Severance Tax
- Metal Severance Tax cycle
- Metal Severance Tax trend

Figure 9 - Investment Income Trend

Investment Income



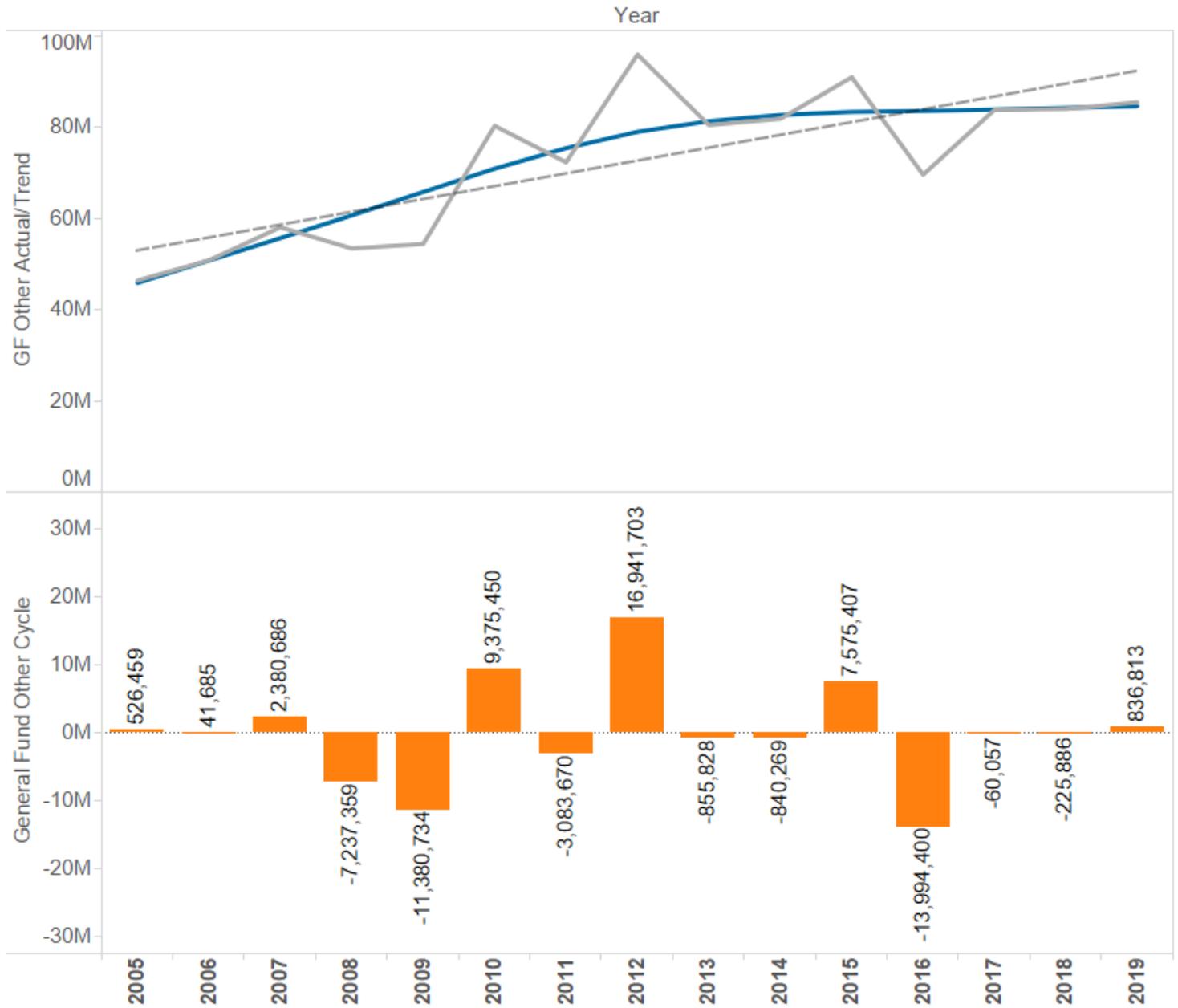
Note: the dotted line represents the linear trend.

Measure Names

- Investment Income
- Investment Income cycle
- Investment Income trend

Figure 10 - General Fund Other Trend

General Fund Other



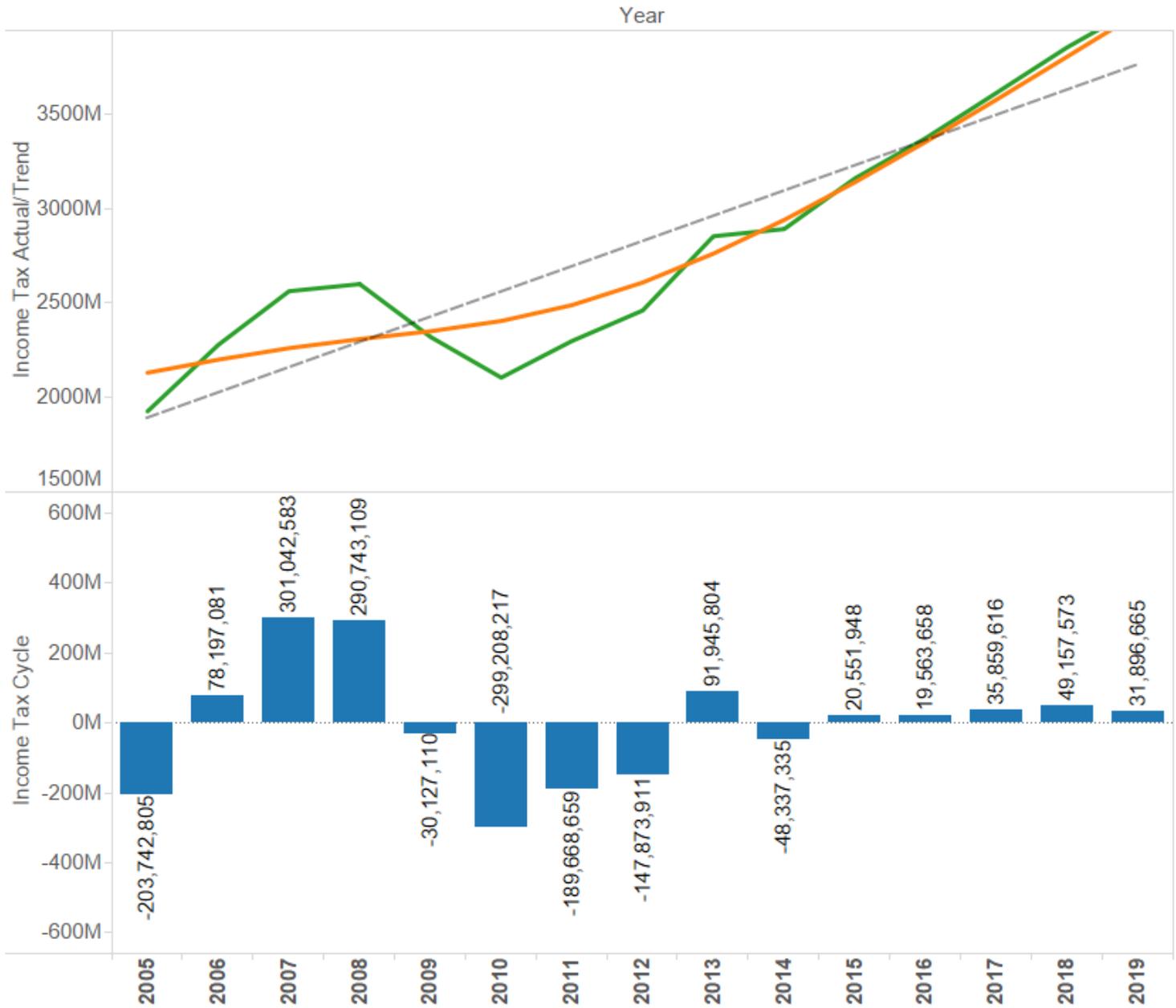
Note: the dotted line represents the linear trend.

Measure Names

- General Fund Other
- General Fund Other Cycle
- General Fund Other Trend

Figure 11 - Income Tax Trend

Income Tax

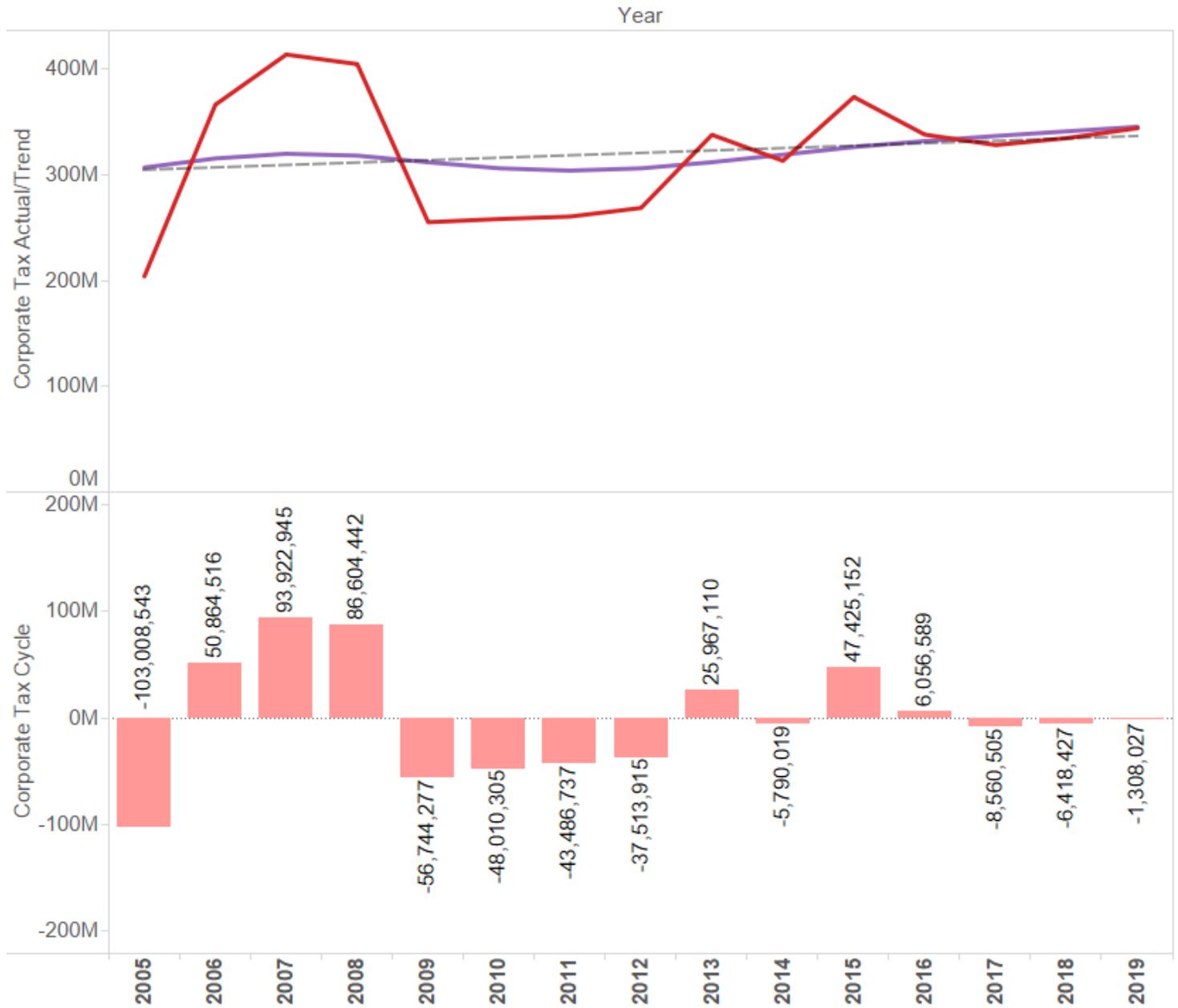


Note: the dotted line represents the linear trend.

- Measure Names**
- Income Tax Cycle
  - Income Tax Trend
  - Income Tax

Figure 12 - Corporate Tax Trend

Corporate Tax



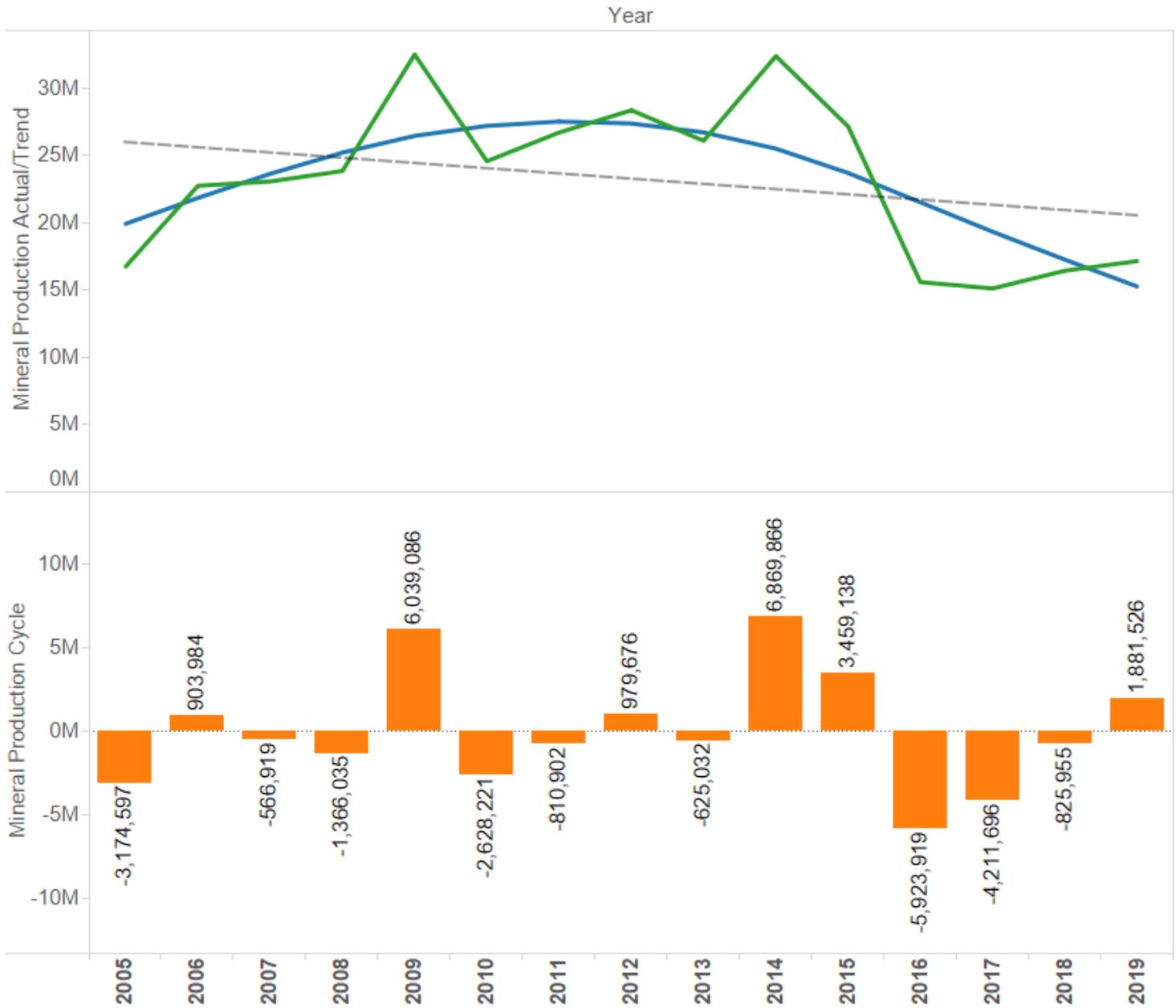
Note: the dotted line represents the linear trend.

Measure Names

- Corporate Tax
- Corporate Tax Cycle
- Corporate Tax Trend

Figure 13 - Mineral Production Tax Trend

Mineral Production Withholding

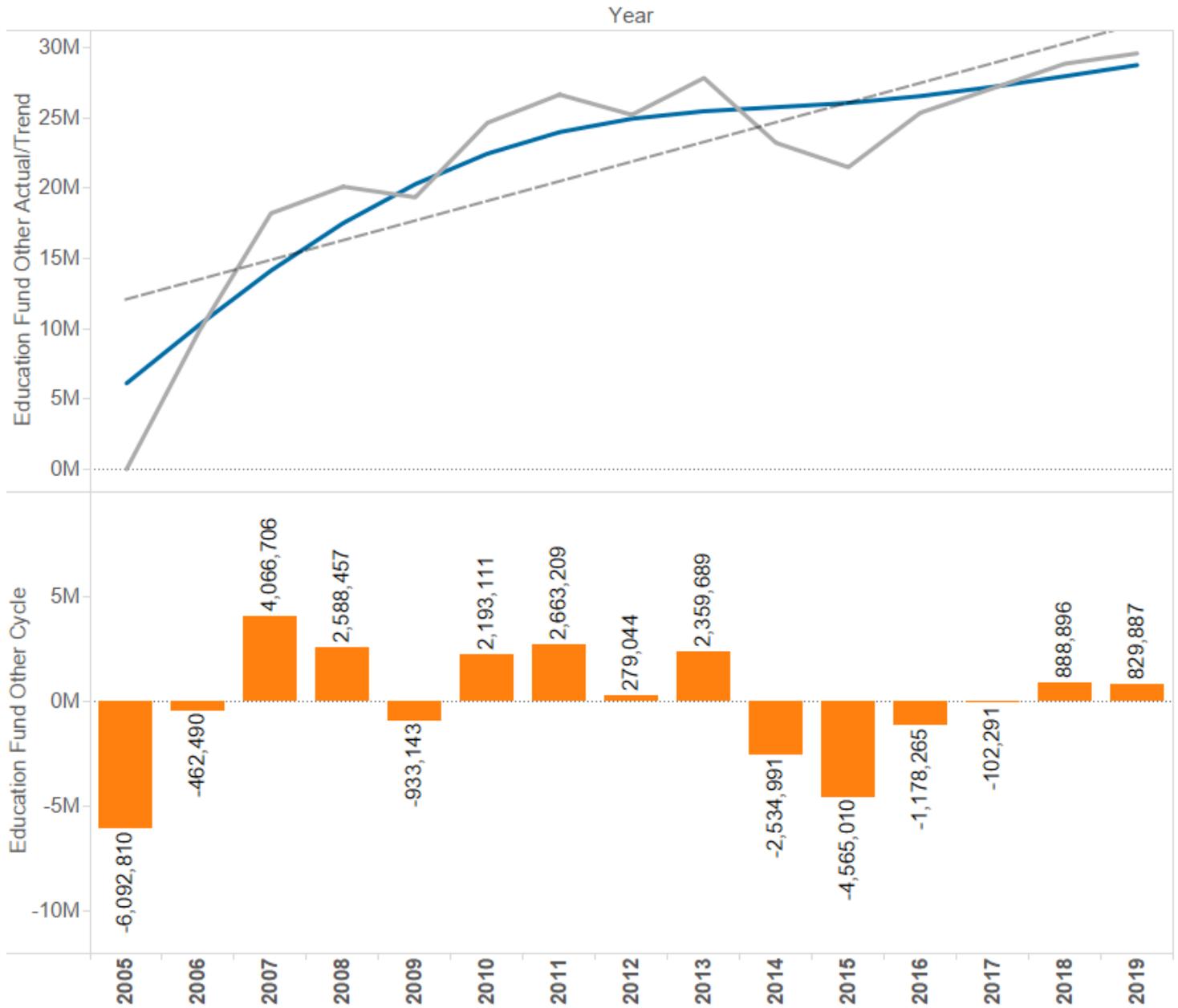


Note: the dotted line represents the linear trend.

- Measure Names**
- Mineral Production Withholding
  - Mineral Production Cycle
  - Mineral Production Trend

Figure 14 - Education Fund Other Trend

Education Fund Other



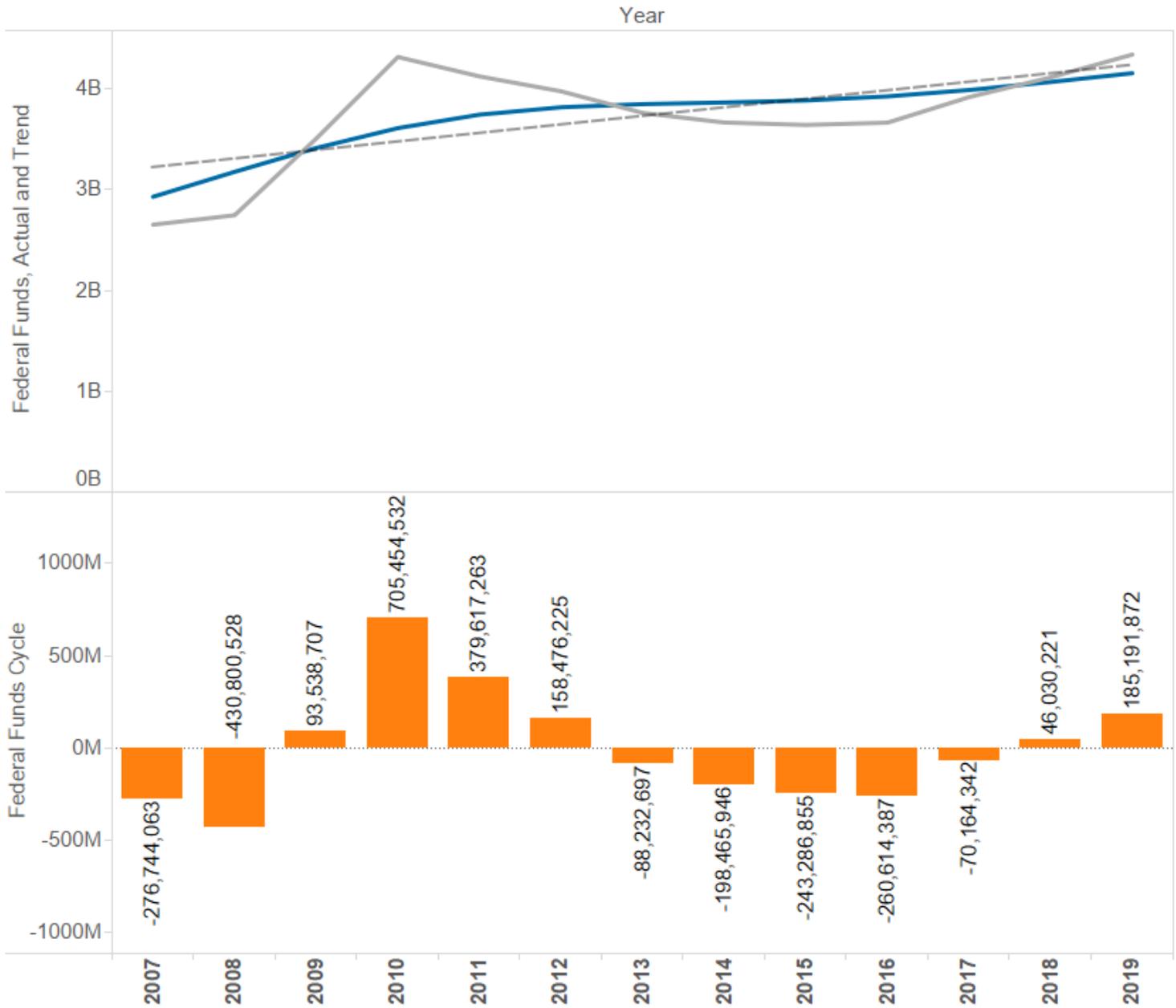
Note: the dotted line represents the linear trend.

Measure Names

- Education Fund Other
- Education Fund Other Cycle
- Education Fund Other Trend

Figure 151 - Federal Funds Trend

Federal Funds



Note: the dotted line represents the linear trend.

Measure Names

- Federal Funds
- Federal\_Funds\_cycle
- Federal\_Funds\_trend