

Revenue to Earnings Before Interest, Taxes, Depreciation and Amortization (Cash Flow) (EBITDA) Reconciliation

This backtest data set contains the data we use to calculate <u>EBITDA</u>. This data set contains point-in-time data. See below.

This data is available through our <u>API</u> in the <u>EBITDA Calculation endpoint</u>. Historical data provided through the API is best-available data as of today, not the point-in-time data presented in this backtest data set.

Economic Rationale for EBITDA value - Why EBITDA Matters

Our <u>Robo-Analyst technology</u> allows us to scale the most accurate calculation of EBITDA across thousands of companies.

EBITDA Calculation

In general, we make 6 types of adjustment to calculate EBITDA:

Total Operating Revenue

- + Total Operating Income
- Total Operating Expense
- Total Net Non-Operating Expense Hidden in Operating Earnings
- ESO Expense (Employee Stock Options)
- + Goodwill Amortization
- + Depreciation and Amortization (Cash Flow)
- = EBITDA/EBTDA

<u>Total Operating Revenue</u> is the Total Operating Revenue reported by the company on the income statement. An example of revenue is product sales revenue.

<u>Total Operating Income</u> is the total operating income derived outside of revenues, including items such as income from unconsolidated subsidiaries and discontinued operations for REITs.

<u>Total Operating Expense</u> is all the operating charges that appear on the income statement. An example of a Total Operating Expense is selling, general, and administrative expense.

<u>Total Net Hidden Non-Operating Expense Hidden In Operating Earnings</u> is the net of losses and gains that do not directly appear on the income statement. These items are buried inside other items that appear on the income statement. Hidden items appear only in the Management Discussion & Analysis (MD&A) or in the footnotes to the financial statements. An example of a Hidden Non-Operating Expense is a non-recurring acquisition integration charge that is bundled into selling, general, and administrative (SGA) expense on the income statement and is disclosed only in a footnote detailing the acquisition. More <u>details</u>.

<u>ESO Expense (Employee Stock Options)</u> is the cost of issuing (at-the-money) employee stock options (ESOs) to employees before companies were required to expense ESOs. Prior to 2006, businesses were not required to record any cost for issuing ESOs. Using data provided only in footnotes, we charge companies for the cost of all ESO issuances long before FASB required companies to report the expense. This charge only appears in historical filings prior to adoption of the new accounting standards. More <u>details</u>.

<u>Goodwill Amortization</u> is a gradual, formulaic reduction in goodwill asset value using any of the several GAAP amortization methods. In 2002, FASB did away with Goodwill amortization and replaced it with the practice of goodwill impairment. This adjustment only appears in historical filings prior to adoption of the new accounting standards. More <u>details</u>.



<u>Depreciation and Amortization (Cash Flow) Expense</u> is the depreciation and amortization reported on the cash flow statement.

Coverage

New Constructs covers:

~2800 currently active stocks.

~2700 currently inactive stocks that appear in the historical data.

Coverage information is updated daily and available on our website: https://client.newconstructs.com/nc/coverage/view.htm

Time Frame - 1998 to Present

Our company data sets begin in 1998 when SEC filings were made available in electronic form.

Source

We source all data directly from the annual and quarterly SEC filings using our proprietary <u>Robo-Analyst</u> <u>technology</u>. All calculations are our own.

Point-in-Time Data

New Constructs data is provided as of the data availability date presented in the data. See information on data availability dates below.

Data Fields

ticker - The ticker for the security on the file generation date. Tickers that include a colon are currently inactive stocks. They are no longer traded because they were acquired, went bankrupt, etc. We assign the last used ticker to the security following by a colon and a number that increments for each new company that becomes inactive with that ticker. For example, XYZ Corp uses ticker XYZ and goes inactive. We assign the company the ticker XYZ:1 because it is the first company in our system to go inactive using ticker XYZ. If a different company, XYZ Technology, starts using ticker XYZ and goes inactive, it will be assigned XYZ:2.

A list of tickers and company names is available on our website at <u>https://client.newconstructs.com/nc/coverage/view.htm</u> or through the coverage endpoint of our API, see <u>https://client.newconstructs.com/nc/documentation/api.htm</u>

company_name - The name of the company on the file generation date.

cik - The Central Index Key (CIK) used by the SEC to identify corporations and individuals who have filed with the SEC. We do not provide CUSIPs or other industry identifiers for securities. CIK is provided to help map securities from New Constructs to other data sets. For active companies, the CIK is the one in use by the SEC on the data generation date. For inactive companies, the CIK is the last one in use by the company prior to its being inactivated.

figi - The Financial Instrument Global Identifier (FIGI) is an established global standard issued under the guidelines of the Object Management Group (OMG.org, an international, non-profit standards organization), founded in 1989. FIGI is provided to help map securities from New Constructs to other data sets. At this time, we only provided FIGI for active securities. Please see <u>https://www.openfigi.com/</u> and <u>https://www.openfigi.com/assets/local/figi-allocation-rules.pdf</u> for details on OpenFIGI and its use.

stock_exchange - The exchange on which a ticker trades. For active stocks, the exchange is the one on which the ticker was traded on the data generation date. For inactive stocks, the exchange is the last one on which the ticker was traded prior to its being inactivated.

company_status_current - Actively traded stocks are marked as 'live'. Inactive stocks are marked as 'inactive'. This is the status of the security on the data generation date.

fiscal_year - The fiscal year of the most recent filing used in the model.

fiscal_quarter - The fiscal quarter of the most recent filing used in the model. If the most recent filing is an annual filing, this field will be null, indicating the data belongs to an annual model. If the most recent filing is a quarterly filing, this field will show the quarter: 1, 2, or 3, indicating the data belongs to a TTM model.





filing_type - The filing type of the most recent filing used in the model - generally a 10-K or 10-Q, though other filing types are also used.

filing_date - The date the most recent filing used in the model was filed with the SEC.

period_end_date - The period end date of the most recent filing used in the model.

actual_data_availability_date - The date that New Constructs provided this data to clients on our website, in data feeds, or any other distribution method. The data availability date is the real historical date this data was available to clients. For companies added to coverage, the data_availability_date for all historical data will be the date we added the company to coverage. For example, we added Summit Materials, Inc. (SUM) to coverage in January 2018, so the data_availability_date for all SUM data prior to January 2018 is January 2018. SUM's data was made available to clients on that date. The data set includes data for SUM back to the first date we can generate a model for SUM in 2016. For backtest purposes, we also provide an implied data availability date. See below.

implied_data_availability_date - The date that New Constructs would have provided this data to clients on our website, in data feeds, or any other distribution method assuming that we covered the security at the time with our current system & <u>Robo-Analyst technology</u>. For backtesting purposes, this date is most similar to the data_availability_dates for SEC filings filed today. It is provided as a reasonable data availability date for historical data to most closely match current practices and technology. See data_availability_date above for information.

model_date - The historical date for which the model was generated. In the data set, there is one model_date at the beginning of every other month for each security. New Constructs backtest data is bimonthly recalculated data. The backtest data in this file are as calculated by our system on the indicated data_generation_date, once for every other month on the first trading date over the historical period. Only data available on the model_date is used to calculate our ratings and metrics. No future data is used.

data_generation_date - The date on which the data was generated.

Data Value Data Fields - The following data fields are columns in the data set. All values are reported in ones units.

Name	Datapoint	Example (SABR 2017)
Total Operating Revenue	REVENUE	\$3,598,484,000
Total Operating Income	INCOME_OPERATING	\$2,580,000
Total Operating Expense	EXPENSES_OPERATING	\$3,023,932,000
Total Net Non-Operating Expense Hidden in Operating Earnings	EXPENSES_PRE_TAX_HIDDEN_TOTAL	(\$24,650,000)
ESO Expense (Employee Stock Options)	ESO_EXPENSE	\$0
Goodwill Amortization	GOODWILL_AMORTIZATION_ADJUSTED	\$0
Depreciation and Amortization (Cash Flow)	DEPRECIATION_AND_AMORTIZATION_CASH_ FLOW	\$400,871,000
EBITDA/EBTDA	EBITDA	\$953,353,000

EBITDA Calculation