**ELIP Data Sources (as of April 2019)**

Single-Family Production:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Code: HOUST1F

Multifamily Production:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Code: HOUST5F

Auto Production:

* Federal Reserve main website (specific data download located here): <https://www.federalreserve.gov/datadownload/Download.aspx?rel=G17&series=3071ed5768de9e68e2d5a5815d3abe09&filetype=spreadsheetml&label=include&layout=seriescolumn&from=01/01/1977&to=01/31/2018>
* Data Series Code: G17/MVA/MVA.AUTLTT.S

Auto Sales:

* GreenStreet Data Hub located here: <https://www.greenstreetadvisors.com/rea/tools/data_finder>
* Go to the national economy, monthly data download in the Data Hub.

Industrial Production:

* GreenStreet Data Hub located here: <https://www.greenstreetadvisors.com/rea/tools/data_finder>
* Go to the national economy, monthly data download in the Data Hub.

Household Balance Sheets:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series codes include: TLBSHNO, TABSHNO, TNWBSHNO, USREC, CPIAUCSL

Household Cashflows & Debt:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series codes include: TDSP, HCCSDODNS, HHMSDODNS, DPI

Real Consumer Credit:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series codes include: TOTALSL, PI, CPIAUCSL

Consumer Debt:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Code: HCCSDODNS

Consumer Confidence:

* Conference Board CCI Index located here:
  + <https://www.conference-board.org/data/consumerconfidence.cfm>
  + Since we don’t have a subscription, keep the historic data the same and populate news released data using the Press Releases.
  + Additional data can also be found here: <https://www.economy.com/dismal/indicators/releases/usa_consumer/9B75E7DF-B660-4BBE-9B4E-BCA33F823B46/United-States-Conference-Board-Consumer-Confidence>
* University of Michigan Consumer Confidence Index Input Tab:
  + St. Louis Fed’s website <https://fred.stlouisfed.org>

Corporate Debt Input Tab:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Codes include: NCBDBIQ027S, GDP, CPIAUCSL

Corporate Profits Input Tab:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Codes include: CP, B057RC1Q027SBEA, CPIAUCSL

Conference Board LEI Tabs:

* The Conference Board website here: <https://www.conference-board.org/data/bcicountry.cfm?cid=1>
* Since we don’t have a subscription, keep the historic data the same and populate news released data using the Press Releases.
* Historic data was obtained here: <https://www.conference-board.org/ea/TCB_BE_Portfolio.xls>

Initial Unemployment Claims:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Code: IC4WSA

Conference Board Employment Trends Tab:

* Use this link <https://www.conference-board.org/data/eti.cfm> to download the National Historical Table. You can sign up for email notifications when new data is available too.

Gross Domestic Private Investment as % of GDP:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Code: USREC, A006RE1Q156NBEA, PNFI, GDP,

Private Equity Dry Powder:

* Sourced from both the Linneman Report and the Preqin Quarterly Updates
  + Preqin doesn’t have a consistent report in which they highlight dry powder, but typically it is featured in the Private Equity Quarterly Update such as this: <https://www.preqin.com/insights/quarterly-updates/preqin-quarterly-update-private-equity-venture-capital-q1-2019/25831>
  + You can also find the Real Estate-specific dry powder figures in their Real Estate Quarterly Update such as this: <https://www.preqin.com/insights/quarterly-updates/preqin-quarterly-update-real-estate-q1-2019/25829>

CMBS Issuance:

* CMA Alert (their reporting typically lags by one quarter given data availability, so if you’re compiling a 2Q report, the data will likely be from 1Q).
* CMA Main Website with the rankings: <https://www.cmalert.com/rankings.pl?Q=91>

Origination Indices:

* Mortgage Bankers Association: since we don’t have a subscription, just utilize the raw figures and the charts provided for each quarter.
  + Download the CREF Quarterly Databook: <https://www.mba.org/news-research-and-resources/research-and-economics/commercial/-multifamily-research/commercial/multifamily-quarterly-databook>

NCREIF TBI (Transaction Based Index):

* NCREIF’s main website (requires logon credentials): <https://www.ncreif.org/data-products/tbi>
* Under the products, find the Transaction Based Index (NTBI) spreadsheet.
* Data can also be downloaded through their custom query tool.

GreenStreet CPPI:

* Green Street’s portal:
  + This link brings you to the public page; at the bottom of the page you can download the Major Sector data series: <https://www.greenstreetadvisors.com/insights/CPPI>
  + Alternatively, if you’re in the portal already, on their main menu on the right, go to Real Estate Analytics, under Data Tools, click Fundamentals & Valuation. Then click Commercial Property Price Index drop down, then click CPPI. There is an option towards the top-left of the chart that allows you to download the spreadsheet.

REIT Pricing Indices:

* NAREIT’s website: <https://www.reit.com/data-research/reit-indexes/ftse-nareit-us-real-estate-index-historical-values-returns>
* For the U.S. Equity REIT Index Monthly Tab:
  + Select the “Monthly Index Values & Returns” spreadsheet; then select the “Monthly Historical Index Data: 1972 – current” spreadsheet. Select the relevant Price Return data from the “All Equity REITS” Column (typically columns Y and Z.
* For the “NAREIT Annual Indices Tab:
  + NAREIT’s website: <https://www.reit.com/data-research/reit-indexes/ftse-nareit-us-real-estate-index-historical-values-returns>
  + Select the “Annual Index Values & Returns” spreadsheet. Then select the “Annual Returns by Property Sector and Subsector. Drop in the entire file into the grey cells; the calculations run from there in columns AL – AP; there is a chart to the right side of column AP for reference.
* REIT Value Pricing Notices:
  + These notes are pulled from the Linneman Report in the REIT pricing section.

Transaction Volume:

* Since we do not have access to RCA, and since NCREIF transactions database is limited to institutional product tracked by their data contributors, pull the charts from the Mortgage Banker’s Association Quarterly Databook (or from any other source you can track down).
* <https://www.mba.org/news-research-and-resources/research-and-economics/commercial/-multifamily-research/commercial/multifamily-quarterly-databook>

Kansas City Financial Stress Index (KCFSI):

* Federal Research Bank of Kansas City Website: <https://www.kansascityfed.org/research/indicatorsdata/kcfsi>
* Can be downloaded here: St. Louis Fed’s website <https://fred.stlouisfed.org>
  + Data Series Code: KCFSI
* Select the “Historical Real-time Data” spreadsheet to see the iterations
  + NOTE! At times this source is more current than the FRED source, so this source is used.

Treasury Spreads:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Codes include: GS10, GS2, GS3M, T10Y3M, T10Y2Y, FEDFUNDS

Yield Curve Probability:

* Federal Reserve Bank of New York: <https://www.newyorkfed.org/research/capital_markets/ycfaq.html>
* Select the “Monthly data” excel sheet shortly below the Current Data heading.

CAPE Ratio:

* Robert Shiller’s Online Data: <http://www.econ.yale.edu/~shiller/data.htm>
* Select the link in the middle of the page that says, “alternative version of CAPE,” which will populate the spreadsheet. Drop in the data starting in 1988. Typically, this data is up-to-date, but it seems that as of 1Q, it hasn’t been updated through year-end 2018. While I recommend checking the link above for an update first, I found a second source here;
* The traditional P/E ratio is simply calculated without the adjustment for 10-year smoothed inflation adjusted corporate earnings.

Bond Quality Spreads:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
* Data Series Codes include: BAMLH0A0HYM2EY, BAA, USREC

NCREIF Income Yield to BAA:

* Grab columns A – N at the NCREIF website via their custom query tool.
  + Requires sign-on credentials: <https://www.ncreif.org/member-home/>
  + Select Query Tool, then selection “Property Data NPI” for Data Type, then All Managers, then the “NPI Returns” Query Template. Run query and then export.
* For columns S – W, obtain through St. Louis Fed’s website <https://fred.stlouisfed.org>
  + Data Series Codes include: BAA and USRECQ

OECD Global Growth:

* St. Louis Fed’s website <https://fred.stlouisfed.org>
  + Data Series Codes include: ONMLOLITONOSTSAM, OECDNMERECM
* JP Morgan Global PMI:
  + Given that we don’t have a subscription to the raw data, obtain the most current news release on the web such as this: <https://www.markiteconomics.com/Survey/PressRelease.mvc/841a0978ad714f079944c7f52f2edff6>