

## IS ABANDONED CONSTRUCTION AN EARLY SIGNAL OF ECONOMIC CHANGE?



BuildFax specializes in translating construction data from building permits into property condition and history. But what about the building permits that never make it? Those projects that get started, but never completed?

Could examining abandonment trends over the course of an economic downturn uncover a possible connection to the housing crisis, or even reveal a new leading indicator? And what about the rise in construction we are seeing now – is there a recurrence of abandoned projects in the current economy (or on the horizon)?

These construction records just might have some pretty interesting stories to tell. (Spoiler alert: they do!)

### **A Tale of Two Trend Lines**

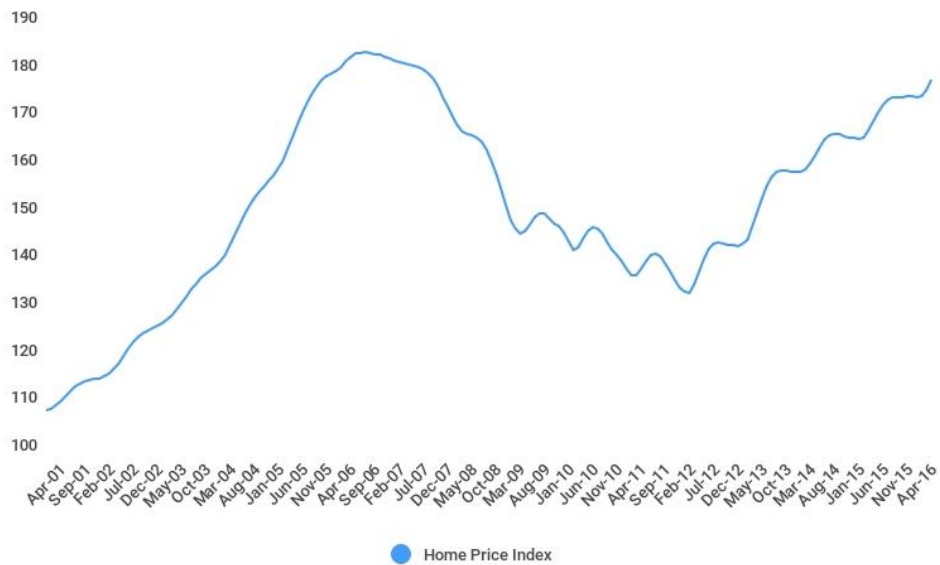
It turns out that the trend lines for abandoned and issued residential building permits show signs indicating housing market shifts.

When viewed together, residential permit issuance and abandonment follow similar trajectories in the early 2000s. Both climb rapidly until they plummet, with issuance peaking in September 2004 and abandonment peaking just five months later in March 2005 (a whopping 15 months before the Home Price Index crashed). As a reference point, the Home Price Index peaked in July 2006, marking the beginning of the economic downturn.

## Residential Issued Permits Vs. Abandoned



## Home Price Index





Considering the events of 2004 and 2005 (changes in financial regulations, excessive borrowing, and swelling consumer indebtedness), it makes sense that people may have bitten off more than they could chew with construction projects. Perhaps many factors formed a perfect storm that left too many investors unable to complete their projects, and forced them to abandon ship.

Combined with a rapid rise in project abandonment, the sharp swing between construction starts appears to indicate an unstable pattern of growth. The pattern hasn't appeared again beyond the economic crisis, which may signal a more sustainable outlook. In fact, such a slow increase of project abandonment during the last 10 years may be a good sign for our economic future.

"The abandoned permits z-score we're showing is computed using the full 15 year time period," said Zach Wade, Data Scientist at BuildFax. "Abandonment activity in 2007, for example, is comparable to that in 2015. Post-crisis abandoned permit levels never returned to pre-crisis lows, yet the abandonment trend appears more stable over time even as house prices break above the 2007 pre-crisis peak. Perhaps these conditions characterize more sustainable housing market price growth."

Abandoned residential construction projects have significant impact on the industries that serve the residential market.

- **Insurance Carriers:** Carriers should keep an eye on residential construction abandonment, especially as it relates to the properties on their book of business. Is it worth flagging properties that have had abandoned construction projects for possible review?
- **Building Product Manufacturers:** How might abandoned permits affect construction material sales and forecasting? Should a high frequency of abandoned construction projects in a certain area raise a red flag for manufacturers?
- **Equity Traders:** Might these trends reveal an untapped resource for trading signals?

### **More Smooth Sailing Ahead for Commercial Real Estate Sectors**

With compelling findings for residential issuance and abandonment, commercial real estate could reveal some insights as well.

This study looked at three sectors: lodging-resort, healthcare, and retail for this study, and, interestingly, construction activity within these three sectors takes on distinct trends.

Retail permit issuance and abandonment were the most volatile over the 15-year period, which may indicate greater churn than in the lodging-resort and healthcare industries. This is in line with the skyrocketing growth of online shopping over the last decade, which has disrupted sales at brick-and-mortar stores.

The smoother trends of lodging-resort and healthcare also make sense. Overall, the economy overall has been on an upswing: people are still vacationing in those resorts.

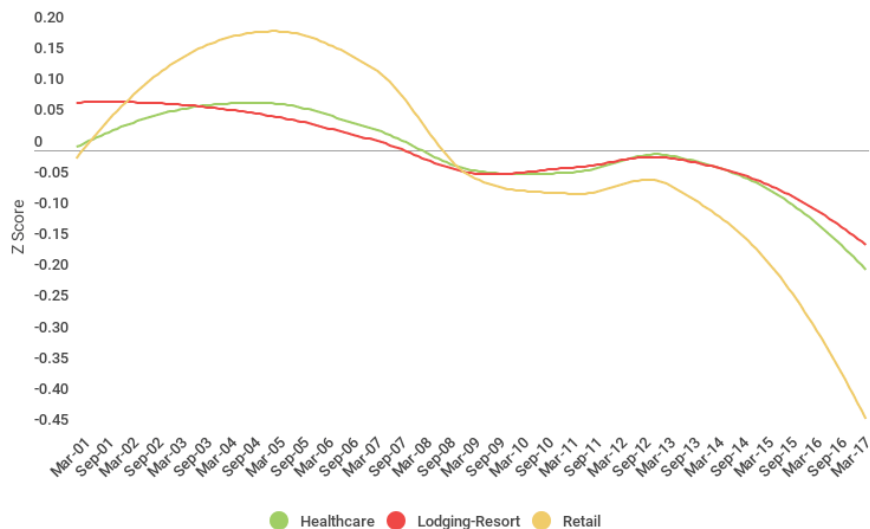
They're still getting sick too. Of the three sectors, healthcare is (understandably) most immune from macroeconomic business cycles.

Overall, abandonment is down and issuance is up for each sector over the full time-period. As expected, permit activity mimics trends in the larger economy, showing clear fluctuations during times of crisis and recovery, and long-horizon trends consistent with a growing economy.

### Permit Issuance Historical Trend



### Permit Abandonment Historical Trend



In a nutshell, permit issuance and abandonment tell a positive story about the economy: homeowners and investors are remodeling and building more than ever, while abandoning projects at a lower rate.

Those same homeowners are visiting healthcare facilities that have also seen more construction activity and less abandonment. They're still vacationing too, supporting the lodging-resort sector that shows a similar growth outlook.

But retail looks a bit different. Before heading to the resort, those homeowners are heading *online* to buy their swimsuits, luggage, and floppy hats.

### Key Takeaways

- **A Leading Indicator:** Substantial evidence shows permit abandonment relative to issuance as a leading indicator of economic change. Unlike the troubling trends prior to the economic downturn, the last decade shows signs of more sustainable growth.
  - **Economic Outlook:** Currently, there's no sharp rise in residential abandoned projects, which suggests a positive economic outlook.
    - **Insurance Carriers:** Carriers should keep abandonment on their radar, especially as it relates to properties on their book of business. Could abandoned permits be used to flag properties for review? For claims, are carriers checking for abandoned permits to make sure work is completed properly?
    - **Building Product Manufacturers:** How might abandoned permits affect construction material sales and forecasting? Should a high frequency of abandoned construction projects in a certain area raise a red flag for manufacturers?
    - **Equity Traders:** Might these trends reveal an untapped resource for trading signals?
  - **Commercial Sector Mimics Trends of Economy:** For lodging-resort, healthcare, and retail commercial sectors, the overall trend is up for permit issuance down for abandonment. Long-horizon trends are consistent with a growing economy.
  - **Retail Is Volatile:** Of the commercial sectors examined, retail projects were most sensitive to macroeconomic business cycles. Healthcare appeared to be the most immune from business cycle swings.
    - **Insurance Carriers:** For commercial properties, could looking at abandonment by sector reveal pockets of risk? Could it be used as an underwriting variable? Might these trends uncover fruitful targets for marketing?
-



- **Building Product Manufacturers:** Could these commercial trends represent opportunities for product development tailored to less-volatile sectors?
- **Equity Traders:** It's worth a closer look to see what else can be gleaned from commercial sector construction abandonment that could give you an edge. This data has the potential to make an impact on other types of models.

#### **Fun Facts:**

- Residential permit abandonment peaked a whopping 15 months before the Home Price Index downturn
- Residential permit issuance peaked almost two years before the Home Price Index downturn
- Residential permit issuance and abandonment peaked within five months of each other

If you'd like more information about this study or want to test out some data for yourself, please contact BuildFax at [hello@buildfax.com](mailto:hello@buildfax.com).

#### **Method Footnote:**

*The charts presented in this article are not applicable to forecasting techniques because they blend historical data and present data. The data for this study was extracted from more than 15 years of construction data across a balanced sample of permits from our database, which contains information on more than 90 million residential and commercial properties.*

---