



### Why an AcadHPI?

In 1998, Mervyn King called for a “true measure of house price inflation”. Both AcadHPI and the CLG index were launched in response. Whilst lack of timeliness in the publication of Land Registry (LR) data led CLG to employ a sample, from mortgage lenders, of the prices at which mortgages are completed, Acadametrics chose to resolve the timeliness issue and to use LR data.

LR provides a monthly government census of every residential property transaction in England and Wales, including properties bought with cash. What is different about the Acadametrics House Price Index is that it not only uses the prices actually transacted, but also that it uses every residential property transaction in England and Wales. By using the prices recorded on the Land Register, as opposed to prices taken at earlier stages in the house purchase cycle, AcadHPI is based upon real values. Sample error can be significant; by using the complete transaction set, as opposed to the sample used by all other indices, AcadHPI minimises the statistical errors involved in creating an index.

By the end of any given month LR has received, and can publish, only a small proportion of the prices transacted in the month concerned. Hence, AcadHPI for any current month starts with an AcadHPI “forecast” result; this result may be thought of as from an “index of indices” since it uses the latest published results of other indices to prepare a forecast of what AcadHPI will report, once every transaction has been reported. No model can be perfect but the AcadHPI “forecast” aims to provide a reliable guide to factual price changes, where choosing between conflicting indices can be problematical. Readers can check this reliability, as we describe below.

Each initial AcadHPI “forecast” index is followed by two AcadHPI “updated” index results which employ the increasing number of transactions reported to LR over subsequent months. Whilst it takes many months before every transaction is reported, the bulk are recorded at LR after a delay of some three months. Once three months have elapsed, AcadHPI is built upon enough factual transactions to provide the AcadHPI “final” index result which is our “true measure”. Once every transaction for a month has been reported and built into AcadHPI, eliminating any forecast element in the process, the AcadHPI “ultimate” index comprises every residential property price recorded at LR, smoothed, seasonally and mix adjusted. Normally, there is very little variation between AcadHPI “final” and AcadHPI “ultimate”.

As stated above, readers can check the accuracy of our AcadHPI “forecasts” since we publish our Development of Forecasts which shows how AcadHPI for any given month changes from the AcadHPI “forecast” to AcadHPI “ultimate”. Every month, too, we publish a “Comparison of Indices” showing the difference (mean square errors) between the principal indices and the AcadHPI “ultimate” index.

And what is a “true measure of house price inflation”? Whilst both AcadHPI (aimed at providing a “true measure”) and the CLG index (aimed at providing a “definitive” index) were built solely to meet the “true measure” target set by Mervyn King, no test for accuracy was ever considered. How can an index be tested? Two factual prices at which the same property was sold, at two different dates, are required. An accurate index, applied to the first price, would accurately forecast the price recorded on the second occasion. Such prices were provided in December 2004 by the LR “price paid dataset”, covering all properties sold more than once since 2000. However, indices provide only an average price of all of the different houses within a geographic area (in the case of AcadHPI at county/London borough level). Indices are not accurate at individual or even at postcode level. Furthermore, indices cannot take into account the change in value that might occur, for a specific house, because it has fallen into disrepair or had a further bedroom added or because of the opening nearby of a good new school. Hence, at individual property level, an index is unlikely to forecast a second sale price with a high level of accuracy. But, for a bulk of houses, an index should provide a result close to the factual value as recorded at LR. For the results of our test, please download our paper, [“Index Monitor”](#).

As well as AcadHPI, we prepare Acadametrics Prices and Transactions, based upon LR data for use in revaluing a property investment or mortgage portfolio. Acadametrics Prices and Transactions, derived from the LR data, also provide the data for our web based [House Price Calculator](#).

A comparison of the Acadametrics mix adjustment methodology and the Case-Schiller repeat sales regression methodology favoured in the USA, where there is no source of national prices comparable to the Land Registry, is provided in the [Meissner Satchell paper](#).