This user guide for Allegheny County Assessment Data is intended to go beyond metadata and provide consumers of the data set a sense of the purpose for which the data was collected, the business processes, software, and applicable standards involved with the data, suggested applications for the data (and how to use it), and other details so the expectations and outcomes of data users are improved.

Original Purpose and Application

This database is used by the Office of Property Assessments (OPA) to administer the property assessment system in Allegheny County, PA, including the appeals process. The data is distributed for use by local taxing bodies (county, municipalities and school districts) for taxation. Independent downstream recipients of the data may use it to facilitate code enforcement, real estate market research, title searches, or trends in urban planning, etc.

History of the data and current format

The electronic format came into use beginning with the 2002 county reassessment with Sabre Systems. It was then migrated to CLT’s iasWorld product. An updated application interface and assessment values were created in 2012 as part of the most recent County wide reassessment.

Organizational Context

Assessment and taxation are in two different departments for Allegheny County. OPA passes information to the Treasurer for the collection of County taxes, and to school districts and municipalities for their taxation requirements. This includes the annual certified values and subsequent changes throughout the year from permits and appeals.

Assessments and county tax payment information were made available online with a joint web application known as the ‘Real Estate Website’ in an effort to improve transparency to constituents. The database became searchable online in 2001. At that time anyone could search the database by name, address, or property ID number and obtain that property’s assessed value. County officials removed information about 100 judges from the database four years later due to security concerns after judges in Chicago and Atlanta were tracked down and murdered. Law enforcement officers then requested their names to be removed from the searchable records as well. In 2007 County Council voted to remove the search-by-name function for all property owners from the online property assessment database.
Work Flow

The Department of Real Estate (DRE) collects ownership and sales records in their system when a deed is recorded. There is no legal requirement to record a deed within a set window from the sale date, so there may be a delay of months or years before a sale is shown in the supporting applications. Once it is recorded, the sale and ownership information is then updated into OPA's system and passed to the Treasurer’s Office. The frequency of this data reconciliation between the DRE and OPA varies, but normally happens within two weeks of the recording date.

If a residence that has the Homestead exemption (Act 50) is sold, it is flagged so the homestead is removed for the following tax year. New owners must file to obtain the exemption on the parcel in their name for the new tax year if they wish to claim the exemption. This information is passed onto School Districts so they may process it for additional Act 1 exemption if applicable.

Applications for the various exemption and abatement programs have differing deadlines and limitations, some of which are voted on annually. Please see the County Website for current program availability.

Changes to property value and certain characteristics (like Land Use Codes) flow through a posting process before they can be seen in the distributed data venues such as the Western Pennsylvania Regional Data Center or the County Website. Data is collected via assessors and the appeal process.

Some municipalities share permit and demolition data regularly. The overall process would benefit from a unified approach to permitting, reporting, and data sharing. This would increase accuracy of assessments and improve data quality – capturing new construction and demolitions in a timely fashion.

Standards and formats used

Parcel ID numbers are 16 alpha-numeric characters and are often derived from Map Lot & Block numbers. New Parcel IDs are created as needed by the Department of Real Estate when new parcels are created.

Parcel ID numbers are the primary key linking assessment data with Allegheny County’s parcel GIS files. Former naming conventions (pseudo-numbers) may be used for searching in limited cases.
Things to know about the data, including limitations

- Assessed Values are often not the same as the Market Value of a property, and the two may NOT be used interchangeably. Assessed Values are built upon a Base Year methodology. Allegheny County’s current base year is 2012 with an effective date of value of January 1, 2012.

- Assessments are an opinion of value, based on many factors like neighborhoods and land characteristics and facilitated by mass appraisal software. Conditions and factors are ever changing and property owners have the right to appeal each year, regardless of the outcome, actions, or inaction from preceding years.

- For commercial properties all improvements are assessed, not just buildings. That includes things like paving, fences, retaining walls, etc…

- Base Year values are subject to ongoing maintenance throughout the year. In accordance with the County's Administrative Code and State statutes, values may be adjusted for the following reasons:
  
  1. The Office of Property Assessments can adjust Base Year values through the administrative change process for omissions, mathematical or clerical errors.
  2. Base Year values can also be adjusted due to a change in the physical nature of the property such as building permits for additions or demolitions, or due to recorded subdivision plans.

- As discussed in the Organizational Context section, a 2007 County Council law prohibits the Office of Property Assessments from making the database searchable online by owner name. To comply with this law OPA has removed owner names from this data release.

- Owner names are entered as recorded on the deed filed by the owner in the Department of Real Estate. The County is not permitted to standardize entries among common owners, or even fix deed spelling errors. For this reason, the data appearing on the County website shows data as deeded. Some owners, such as Ross Township, are listed in numerous ways, such as “ROSS TOWNSHIP”, “TOWNSHIP OF ROSS”, “TOWNSHIP OF ROSS (THE)”, and “TWP OF ROSS.” If an owner wants a name changed, added, or removed, a new deed must be prepared and recorded. You may wish to consult an attorney before preparing a new deed.

- Land Use Codes (“USECODE” and “USEDESC”) normally indicate the way the structure on the parcel is being used, such as Single Family Dwelling. In some cases it will refer
to condition or ownership indicators instead, such as “government owned” or “condemned”. Codes and their usage may change per system and reporting requirements. Please check the data dictionary for more details.

- Interior access is not routine once a residence is occupied so internal property details have not been verified by OPA in most cases. However the number of bedrooms and similar interior detail has little if any impact on the assessed value of the property. OPA estimates overall living area via exterior measurements, taken either on-site or via aerial photography. Commercial properties have interior reviews to determine accurate usage and income.

- Condition is a subjective indication of the status of the structure on a parcel, where grade refers both to the quality of construction materials and techniques. The condition field (“CDU” or “CONDITIONDESC”) represents a combination of three factors: Condition, Desirability and Utility, with the weight on Condition. Please see the data dictionary found on the open data portal for more details.

- Deeds have been recorded in Allegheny County since 1788. Early sales may not be seen in the electronic system, and may default to a 1950 sale date.

- Commercial building data does not appear on the County website since they are often comprised of multiple buildings on one property and multiple uses within the same building (a one-to-many problem). Approximately 90% of the parcels in Allegheny County are classed as residential.

- Homestead exemption flags may not immediately appear in the data following the County’s approval of an application. Using the Homestead exemption flag to determine homeownership of a property shortly after a property’s sale may not accurately represent homeownership status of the property. Please keep in mind that not all homeowners file an application for the Homestead exemption.

- Locally offered abatement or exemption programs (by school and/or municipality) will not be represented in County Assessed values.

- Sales recorded in deed records and captured in the property sales dataset may not appear in the assessment dataset if these properties have not yet been assigned an assessed value for taxation purposes. The absence of an assessed value does not prevent a sale from being recorded.
Additional applications of the data

Assessment data has been used in numerous ways beyond its original purpose by a number of users. Some examples are listed below based on prior uses of data involving the University Center for Social and Urban Research at the University of Pittsburgh and project partners. If you know of any additional uses of this dataset that aren't included here, we'd like to share them in this document. Please contact us at the Western Pennsylvania Regional Data Center (wprdc@pitt.edu).

Identify Vacant Land

The land use fields ("USECODE" and "USEDESC") include publicly-owned property as a land use. For this reason, the land use field has limited applicability to the types of land uses common among publicly-owned properties, including government facilities, parks, un-buildable property such as hillsides, and land that once held structures but is now vacant.

Three municipalities in Allegheny County tax land and buildings at different rates. For this reason, the assessment file contains a “FAIRMARKETLAND,” “FAIRMARKETBUILDING,” and “FAIRMARKETTOTAL” (total = land + building) value. To identify vacant land, the split land/structure valuation has been used with good reliability. Ground-truthing efforts on properties whose “FAIRMARKETBUILDING” = 0 have shown that they typically do not have a structure. In 2014, a comprehensive survey of vacant parcels in the North Side of Pittsburgh was conducted by GTECH Strategies (GTECH). GTECH's data collection efforts targeted properties whose building assessment (FAIRMARKETBUILDING) =0. They hired and trained neighborhood residents to collect the data. Of the 6,882 parcels with an assessed building value of "0," 4,791 (70%) did not contain a structure. Many of the remaining 2,699 parcels were also vacant, but apparently were not included in the survey as they were located in a railroad or utility right of way, were a park, cemetery, or condominium common property. The locations of these parcels can be seen in Figure 1.

GTECH surveyors also found 559 properties that did not have a structure, but had a building value greater than "0" according to assessment records. In looking at the GTECH classifications on these parcels, 217, or 39% were parking lots. In the assessment data, these often had a land use code of "parking lot" or "comm aux building." At the time, GTECH was not aware that commercial properties in Allegheny County include a valuation of all improvements, including paving, fences, retaining walls, etc. as mentioned earlier in this document.
The results of the GTECH survey suggest using a zero value in the assessment's “FAIRMARKETBUILDING” field can reliably be used to identify vacant land in Allegheny County, especially among non-commercial properties. Figure 1 shows the results of the GTECH survey on a map in conjunction with the building assessment. To account for improvements on commercial vacant land (whose “FAIRMARKETBUILDING” value may be greater than zero), additional ground-truthing can be done on properties with a very low building value, or where the County's land use code is consistent with a reasonable definition of a vacant property land use.

Figure 1: Results of 2014 GTECH Vacant Land Survey with Building Assessed Value

Owner-Occupied Properties

Staff at Operation Better Block in Homewood have compared the property address with the owner's address (using the four “CHANGENOTICE” fields as a proxy for owner's address) to identify residential properties that may be owner-occupied. Staff then looked at the Homestead flag on the property to identify homeowners that had not filed for the exemption. Staff and volunteers with Operation Better Block then contacted these residents and helped them complete Homestead exemption forms (note: the Homestead exemption may only be claimed once, even if someone lives part time in another location they own – anywhere in the United States).
Investor-Owned Properties

It may be possible to identify investor-owned residential properties using several fields in the assessment data. Given that not all eligible owners apply, relying solely on the lack of a Homestead flag does not provide enough certainty when working to identify investors. To begin, look at all residential properties using the “CLASSDESC” field to limit the search to privately owned properties (please note that condominium units are classified as residential, but apartment buildings with five or more units, or mixed-use residential parcels are categorized as “commercial” in the “CLASSDESC” field). Then, for all properties without a Homestead flag (“HOMESTEAD”<> “HOM”), compare the property address and owner’s address (using the four “CHANGENOTICE” fields as a proxy for owner’s address). If the addresses do not match and there is no Homestead exemption, this may provide an indication that the residential properties may be investor-owned. This data can be used to get a sense of neighborhood housing market dynamics and to develop informed investor housing strategies.

For a guide to developing an investor housing strategy, see: http://www.policylink.org/find-resources/library/when-investors-buy-up-the-neighborhood

Track Common Ownership Across Multiple Properties

Owners of multiple properties can sometimes be linked by a common owner’s address (using the four “CHANGENOTICE” fields as a proxy for owner’s address) across their various holdings, even if the owner’s names appear differently in the assessment data for some of the properties in their portfolio. This data has been useful in proactive code enforcement, as data was recently used to identify the potential holdings of an investor that was cited for not addressing serious condition issues on a rental property in Carrick. In the assessment data, properties held at least in part by this owner were listed under several different corporate names but had a common owner’s address in the assessment record. The owner of the problem property mentioned in the news article was listed as an officer with one of these companies according to incorporations data from the Pennsylvania Department of State.

Please use caution with this technique, as some properties may list the "CHANGENOTICE" address as either the property manager or the mortgage company, not the property owner. It is best used on properties not managed by a third party, and owned free and clear.

Related news story: http://www.post-gazette.com/local/city/2014/05/08/Carrick-landlord-fined-for-health-code-violations/stories/201405080295
Publicly-Owned Properties

The “CLASS” and “USEDESC” fields can both be used to identify publicly-owned property. Setting the “CLASS” = G (Government) should provide a comprehensive list of public property. The “USEDESC” field can then be used to identify the type of public ownership (state, county, local, etc.).

Appendix: listing of field values

Please see the Property Assessment Data Dictionary on the data portal for a list of fields and example values.

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