SmartFabric Release Notes

Version 20250415

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Overview

The purpose of this document is to provide additional information regarding the 20250415 version of LightBox's SmartFabric data. This release contains data content updates, data coverage expansions and bug fixes. If any questions arise, please contact support by emailing support-dmp@lightboxre.com with any questions.

We provide following documentation along with this release note:

1) DataDictionary – For understanding the definition of our data fields.
2) ERD – For understanding the entity relationship between all data layers. This is a helpful tool for enabling connectivity between different tables.
3) SmartFabric_FillRateReport_CountyLevel – For understanding counts and population rate of each field for each of the data layers, grouped by County.
4) SmartFabric_RecordCount – For understanding total records for all our data layers, grouped by States and Counties.
5) SmartFabric_Statistics – For important high-level statistics on this quarter data release.
6) SmartFabric_VintageReport – For understanding latest refresh dates of our data.

New Data and Data Updates

This release introduces True Owner as a new addition to the SmartFabric add-on, expanding our data offerings. We also continued extensive content updates across existing datasets to ensure exceptional data currency, national coverage, enhanced attribution accuracy, and improved location precision.

The spreadsheet SmartFabric_Statistics_20250415.xlsx contains important statistics details of this release. This spreadsheet include:

- Overview – a description of each tab like the below, for ease of use.
- Summary Statistics – a tool to generate summary statistics for national, and any state level or county level geographies.
- County Statistics – contains raw data by county that can be used for analysis and filtering.
- Update Counties – a listing of counties with significant updates in this release. ***Please see below on how to use this list for important information.**

How to Use the Update Counties Sheet

This new addition to our SmartFabric Statistics sheet provides county-level information detailing which spatial layers have undergone significant updates in this release. Each is noted with "Yes" or "No", flag. 'Parcel Update' column also contains a "New" category that represents counties which LightBox did not previously have parcel coverage for and in this release, we do.

There are instances where a layer for one county is not flagged as updated in the Updated Counties sheet, but you still see changes in the data. This is because all data layers in SmartFabric are connected. Changes in one layer can trigger changes in connected layers. Please refer to our methodology for more details.
There may be instances where a county has been updated, but significant changes within the data are not seen. This can occur in counties where the previous version of source data that LightBox had was already recent, and the update ensures we have the most up to date data.

High Level Updates

- Parcels - Parcel data was refreshed for 1,058 counties in this release.
- Assessments - We refreshed assessor data for 894 counties in this release.
- Ownership data - Ownership data within assessments was updated for 2,551 counties with the latest sales transactions.
- Addresses - We performed county-level local source updates in counties across the following states: AL, AK, AZ, CO, FL, GA, ID, IL, IA, LA, MD, MN, MT, NV, NM, NC, ND, OH, PA, SC, SD, WA, and WI.
- Building Footprints - We refreshed footprints for buildings in the states CA, FL, GA, IA, ID, IL, KS, MA, ME, MN, MO, MT, NC, NE, NH, NJ, NY, OK, OR, SC, SD, TN, TX, VA, WA, WI, and WV. We also updated refreshed building height data in the states of CA, MA, NY, PA, TX, and WV.

Enhancements

- We launched True Owner, a new data offering as SmartFabric add-on in March 2025. True Owner data identifies actionable contact(s) most likely associated with the true owner of a commercial property. It is now available in Snowflake and as a bulk data offering.
- SmartFabric and Zoning data are now available as a newly released LightBox Feature Service. This feature service contains rich attribution (schema can be found here: https://lightbox.document360.io/docs/sf-efs-schema-notes). It also offers parcels with integrated assessment attribution, ensuring greater ease of use.
- We added parquet file format as a new bulk data format option starting from 20241015 release. Parquet files are available at the national and state level.
- SmartFabric, Zoning and True Owner data are now available in Snowflake. The data listings in Snowflake have the same content as our bulk data offering. Free trial listing can be found at: https://app.snowflake.com/marketplace/listing/GZTSZTDMS2/lightbox-parcels-assessments-buildings-and-addresses-of-us-properties

- We identified several properties with overlapping or duplicate building footprints—specifically, BUILDING_LIDs with identical or highly similar geometries. These fell into two main categories: overlaps along county boundaries and overlaps in complex structures in dense urban areas (e.g., skyscrapers, stadiums). The first category contributed 90% of the overlap issue. We've deployed a solution to resolve all identified cases of overlap for the first category.

- We've improved how secondary buildings are matched to parcels, resulting in more accurate building assignments. This enhancement led to noticeable increases in secondary building counts across 439 counties. Notably, San Francisco saw a 63% increase in secondary buildings.

- Parcel Data Enhancement – San Francisco, CA: Previously reported overlapping parcels in San Francisco, CA have been addressed. In collaboration with the county's GIS department, we have implemented a solution to accurately identify and retain the correct parcels while removing redundant records.

Known Issues

- Parcel record count drop –
    - Lee county, VA (FIPS 51105): A 67% reduction in parcel record count was identified, primarily due to the consolidation of smaller lots into larger property units. Manual review confirmed that the updated parcel polygons more accurately reflect property boundaries as observed in satellite imagery.
    - Hemphill county, TX (FIPS 48211): A 63% reduction in parcel record count was observed, resulting from the merging of small lots into larger properties to improve alignment with satellite imagery.
    - Irion county, TX (FIPS 48235): A 15% reduction in parcel record count was attributed to the consolidation of right-of-way parcels.

  This is a result of our ongoing efforts to enhance data accuracy and integrity across our datasets.

- Assessment record count drop –
    - Aurora County, SD (FIPS 46003): A 19% decrease in assessment record count was observed in this release (previous: 5,248; current: 4,233). This reduction is due to the removal of easement records, which are not classified as real property.
    - Perry County, IL (FIPS 17145): A 12% decrease in assessment record count was observed (previous: 18,294; current: 16,066). The decrease results from the exclusion of easement and mineral rights records, which are not considered real property.
    - Perry County, IL (FIPS 37023): An 11% decrease in assessment record count was observed (previous: 66,454; current: 59,380). This change is due to the removal of duplicate records identified during data quality improvements.

- Building Footprint count drop – We applied a fix for duplicate building footprints and as a result saw >10% building footprint count drop in Fairfax City, VA and Falls Church City, VA.

- Address record count drop – For Sumter County in Florida and Alger County in Michigan, address point count dropped by 10% as we updated our sources, improved address standardization process, and deleted inaccurate data points.

- We have identified the presence of special characters in about 4000 address strings (e.g. a`, i`, o`). As these characters are not recommended by USPS standards, we are actively working on replacing them to ensure compliance with USPS guidelines.

- Building footprint gaps – We have implemented a system to identify specific neighborhoods where building footprints are likely to exist but are currently missing from our database. Each quarter, we target these areas and make substantial additions to our building footprint data. Counties where these gaps have been identified and updated can be found in the Updated Counties tab of the SmartFabric Statistics sheet.

- Building Footprint Height Accuracy – We are constantly refining our process for accurately modeling buildings heights. For this release, we have updated building heights for 354 counties.

- Street Parcels – Our current product design is to keep street parcels which are delivered to us from our sources as is. There is a roadmap item to add a flag field to the parcel data which will help client to identify Right-Of-Way (ROW) parcels with ease. Please see 'Important Upcoming Changes' section for the upcoming schema change.

Updating and Making Use of the 20250415 Release

For existing clients of LightBox's SmartFabric there is the question of how you best make use of the new data. In any update of the data there are numerous things that can change, below are a few examples:

- Parcel/Building polygon changes - new parcels/buildings, deleted parcels/buildings, reshaped parcels/buildings.
- Building grouping changes – the relationship between buildings can change, for example what once was a 2-polygon region object with one address may become 2 single polygon regions each with its own address.
- Primary Address changes – an address may see a significant change as we improve the addressing (from no address to an address, or 10 Smith St to 12 Smith St), or may see an improvement in the hygiene of the address (from a ZIP5 to a full ZIP+4).
- Secondary Address changes – the numbers and details of secondary address and secondary unit information may change (through addition, deletion and modification).

- Unique Identifiers – all unique IDs (both LID and ObjectID fields) are subject to change.
- Removal of PO Boxes coming from the USPS ZIP+4 data lead to a decrease in secondary address numbers in certain locations but an increase in data quality.

There are several strategies that you can use. In each, an understanding of LightBox's LID structure and relationships is key. Please see our LID FAQ and Relationship FAQ for more information on each of these.

Comprehensive Use of New Data

Upload the new data into your production or operational environment and discontinue using the previous version of data. This is a good strategy if you do not perform any value add or improvements on the data (i.e. you have no work that you want to preserve).

Our general recommendation is to always make use of the entire new release of data, or at least an entire state. For example, if Kansas' coverage is significantly improved, drop the prior version's Kansas data, and upload the new data for Kansas.

You may wish to assess the significance of an update versus the work involved. For example, new coverage for any given state may consist of mostly rural areas. If these counties are of less importance for your business, you may want to skip utilizing new data for various states for the current release. It is also important to check the updated counties list, though, as updates to counties with high population counts may tilt your decision in favor of updating an entire state.

Uploading Just "The Deltas"

We hear and use the term "The Deltas" to refer to any change or additions in coverage. We do not recommend blending coverage between releases or to only update partial counties. It is important to note that there will be changes in a county even though that are not listed as such the Updated Counties sheet. This occurs specifically in the addresses and relationship files as in addition to the local sourcing completed and noted in our SmartFabric Statistics sheet, each quarter we bring in nationwide address sources and run all addresses through our address standardization. We also re-establish all relationships in our 6 relation files to reflect updates and enhancements to our matching logic.

It is possible to use the "Updated Counties" tab in the "SmartFabric_Statistics" sheet to identify new counties of coverage. Extract only the features with the County FIPS code for a county with new coverage. Then insert only those records into your tables from the prior release. For example, if you want to add coverage for New Castle, Delaware you can add in the entire DE*.* files. If you want to add

coverage for the city of Fort Smith in AR, then you can select records with FIPS 05137 and insert those records into your prior release.

Next and Future Releases

Our next release will be the July 2025 vintage data. In this next release, we will continue to enhance data freshness and overall data quality. We are also planning on important changes mentioned below:

- **Planned FIPS Code Change in Connecticut**
  The U.S. Census Bureau has introduced new geographic "Planning Region" FIPS codes for the State of Connecticut, which will replace the existing County FIPS codes in future reporting. After a thorough review, LightBox has determined that adopting these new Planning Region FIPS codes will provide greater value to our clients. This update is scheduled to be implemented in the July 2025 release.
  For more information on the Connecticut FIPS changes, please review the following links:
  Final Changes to County Equivalents in Connecticut (census.gov)
  Federal Register: Change to County-Equivalents in the State of Connecticut

- **Planned Schema Changes - Introduction of ROW_FLAG to the Parcel Table**
  We are introducing a new field named ROW_FLAG (subject to change) in the parcel table of our database schema. This field will serve as a flag to indicate if a parcel is a non-real property, carrying a category code for types like Right-of-Way. The purpose of this field is to help clients easily remove non-real properties from their processes, particularly for those who consider non-real properties as noise in their use cases.

These changes may impact your current ETL process. Please reach out to your Customer Success Manager or our support team at support-dmp@lightboxre.com with any questions or concerns.