



AN ESRI
TECHNICAL PAPER

JUNE 2024

Methodology statement: 2024 Business Locations and U.S. Business Summary data

380 New York Street
Redlands, California 92373-8100 usa
909 793 2853
info@esri.com
esri.com



Copyright © 2024 Esri
All rights reserved.
Printed in the United States of America.

The information contained in this document is the exclusive property of Esri. This work is protected under United States copyright law and other international copyright treaties and conventions. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, except as expressly permitted in writing by Esri. All requests should be sent to Attention: Contracts and Legal Services Manager, Esri, 380 New York Street, Redlands, CA 92373-8100 USA.

The information contained in this document is subject to change without notice.

Esri, the Esri globe logo, The Science of Where, Tapestry, ArcGIS, [esri.com](https://www.esri.com), and @esri.com are trademarks, service marks, or registered marks of Esri in the United States, the European Community, or certain other jurisdictions. Other companies and products or services mentioned herein may be trademarks, service marks, or registered marks of their respective mark owners.

Table of contents

Overview	4
About Data Axle business data	5
Esri Business Locations point data	6
Esri U.S. Business Summaries	7

Methodology statement: 2024 Business Locations and U.S. Business Summary data

Overview

Esri creates its Business Location point dataset from a comprehensive database of businesses licensed from Data Axle. Data Axle provides more than 14 million U.S. and more than 1 million Canada businesses, featuring attributes such as company name and location information, industry classification, number of employees, sales volume, brands, shopping center information, and more. The Business Location points are one part of a comprehensive portfolio of ArcGIS Places data—also known as points of interest (POI)—offered by Esri.

Esri also uses Data Axle’s business information to create its Business Summary product for the United States. Business summaries are built from the Business Location points, and provide ready-to-use aggregations for different types of geographic areas such as census tracts or ZIP codes. Business summaries can be generated for user-defined custom polygons such as drive-time areas as well.

The Business Location point dataset and associated Business Summaries are current as of February 2024. Beginning with the June 2024 release, Business Summaries will be published three times per year¹, concurrently with the Business Location points.

This year, Data Axle POI and Business Summary users may note an increase in the number of businesses and changes in estimated sales volume for key sectors. Between February 2023 and February 2024, Esri received almost a million additional business records from Data Axle, as new data sources have been brought into Data Axle’s business compilation process. Notable additions have occurred in sectors including medical/health, nonprofit 501C status, mining, and unclassified/NEC (Not Elsewhere Classified) businesses.

Consult our [Data Axle technical documentation page](#) for more information about the Business Locations and Business Summary products.

¹ Consult the product release notes or visit [Esri Business Summary](#) to obtain the current business data vintages.

About Data Axle business data

Data Axle uses a variety of sources and methods in developing its business database, including scrubbing directory listings, web monitoring, identifying new business activity (through permits, licenses, phone connections, and so on), news alerts, public filing or bankruptcy notices, USPS postal information, and more. The data is continuously updated using an extensive telephone verification process; approximately 25 million calls are made per year to maintain as accurate a business directory as possible.

Each record is assigned a Standard Industrial Classification (SIC)-based code and a North American Industry Classification System (NAICS)-based code. Data Axle uses the 2022 NAICS categorization system.

Data Axle adds additional granularity to both classification systems by appending two proprietary digits to the end of the codes, creating six-digit SIC-based codes and eight-digit NAICS-based codes. All records receive a primary NAICS-based code and SIC-based code which identifies the primary purpose of the business. Where appropriate, a secondary code may also be provided. For example, a supermarket may have a primary NAICS-based code for grocery store but also have a secondary NAICS-based code as a health and personal care retailer.

The business data also features employee count information. Actual employee counts are provided where the information is available through public sources such as SEC documents, company websites, or annual reports. When an actual count is not available, Data Axle provides an estimated count. Kiosk locations such as ATMs will not have an employee count.

Data Axle sales volume attributes are modeled, as verifiable sales volume figures are extremely difficult to obtain from private businesses. The primary source data used to model sales volume comes from the U.S. Department of Commerce. Data Axle's total annual sales volume is estimated by applying a county-level six-digit NAICS industry sales per employee multiplier to its location employment data and corresponding six-digit NAICS industry code. Data from the U.S. Bureau of Economic Analysis is also used to account for price changes so the estimates reflect current dollar values. Extreme values are also normalized within franchises and chains to ensure reasonable values. Note that sales volumes may not be provided for certain lines of businesses that do not produce sales such as governmental offices, associations/organizations, and educational institutions.

**Esri Business
Locations point
data**

To create the Esri Business Locations point dataset, Esri uses latitude/longitude coordinate values provided by Data Axle or geocodes Data Axle business address information to place business points on the map. Most businesses can be located to rooftop level or street centerline accuracy. However, some business locations are only able to be placed to city or ZIP code centroid-level accuracy. The location type and location confidence attributes provided by Esri can help determine the spatial accuracy for the business record.

Prior to release, Esri removes some business records that do not meet quality requirements. Typically, this is due to business records missing attributes such as business name or street address, or spatial issues such as missing latitude/longitude or the business location falling outside expected geographic boundaries. Esri also makes best efforts to remove duplicate records from the Business Locations dataset.

Note the Business Location point dataset contains all business attributes Esri is permitted to provide to customers in software, but does not include all the attributes Data Axle offers through its own platform.

Esri U.S. Business Summaries

To create the Business Summary product, various geographic codes (list shown below) are first appended to each business point location. The total number of business points, total sales volumes, and total employee counts are then summarized for each geography. This is done for all businesses and also for specific business categories.

The business categories are generally groupings of two- to four-digit NAICS and SIC codes—for instance, Construction (SIC 15-17), Finance & Insurance (NAICS 52), or Health & Personal Care Retailers (NAICS 456). There are more than 60 ready-to-use business category aggregations available in the Esri Business Summary product.

Note that records flagged as a kiosk from Data Axle's place type attribute are not included in the Business Summary calculations. Kiosk listings typically include locations such as ATMs, electric charging stations, donation drop boxes, mailing kiosks, and video rental kiosks. While these records are omitted from Business Summary calculations, the records remain in the Business Locations point dataset.

The Business Summary product is available for the following geographies:

- Census Block Group
- Census Tracts
- Cities and Towns
- Congressional Districts
- Designated Market Areas (DMAs)
- Metropolitan Areas (CBSAs)
- County Subdivisions
- Counties
- States
- Zip Codes
- USA
- Uber H3 Hexagons: Resolutions 2-7

Business Summaries can also be estimated for any user-defined polygon such as rings and drive times using the data enrichment capabilities available in Esri software.

For more information about Esri Business data, call 1-800-447-9778.

Esri's Data Development team

Led by chief demographer Kyle Cassal and economist Douglas Skuta, Esri's Data Development team uses sophisticated quantitative methods to produce small area demographic and socioeconomic data to support informed decision-making. The team builds on a rich history of market intelligence to produce trusted independent estimates and forecasts for the United States based on innovative methodologies that use public and private data sources with the power of ArcGIS. Esri's Data Development team provides more than 7,000 proprietary data items to better understand the characteristics of people and places across multiple statistical and administrative boundaries and custom trade areas.



Esri, the global market leader in geographic information system (GIS) software, offers the most powerful mapping and spatial analytics technology available.

Since 1969, Esri has helped customers unlock the full potential of data to improve operational and business results. Today, Esri software is deployed in more than 350,000 organizations including the world's largest cities, most national governments, 75 percent of Fortune 500 companies, and more than 7,000 colleges and universities. Esri engineers the most advanced solutions for digital transformation, the Internet of Things (IoT), and location analytics to inform the most authoritative maps in the world.

Visit us at esri.com.



Contact Esri

380 New York Street
Redlands, California 92373-8100 USA

1 800 447 9778
T 909 793 2853
F 909 793 5953
info@esri.com
esri.com

Offices worldwide
esri.com/locations

For more information, visit
esri.com/data/esri_data.