Census Has Business Data? Key Data for Business and Economic Research

AUBER 2019 Fall Conference
October 13th, 2019

Presented by: Andrew W. Hait
U.S. Census Bureau
About the Census Bureau

• The U.S. Census Bureau is the federal government’s largest statistical agency.

• We conduct more than 130 censuses and surveys each year, including
  - **The Decennial Census** – the once-a-decade population and housing count of the United States
  - **The American Community Survey** – the ongoing annual survey of the nation’s population
  - **The Census of Governments** – identifies the scope and nature of the nation's state and local government sector
  - **The Economic Census** – the official five-year measure of American business

• Our mission is to serve as the leading source of quality data about America’s people, places, and economy.

https://www.census.gov/
Key Census Geographic Areas

Nation
- Metropolitan and Micropolitan Areas
- Urban Areas
- American Indian/Alaska Native Areas/Hawaiian Home Lands
- Zip Code Tabulation Areas

Regions
- States
  - Congressional Districts
  - School Districts
  - Places
  - Counties
    - Public Use Microdata Areas (PUMAs)
    - Alaska Native Regional Areas
    - State Legislative Districts

Census Tracts
- 930,000 Geographic Areas
- 35,000+ Communities

Block Groups

(Economic program geographies)
Census Economic Surveys

- Census Bureau Economic Surveys are a key source for official statistics companies can use:
  - Monthly and Quarterly are small sample surveys that provide the most **TIMELY** data available
  - Annual surveys have larger samples and provide the most up-to-date **TREND** data available
  - Every 5 years, the Economic Census measures all businesses and provides the most **COMPREHENSIVE** data available
- These surveys set the standard for U.S. economic statistics, and are fueled by the data provided by individual businesses
17 Census Bureau surveys that provide key economic statistics for nearly every sector:
- Monthly, including:
  - Retail Trade Survey, Building Permits, and Exports/Imports
- Quarterly, including:
  - Quarterly Financial Report; Quarterly Services Survey

Sample surveys

Shown at the national level only, except:
- Building Permits (state, permit issuing areas)
- International Trade data

Released on the Economic Indicators Briefing Room: www.census.gov/economic-indicators/index.php and FRED https://fred.stlouisfed.org/
International Trade

- A Census Bureau program that provide monthly and annual U.S. exports and imports statistics
- Data reported via ACE AESDirect and CBP documents
- Data shown at the national, state, region, and port levels
- Data provided by:
  - NAICS (Ag, Mining, and Manufacturing sectors only)
  - Commodity Classification
  - Country of origination and destination
- Census Bureau also issues export regulations from the U.S.
- See census.gov/foreign-trade/data/index.html for more info
- Released on USA Trade Online (https://usatrade.census.gov/)
Annual Economic Programs

• 20 Census Bureau surveys that provide annual economic statistics for nearly every sector
• Sample surveys or administrative data
• Shown primarily at the national level, except:
  - *County Business Patterns*: National, State, Metro, County, ZIP Code
  - *Nonemployer Statistics*: National, State, Metro, County
  - *Annual Survey of Manufacturers*: National and State
• Other Related Annual Programs, including Retail eCommerce Sales (E-Stats) and Annual Capital Expenditures Survey
• Released on QuickFacts, *Census Business Builder*, data.census.gov, and other Census tools
Public Sector (Governments)

- 5 surveys that provide economic statistics about state and local governments
- Serve as public-sector counterpart to private sector data
- Response is voluntary
- Virtually no confidentiality restriction – data is public record
- Core Program Content
  - Organization and Structure
  - Government Employment
  - Government Finances
- Released on Excel files, data.census.gov, and other Census tools
- See https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html for the newly-released 2017 COG “Organization” data

https://www.census.gov/govs/
The 2012 Economic Census (EC)

- NAICS: Every 2- thru 6-digit code covered by the Census Bureau
  - Excludes Agriculture (NAICS 11) and other selected types of business (see [https://www.census.gov/programs-surveys/economic-census/guidance/understanding-naics.html#par_textimage](https://www.census.gov/programs-surveys/economic-census/guidance/understanding-naics.html#par_textimage) for full list of exclusions)

- Geography: Provides data at the national, state, metro area, county, and place levels

- Other Dimensions: Data by business size, Franchise status, etc.

- Over 200 data variables shown, including variables like the number of establishments, employment, payroll, and sales plus sector-specific variables (inventories, assets, expenses, etc.)

- Product Lines data
  - Released on data.census.gov, Census Business Builder, and other Census tools

Also have related data based on the race, ethnicity, gender, and veteran status of the business owner in the Survey of Business Owners and the Annual Survey of Entrepreneurs

For a preview of the key changes, view our recorded webinar at [https://www.census.gov/data/academy/webinars/2019/2017-econ-census.html](https://www.census.gov/data/academy/webinars/2019/2017-econ-census.html).
See the release schedule on the Economic Census web site (https://www.census.gov/programs-surveys/economic-census/about/release-schedules.html)
Geographic Area Changes for 2017 EC

- **15 states** had metro areas (CBSAs) with some type of change
- **3 states** had counties with some type of change
  - Alaska, South Dakota, and Virginia
- **Every state** had economic place changes *(16,349 Places and parts; 58% changed)*
  - 4,891 Places with Area Gain
  - 3,976 Places with Area Loss
  - 125 Places where their code and/or name changed
  - 442 New Economic Places
  - 171 Dropped Economic Places
- **Island Areas**
  - No metro changes for Puerto Rico, no county- or place-equivalent changes for any of the other 4 island areas (U.S. Territories)

Visit [https://www.census.gov/programs-surveys/economic-census/geographies.html](https://www.census.gov/programs-surveys/economic-census/geographies.html) for more information
State Summary of Geographic Area Changes for 2017 EC

<table>
<thead>
<tr>
<th>State</th>
<th>Metro Area Changes</th>
<th>County Changes</th>
<th>Places and Place Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Birmingham CSA gained a Micro Area</td>
<td></td>
<td>314: Total Places 111 Places with Area Gain, 65 with Area Loss, and 4 with Name Change Only</td>
</tr>
<tr>
<td></td>
<td>Huntsville CSA gained a Micro Area</td>
<td></td>
<td>15: New Economic Places</td>
</tr>
<tr>
<td></td>
<td>NEW Pensacola-Ferry Pass CSA</td>
<td></td>
<td>2: Dropped Economic Places</td>
</tr>
<tr>
<td></td>
<td>NEW Eufaula Micro Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td></td>
<td>Wade Hampton Census Area renamed to Kusilvak Census Area</td>
<td>66: Total Places 25 Places with Area Gain, 26 with Area Loss, and 1 with Name Change Only</td>
</tr>
<tr>
<td>Arizona</td>
<td></td>
<td></td>
<td>2: New Economic Places</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0: Dropped Economic Places</td>
</tr>
<tr>
<td>Arkansas</td>
<td>NEW Hope Micro Area</td>
<td></td>
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</tr>
</tbody>
</table>

See [https://www.census.gov/programs-surveys/economic-census/geographies/change-notes.html](https://www.census.gov/programs-surveys/economic-census/geographies/change-notes.html)
2012 vs. 2017 Map Resources


https://tigerweb.geo.census.gov/tigerwebecon/
NAICS

• The standard used by US Federal statistical agencies to classify businesses
• Developed by OMB, Statistics Canada, and Mexico’s stat agency (INEGI)
• Helps ensure statistical comparability across North American countries
• Adopted in 1997 to replace the Standard Industrial Classification (SIC) system
• Updated every 5 years
  • 2017 NAICS Manual
• Businesses and others can have a role in updates
  
  NAICS website: https://www.census.gov/eos/www/naics/
NAICS Changes for 2017

• **Types of Changes** (at the 6-digit NAICS level)
  - One-to-One (Recode), Many-to-One (Combo), and Many-to-Many
  - No One-to-Many (Splitter)

• **Sector Changes**
  - Mining

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>211111</td>
<td>Crude Petroleum and Natural Gas Extraction</td>
<td>211120</td>
<td>Crude Petroleum Extraction</td>
</tr>
<tr>
<td>211112</td>
<td>Natural Gas Liquid Extraction</td>
<td>211130</td>
<td>Natural Gas Extraction</td>
</tr>
<tr>
<td>212231</td>
<td>Lead Ore and Zinc Ore Mining</td>
<td>212230</td>
<td>Copper, Nickel, Lead, and Zinc Mining</td>
</tr>
<tr>
<td>212234</td>
<td>Copper Ore and Nickel Ore Mining</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Key:**
  - Recode (no content change)
  - Many-to-One (combination)
  - Many-to-Many

• **Manufacturing**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>333911</td>
<td>Pump and Pumping Equipment Manufacturing</td>
<td>333914</td>
<td>Measuring, Dispensing, and Other Pumping Equipment Manufacturing</td>
</tr>
<tr>
<td>333913</td>
<td>Measuring and Dispensing Pump Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>335221</td>
<td>Household Cooking Appliance Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>335222</td>
<td>Household Refrigerator and Home Freezer Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>335224</td>
<td>Household Laundry Equipment Manufacturing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>335228</td>
<td>Other Major Household Appliance Manufacturing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NAICS Changes for 2017

#### Retail Trade

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>452111</td>
<td>Department Stores (except Discount Department Stores)</td>
<td>452210</td>
<td>Department Stores</td>
</tr>
<tr>
<td>452112</td>
<td>Discount Department Stores</td>
<td></td>
<td></td>
</tr>
<tr>
<td>452910</td>
<td>Warehouse Clubs and Supercenters</td>
<td>452311</td>
<td>Warehouse Clubs and Supercenters</td>
</tr>
<tr>
<td>452990</td>
<td>All Other General Merchandise Stores</td>
<td>452319</td>
<td>All Other General Merchandise Stores</td>
</tr>
<tr>
<td>454111</td>
<td>Electronic Shopping</td>
<td>454110</td>
<td>Electronic Shopping and Mail-Order Houses</td>
</tr>
<tr>
<td>454112</td>
<td>Electronic Auctions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>454113</td>
<td>Mail-Order Houses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Information

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>512210</td>
<td>Record Production</td>
<td>512250</td>
<td>Record Production and Distribution</td>
</tr>
<tr>
<td>512220</td>
<td>Integrated Record Production/Distribution</td>
<td>512250</td>
<td>Record Production and Distribution</td>
</tr>
<tr>
<td>517110</td>
<td>Wired Telecommunications Carriers</td>
<td>517311</td>
<td>Wired Telecommunications Carriers</td>
</tr>
<tr>
<td>517210</td>
<td>Wireless Telecommunications Carriers (except Satellite)</td>
<td>517312</td>
<td>Wireless Telecommunications Carriers (except Satellite)</td>
</tr>
</tbody>
</table>

**Key:**
- Recode (no content change)
- Many-to-One (combination)
- Many-to-Many
## NAICS Changes for 2017

### Real Estate & Rental & Leasing

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>532220</td>
<td>Formal Wear and Costume Rental</td>
<td>532281</td>
<td>Formal Wear and Costume Rental</td>
</tr>
<tr>
<td>532230</td>
<td>Video Tape and Disc Rental</td>
<td>532282</td>
<td>Video Tape and Disc Rental</td>
</tr>
<tr>
<td>532291</td>
<td>Home Health Equipment Rental</td>
<td>532283</td>
<td>Home Health Equipment Rental</td>
</tr>
<tr>
<td>532292</td>
<td>Recreational Goods Rental</td>
<td>532284</td>
<td>Recreational Goods Rental</td>
</tr>
<tr>
<td>532299</td>
<td>All Other Consumer Goods Rental</td>
<td>532289</td>
<td>All Other Consumer Goods Rental</td>
</tr>
</tbody>
</table>

### Professional, Scientific, and Technical Services

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>541711</td>
<td>Research and Development in Biotechnology</td>
<td>541713</td>
<td>Research and Development in Nanotechnology</td>
</tr>
<tr>
<td></td>
<td>nanobiotechnologies research and experimental development laboratories</td>
<td></td>
<td>except Nanobiotechnology</td>
</tr>
<tr>
<td></td>
<td>except nanobiotechnologies research and experimental development laboratories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>541712</td>
<td>Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)</td>
<td>541713</td>
<td>Research and Development in Nanotechnology</td>
</tr>
<tr>
<td></td>
<td>nanotechnology research and experimental development laboratories</td>
<td></td>
<td>except Nanotechnology</td>
</tr>
<tr>
<td></td>
<td>except nanotechnology research and experimental development laboratories</td>
<td></td>
<td>except Nanotechnology and Biotechnology</td>
</tr>
<tr>
<td></td>
<td>except Nanotechnology and Biotechnology</td>
<td>541715</td>
<td></td>
</tr>
</tbody>
</table>

Visit the NAICS website for more information ([https://www.census.gov/eos/www/naics/](https://www.census.gov/eos/www/naics/))
North American Product Classification System (NAPCS)

• **Product Lines** provide a more detailed breakout of the products made and sold and services provided by businesses

• **2012 Economic Census Product Lines Data**
  - Mining and Manufacturing
    - Product lines data shown at the 6- thru 10-digit product code levels
  - Construction
    - Data by Kind of Business and Type of Construction shown in place of product lines
  - Other Sectors
    - Retail, Wholesale, and most other sectors show data at the broad (end in “0”) and detailed lines

• **2017 NAPCS** will make it easier for users to compare products across sectors

Visit the NAPCS website and Concordance Tables for more information ([https://www.census.gov/programs-surveys/economic-census/guidance/understanding-napcs.html](https://www.census.gov/programs-surveys/economic-census/guidance/understanding-napcs.html))
Other Changes for 2017

• “Structural” Product Changes
  • New “First Look” release
    • For 2012 EC, “Advance Report” had 2-digit NAICS national level only; Industry Series reports added selected 2- thru 6-digits
    • For 2017 EC: Still National data only but with 2- thru selected lower level NAICS detail
      • “First Look” will be superseded by U.S. data in Geographic Area Statistics
  • Establishment & Firm Size releases
    • Consolidated into 7 tables (separate tables by sector in 2012)
    • Size categories standardized across sectors
Other Changes for 2017 (cont.)

- **“Structural” Product Changes (cont.)**
  - Adjustments to Miscellaneous Subjects tables
    - 38 tables dropped
      - 2 Mining, 4 Construction, 4 Manufacturing, 1 Trans. & Warehousing, 2 Information, 4 Finance & Insurance, 5 Real Estate, 6 Prof/Sci/Tech, 2 Management, 2 Admin, 2 Healthcare, 2 Accommodations, 2 Other Services
    - 7 tables added
      - 1 Utilities (“Cost of Purchased Gas for Resale by Utilities”)
      - 1 Construction (“Location of Const: Employment Size”)
      - 1 Wholesale Trade (Petroleum)
      - 1 Educational Services (“Modes of Instruction”)
      - 1 Healthcare (“New Patient Care Revenue by Payer”)
      - 2 Accommodation (“Electronic Menu Ordering” and Limited/Full/Luxury Hotel”)
  - Class of Customer, Enterprise Support, and Exported Services no longer separate releases by sector

See the Economic Census web site ([https://www.census.gov/programs-surveys/economic-census.html](https://www.census.gov/programs-surveys/economic-census.html)) for more information
Other Changes for 2017 (cont.)

- **New Disclosure Rules** (and their impacts)
  - Historically, Number of Establishments was not suppressed even when other variables are withheld
  - New IRS privacy rules require us to suppress Establishment counts when < 3 and/or when other data variables suppressed
  - Will also be providing more information on measures of reliability
Other Changes for 2017 (cont.)

- NAICS and Geographic levels published in Geographic Area tables
  - For 2012 EC, data released varied by sector
  - For 2017 EC, no Place data for Manufacturing
  - For 2017 EC, no ZIP Code data (see ZBP)
  - Published levels for other sectors may be reduced based on response rates, data quality, suppression rules, and other factors
    - Check the Economic Census web site for more info

- Economic Census of Island Areas
  - Releases will mirror the U.S. data tables as much as possible (consolidated)
    - 2 Geographic Area Series tables
    - 4 NAPCS tables
    - 4 Size tables
    - 22 Industry tables (Manufacturing and Construction)
    - 13 Miscellaneous Subjects tables

<table>
<thead>
<tr>
<th>Sector</th>
<th>U.S./States</th>
<th>Metro Areas</th>
<th>Counties</th>
<th>Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Manufacturing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Retail Trade</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Information</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing Services</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
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<td></td>
<td>X</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management and Remediation Services</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Educational Services</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Health Care and Social Assistance</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Arts, Entertainment, and Recreation</td>
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<td>X</td>
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<td>X</td>
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<tr>
<td>Accommodation and Food Services</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Other Services (Except Public Administration)</td>
<td></td>
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</tbody>
</table>
Other Changes for 2017 (cont.)

• New Data.census.gov dissemination platform
  • For the 2012 EC, data primarily released on American FactFinder (AFF), with selected data released in other tools
  • For the 2017 EC, all data will be released on the new data.census.gov platform (selected data will continue to be released in other tools too)
    • Historical Economic Census data will be accessible on AFF until eventually migrated to new platform
  • Users should familiarize themselves with this new tool and its capabilities
Ways to Access Data

- **QuickFacts**
- **My Congressional District**
- **Census Business Builder**
- **OnTheMap and OnTheMap for Emergency Management**
- **American FactFinder**
- **Data.census.gov**
- **Application Programming Interface (API)**
Guiding Principles

- Easy to use
- Customer focused
- Provide access to Census data and more
  - BLS, USDA, & third party
- Leverage existing Census investments
  - Esri, API
- Use latest technology
  - Cloud
- Provide for free

Census Business Builder
V. 2.6

CBB Home Page
https://www.census.gov/data/data-tools/cbb.html
Prior Changes in Release 2.5 and Earlier

- **Data**
  - SBE & RAE
    - Workforce data from the QWI
    - Residential building permits data
    - Upload your own data

- **Functionality**
  - SBE and RAE
    - Add reference layers and to change the basemap
    - Change the default map color palate and classing scheme
  - RAE only
    - Build regions of all supported geographic areas
    - Build regions of 2+ different types of areas

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Key Changes for Release 2.6 (released August 16th, 2019)

• Data
  • Bureau of Labor Statistics *Quarterly Census of Employment and Wages* (QCEW) data

• Functionality
  • SBE and RAE
    • View data from selected programs on a 3rd dimension
      • Employment size (CBP) and worker age (QWI)
    • NAICS and Geography vintages updated from 2012 to 2017
  • RAE only
    • Build regions via 3 drawing tools (rectangle, circle, and polygon)
    • Links from list of area components of region on cover page of Region report to reports for each individual area
Key Changes for Release 3.0 (scheduled for December 2019) and Beyond

• **3.0**
  • **Data**
    • Updating the vintage of nearly all data sources (to 2017, 2018 or later)
    • International Trade data by country
  • **Functionality**
    • Drill down to full NAICS hierarchy in RAE
    • Upload and download shapefiles
    • Create own variables in map
    • Numerous platform updates, including some that will allow users to view all U.S. counties and auto-filter refresh

• **3.1 and beyond**
  • **Functionality**
    • Multiple map variables
    • Improved geo and variable searching
    • Address API “challenges”
Q & A and Thank You!

Contact me at:
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(301)763-6747