STDB®

Market Analysis with GIS for Commercial Real Estate

A Student Handbook

Resources

Website: www.stdb.com
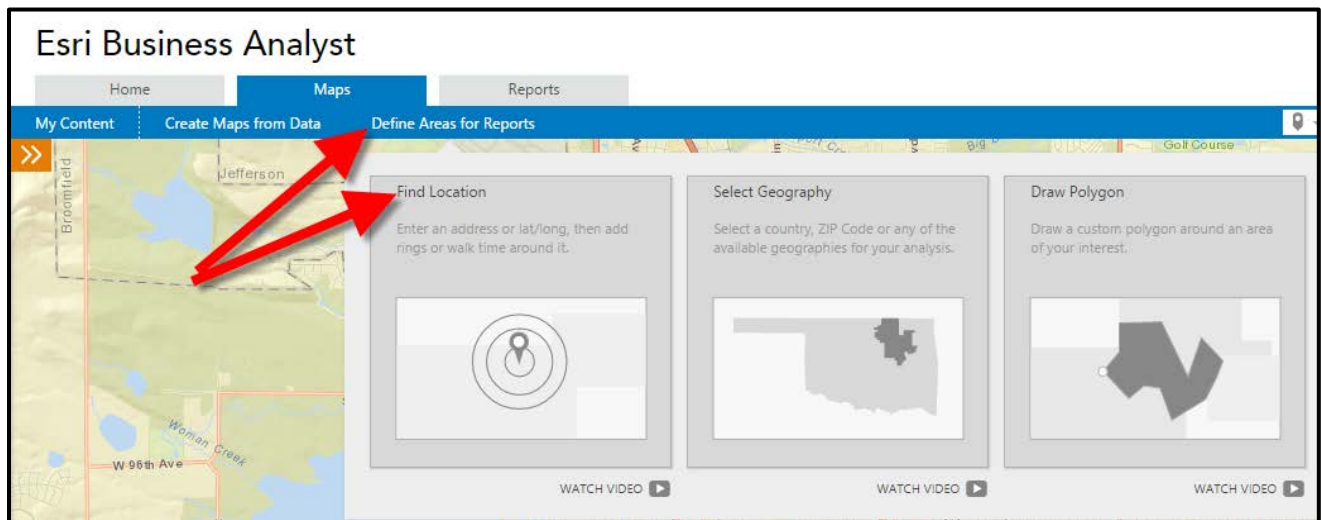

Online Resources: STDB Learning Center – Find on www.stdb.com

STDB Support

- o 469-232-2615
- o support@stdb.com

Workflow 1. [Video Recording](#)

Define an area by location and run reports

Site 1. Find Location –2944 N 44th St, Phoenix, Arizona, 85018

Name Location- Site 1

    a. Add Radius – 3 Miles

Reports, Standard Reports

1. Select Area
    a. Choose your 3 Mile Radius- Site 1
    b. Uncheck any of the other study areas that you may have selected

2. Add Reports
    a. Choose the following reports
        - Community Profile
        - Demographic & Income Profile

3. Run Reports
    a. Select view in one PDF before running
    b. Add report subtitle if desired
    c. Choose Run All

4. View Reports - Review Reports in pop-up, or email…answer the questions on the following page using the reports:

(1) As a broker doing a preliminary analysis, we want some basic demographic information on this area. From the Demographic and Income profile, answer the following:
   a. What is the total population of the area? 133,675
   b. Is it projected to grow between now and 2022? Yes
   c. If so, at what percent annually? 1.49% annually
   d. Is that more or less than the state's projected growth? More

(2) A business owner has approached you with the idea of opening a lunch-focused restaurant close to our location. Using the Community Profile, answer the following questions:
   a. What is the daytime population of the area? 162,647
   b. Of the daytime population, what is the number of workers? 93,769

Site 2. Find Location – Video Recording -700 K St, Sacramento, California, 95814

Name Location – Site 2

   a. Add Rings, Drive Times, Bands – 5 Minute Drive Time

Reports, Standard Reports

   1. Select Area

   a. Choose your drive time study – Site 2
   b. Uncheck any of the other study areas that you may have selected

   2. Add Reports

   a. Choose the following reports:

   - Retail MarketPlace Profile
   - Tapestry Segmentation Profile

   5. Run Reports
   a. Select view in one PDF before running
   d. Add report subtitle if desired
   e. Choose Run All

   6. View Reports - Review Reports in pop-up, or email, answer the following questions using the reports you just ran:

(1) If we are representing a shopping center looking for tenants in this drive time, what types of businesses might we add to our prospecting list based on the Retail MarketPlace Profile? (We are looking for the businesses with the most leakage) Gasoline, Other General Merchandise, Grocery

What types of retail businesses would we be concerned of being oversaturated? (Surplus) Food Service, Department Store

(2) Using the Tapestry Segmentation Area Profile, determine which two segments make up the largest percentage of the population? Metro Renters and Social Security Set

When looking at the top segment, what percentage of them typically rent their homes? 79.2%

**Skills to practice before moving forward-** Video Recording
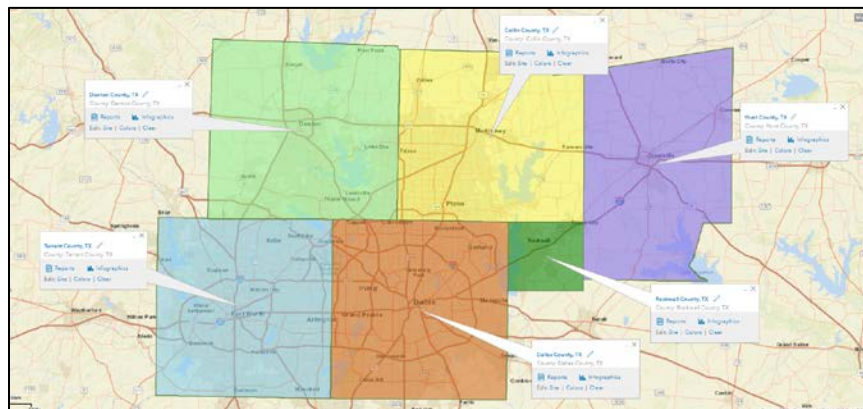
- Creating an area based on a defined geography
  - Create Collin County
  - Dallas, Tx – Create CBSA (Major Market Area)
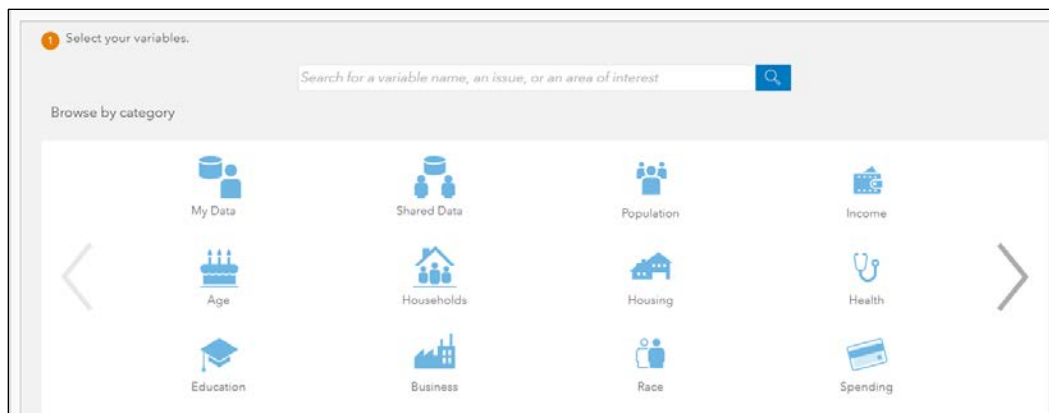
- Using the variable selection work flow on the comparison report practice finding and selecting variables such as:
    - Category Population   2017-2022 Population Growth
    - Category Education   2017 Education: Bachelor's Degree
    - Category Jobs   2017 Unemployment Rate
    - Category Behaviors   Owns a Staple Gun
    - Category Spending   Water Sports Equipment

Workflow 2. Video Recording - Define an area by selecting geographies and run a comparison report
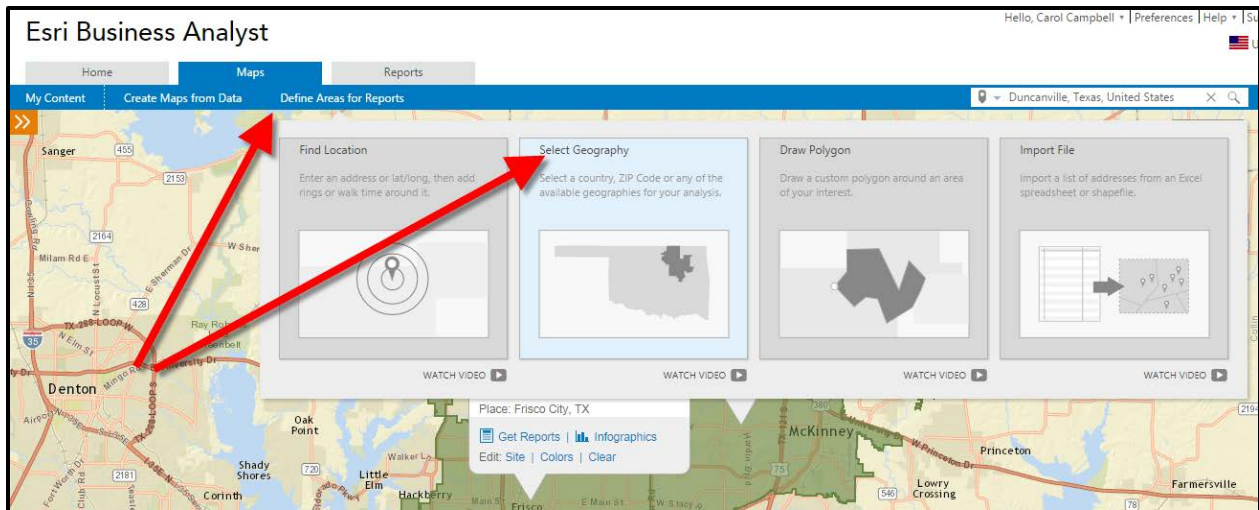
We work in Economic Development for the city of Richmond, VA and are competing with Hartford, CT for a new plant that manufacturers aftermarket suspensions and parts for earthmoving equipment. The incentives and tax credits being offered by both cities are similar, as is access to highways and rail so we need to find other competitive advantages. The company has indicated that they want to locate in a market with a population over 1,000,000 that projects healthy growth and low unemployment. Since they design and manufacture their parts in-house, there is a need for an employment pool of engineers and manufacturing workers to meet the needs for engineers as well as plant workers.

1. Select Geographies – Richmond, VA and Hartford, CT
    a. Metropolitan Area (CBSA) –Select Richmond and Hartford
    b. Make sure the markets are created separately for comparison purposes

2. Reports, Comparison Reports
    a. Select Areas to Compare
   - Richmond
    - Hartford

3. Select variables to use in comparison

- 2017 Total Population
- 2017-2022 Population: Annual Growth Rate
- 2017 Manufacturing Employees
- 2017 Prof/Scientific/Tech Services Employees
- 2017 Unemployment Rate

4. View in Table (Open report)

Based on the data, what would be our pitch to the manufacturing company selling them on the virtues of Richmond? Richmond has greater population, higher projected growth, more Professional Scientific and Tech employees and lower unemployment. The only negative for Richmond is that it has fewer manufacturing employees.

Workflow 3. Video Recording **-** Define an area by drawing a polygon and color-coded map
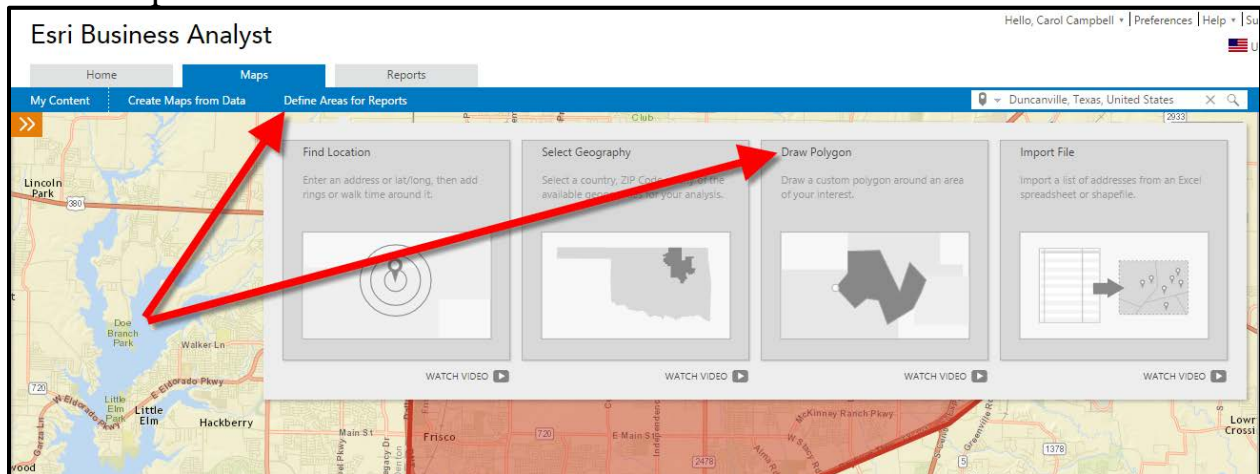
We are working with a multi-family developer who is looking at land northeast of Dallas and has asked us to assess the projected growth in the market area in which he is looking.

1. Draw Polygon -using parameters below in Frisco, TX
   - Sam Rayburn (Hwy 121) – Southern Boundary
   - Custer Rd – Eastern Boundary
   - W University (Hwy 380) – Northern Boundary
   - N Dallas Tollway – Western Boundary

Take the color out of the Polygon but leave boundaries:

    2. Create Maps from Data- Color-Coded Maps

        a. Select "Create Maps from Data" then on "Color-Coded Maps."
        b. Select 2017-2022 population growth from the variable list
        c. Then let's go a step further and add a second variable-2017
        population.

What is our assessment of growth in the area? High projected growth in an area that is part metro/part rural.

For our own satisfaction, we would like to see what crime looks like in the area. Clear the population variable and map crime. What does the map based on the total Crime Index tell us?

Workflow 4. Video Recording - Creating a Smart Map
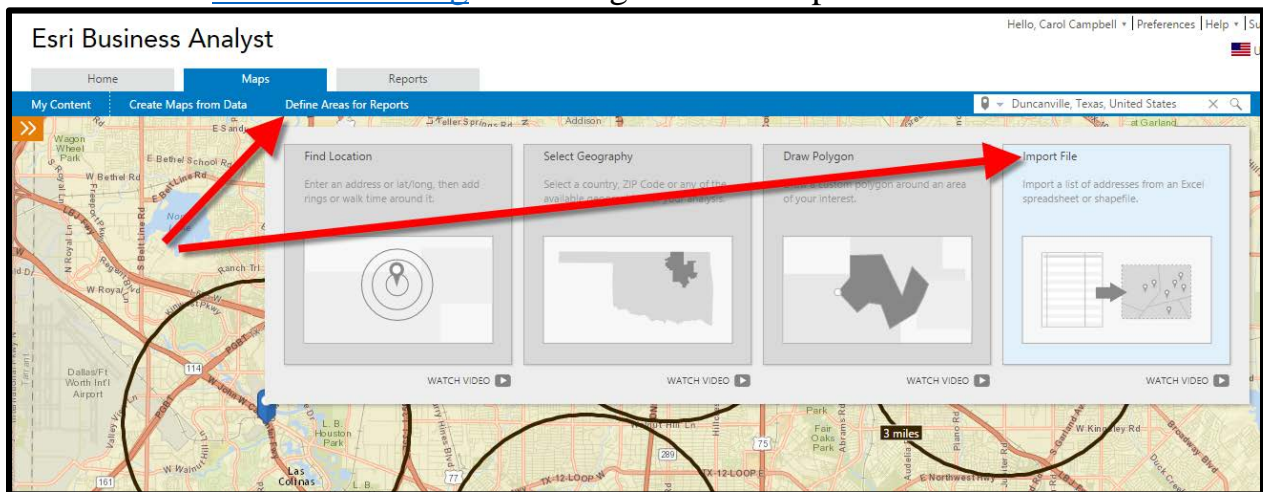
We are a broker searching for casual dining sites for our client who is expanding into the Atlanta market. Since we have their top criteria, we can narrow our search areas by using the Smart Map Search with the following criteria:

- 2017 Median Household Income - $50,000+
- Projected population growth 1% or more per year
- People likely to eat at Panera

Smart Map Search

    Map up to 5 different variables simultaneously.
    Select Create Maps from Data then on Smart Maps. From the list of variables, map:

- 2017 Median Household Income
- 2017-2022 Population Growth
- Market Potential for Panera

Adjust any of the variable ranges along the sliding toolbars to reflect your preferred analysis.

As a reminder, our client has given us the following requirements:

- 2017 Median Household Income- $50,000 +
- 2017-2022 Population Growth (1% per year of more)
- Market Potential for Panera (using an Index of 125+)

Workflow 5. Video Recording - Import Data and perform Suitability Analysis
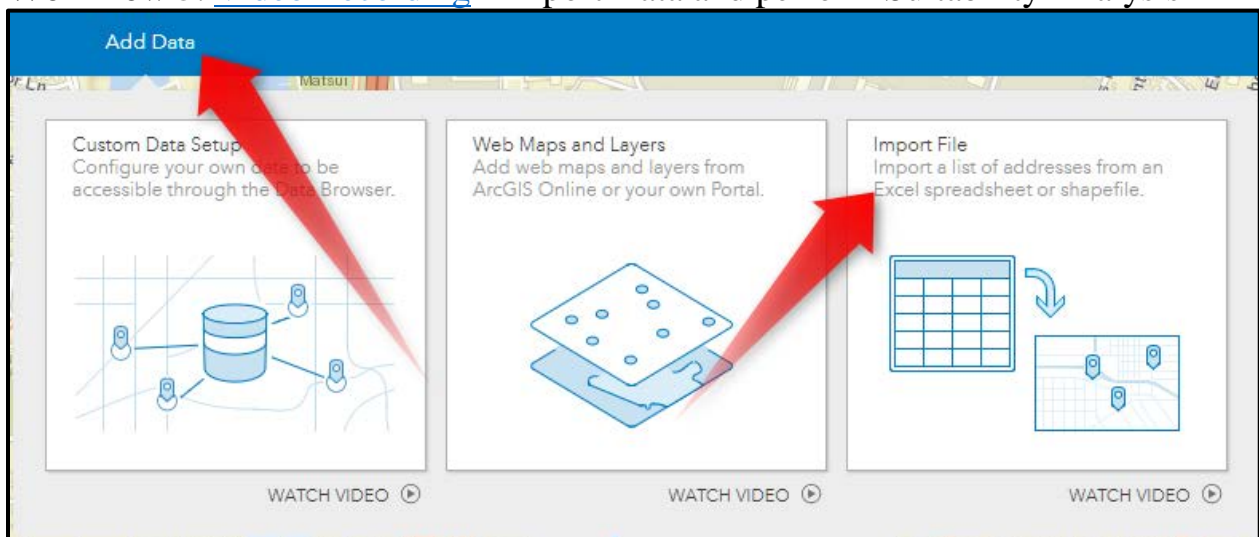
As a continuation of the case above, we will conduct a Suitability Analysis to narrow our results so we can begin to focus on individual sites. We have identified 10 sites to show the client which are on the Atlanta Casual Dining spreadsheet.

First, we need to import the spreadsheet:

- Go to Add Data and select Import File
- Import Atlanta Casual Dining spreadsheet
- Create a 5 minute drivetime around each location
- Select Suitability Analysis
- Start with features on the map
- Add data from the data browser
    - Median Household Income
    - Panera
- Add criteria
- Add attributes from sites to include

- o Available Square Feet
- o Lease Rate
- Apply

Now manipulate the variables and weighting to meet the criteria below:

- 20% Weighting: Median Household Income – $50,000+
- 20% Weighting: Panera type restaurant Index 125+
- 25% Weighting: Available Square Feet – 5,300 sf+
- 35% Weighting: Triple Net Lease- Below $21.00

Based on the criteria and weighting we added, what is the most suitable site? Site 2

Our client also indicated that Panera is their top competitor and they would prefer to locate their first stores where there is a void of Panera locations within the 5 minute drivetime.

Using the Business and Facilities Search, search for Panera in the search window.

Would this change our mind on the number one site to pursue? This would be a judgement call as a Panera is in the very edge of the 5 minute drivetime.

Clear everything off the map except the site that was rated number one. Let's explore the new Historical Traffic layer. Our client needs traffic counts more than 40,000 cars per day. Does the site still meet our criteria? We would have to say no based on this dataset as there is nothing recent that is close enough to this location to use.

Go Back to the STDB Dashboard

Business Lists – Video Recording (coming soon)

1. Produce a prospecting list on 441 Vine Street, Cincinnati, Oh 45202, by creating a .1-mile radius around the building and search for all businesses. What type of business is located in suite 2700? This cannot be done as Business Lists are down.

2. Produce a list of accounting firms in Dayton, OH and find the contact name and title for Ladd & Carter Tax Services. Business Lists are down.

Pictometry – Video Recording

Generate an aerial image of 6985 S Union Park Center, Midvale, UT. What is the date of the most recent image? April 15, 2017

RiskMeter – Video Recording

Generate a flood map of 230 West Plano Parkway, Plano, TX. Approximately how far is this building from the closest flood risk? 3,400 ft +

Practical Exercises and Case Studies

1. Video Recording: How many Pizza Hut locations are within a 15-minute drive time of 1517 North Andrews, Fort Lauderdale, FL? What about Papa John's and Domino's? Can you associate their logos accordingly? If you revisited the project later, could you do it again? ---Pizza Hut 4, 6 Domino's, 5 Papa John's
Hint: Use the Business list tool within BA (Business and Facilities Search)
Answer: 4 Pizza Huts

2. Video Recording – Coming Soon: Using the address 5005 LBJ Frwy, Dallas, TXin Dallas, find the tenants in the building. If you were going to call on Raymond James to prospect for a client or tenant, what is the name of the person you would contact? **Hint:** Use the Business Lists on the Dashboard outside BA. Answer: This can't be completed now as Business Lists are down.

3. Video Recording: A business associate just informed you of a store called Rally Sport that is closing in Boulder, CO. Since you represent a tenant in expansion mode that has previously had great success in similar locations, you are interested in finding out more. The associate could not remember the address but indicated that the store was in the 80301zip code. **Hint:** Find the address using the BA Business and Facilities Search. Answer: 2727 29th St, Boulder, CO, 80301

4. Video Recording: Your client from exercise 3 is in the tire and auto parts business. Assuming his usual trade area is a 5-minute drive time but also wants to look at a 10-minute drive time analysis. Using the old Rally Sport and Fitness address above, what would be your initial reaction to the retail opportunity based on the Retail MarketPlace Profile?
Answer for the 5 minute drive time: Concerned as there is a surplus of 8.8 Million.
Answer for the10 minute drive time: Possibly interested with a leakage of 2.8 Million

5. Video Recording: You need to identify the path of growth for a defined area to determine whether a location adjustment is necessary. Create a color-coded map based on a 10-mile radius from 1901 N Central Expressway, McKinney, TX, 75070. Which direction is the projected population growth? North, Northwest.

6. Video Recording: Create a 200 mile ring around Orlando, FL. Create a two variable map (smart map) that shows the counties within the 200 mile ring that have a population of over 500,000 and over 150,000 people with bachelor's degrees. Which counties meet the criteria? Hillsborough, Orange, Miami-Dade, Palm Beach, Broward

Retail Case

<u>Video Recording</u>: You own a strip center in Tuscaloosa, Alabama and Winn-Dixie is your anchor tenant. Winn-Dixie's initial term is up in 24 months and while they have done well in this location, they are concerned about whether this site will continue to be profitable if the City Council approves the development of a Walmart nearby. A close-by Publix is the only real competition that Winn-Dixie has had in the last few years.

The address of the development site under consideration is 8600 Highway 69 S, Tuscaloosa, Alabama, 35405. Assume that Walmart will also consider their trade area to be 3 miles.

Step-by-Step:

- Go retrieve a Winn-Dixie logo and a Publix logo and save them on your computer.
- On the STDB Learning Center Resources page, there is a spreadsheet that includes the Winn-Dixie and Publix grocery stores.
    - Upload the spreadsheet, saving the file as points only upon upload
    - Change the point symbols to unique symbols and upload logos that match the stores
- Define a market area by using the address 8600 Highway 69 S, Tuscaloosa, Alabama, 35405 and adding a three-mile radius

    a. Using the measuring tool, determine how far (as the crow flies) the proposed Walmart development is from our Winn-Dixie location? .75 Mile

7. Run reports that will give you:
    - Information on supply and demand of grocery stores in this market (Retail MarketPlace Profile)
    - Assessment of past and future population growth (Comparison Report showing population growth from 2000-2010, 2010-2017 and 2017-2022)

    a. If you are speaking at the city council meeting against the Walmart development, what is your pitch? Growth from 2000 to current and projected to 2022 has slowed considerably and there is already a surplus of grocery stores in this area.

Industrial Case

Video Recording: Your client believes they have found the ideal location for their new distribution center in Dallas, TX. The trade area is defined by a 300-mile radius from the proposed new facility. Your client requires a minimum of 10,000,000 households and projected household growth within the trade area and wants to protect against cannibalization of an existing site located in St. Louis, MO. If there is an overlap in the two trade areas, it is critical that there are enough households to support both.

The sites are located at:
      a) Proposed site- I-20 and I-35 in southern Dallas, TX
      b) Existing Site - I-44 and I-270 in southwestern St. Louis, MO

1. Create both sites using a 300 mile radius
2. If there is an overlap, create a third study showing the overlap
3. Using the Comparison Report, determine how many households exist in each of the areas and what the projected growth rate is expected to be.

Is there an overlap between the St Louis and Dallas market areas? Yes
What is the projected household growth rate of the existing site in St. Louis? .49%
What is the number of households in the overlap area? Approximately 421,000. This will vary as polygons will not match exactly.
Based on this analysis, would you recommend for your client to move forward with the Dallas location? Yes

Office Case Study

Video Recording: An insurance company is moving their regional office and have narrowed their office search to 9 locations. Use the excel file "Insurance Companies" found in the learning center to help you determine their best potential location. Use the Suitability Analysis tool in Business Analyst. If the 4 criteria for the decision were size (bigger is better), price per square foot (smaller is better), age of building (newer is better) and average commute time (shorter is better), what would be the best location? Answer: Office Park 7
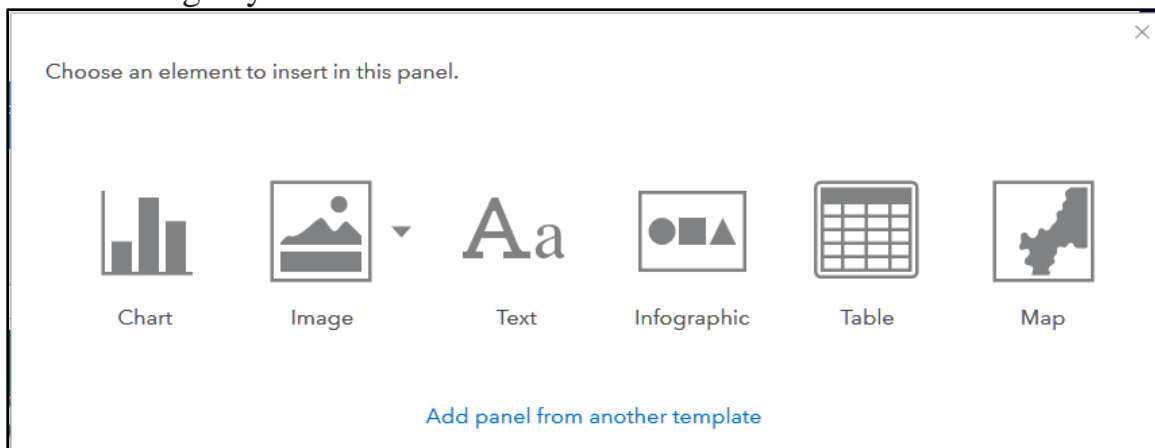
Create Infographics

[Video Recording]: Using the address 2828 Trinity Mills Rd, Carrollton, Texas, 75006:

- Create a 10-minute drive-time around the address
- Go to Reports (at the top of the page)
- Select Build Infographics
- Select Blank Templates
- Choose the Blank Template with 3 columns, 3 rows, logo

3 columns, 3 rows, logo

Open the template.

- As you hover over each section, you will see the ability to Add to each section using any of the tools below:

Choose an element to insert in this panel.

Chart   Image   Text   Infographic   Table   Map

Add panel from another template

- Once you have a section complete, you can edit by hovering over the section and selecting from Edit, Replace or Move
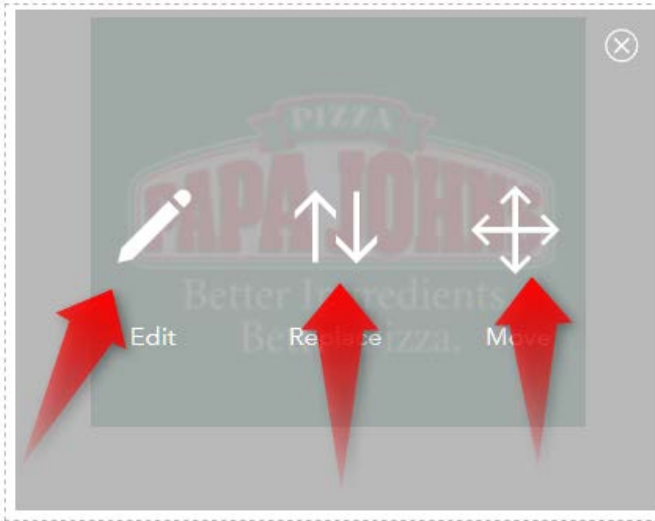
See how close you can come to making the template on the STDB Learning Center Resources page. You can use the sample text and image from the Resources page. Once you have created your Infographic, name and save it Go back to your map to see the information that is based on the drive time from the Trinity Mills location.

Create Custom Report

Video Recording: Use the Custom Report Example on the Resources Page of the STDB Learning Center as an example and see how close you can come to recreate. Go to Reports and Build Reports. Use Video Tutorials on the upper right for assistance if needed.

ACS Activity

Video Recording: What is ACS? The American Community Survey helps local officials, community leaders and businesses understand the changes taking place in their communities. It is the premier source for detailed information about the American people and workforce.

Define your city, neighborhood or market and run:

- ACS Housing Summary
- ACS Population Summary

Find some interesting facts about the area you defined that you might not find in a demographic report: