

Conference for Catholic Facility Management (“CCFM”)

Provider Number: G460



Informing Strategic Decisions by Integrating Diocesan and Religious Institute Data with Demographics and Location Analytics

Course Number: MIA1704

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Datastory Consulting

April 25, 2017



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Course Description

Real estate, construction, and facility management decisions require the ability to integrate a wide range of data into meaningful insight. In most cases, geography plays a unifying role to this disparate data, and “seeing” the data through the lens of a map provides a unique perspective that informs decision-making. This session will provide an overview of how location analytics offer powerful new insights that inform strategic decisions by revealing trends, improving communication, and building consensus. The Archdiocese of Baltimore’s recent Strategic Facilities Planning process will be used as a case study.

Learning Objectives

At the end of this course, participants will be able to:

1. Understand how “location” integrates disparate real estate-, construction-, and facility management-related data into meaningful insight, using examples and case studies.
2. Understand why data-driven decision making is a game-changer, using examples and case studies.
3. Identify what demographic and location analytics data is available, and what resources are available for incorporating data into strategic decisions, using examples and case studies.
4. Understand how visual storytelling related to real estate, construction, and facility management decisions builds collaboration and consensus, using examples and case studies.



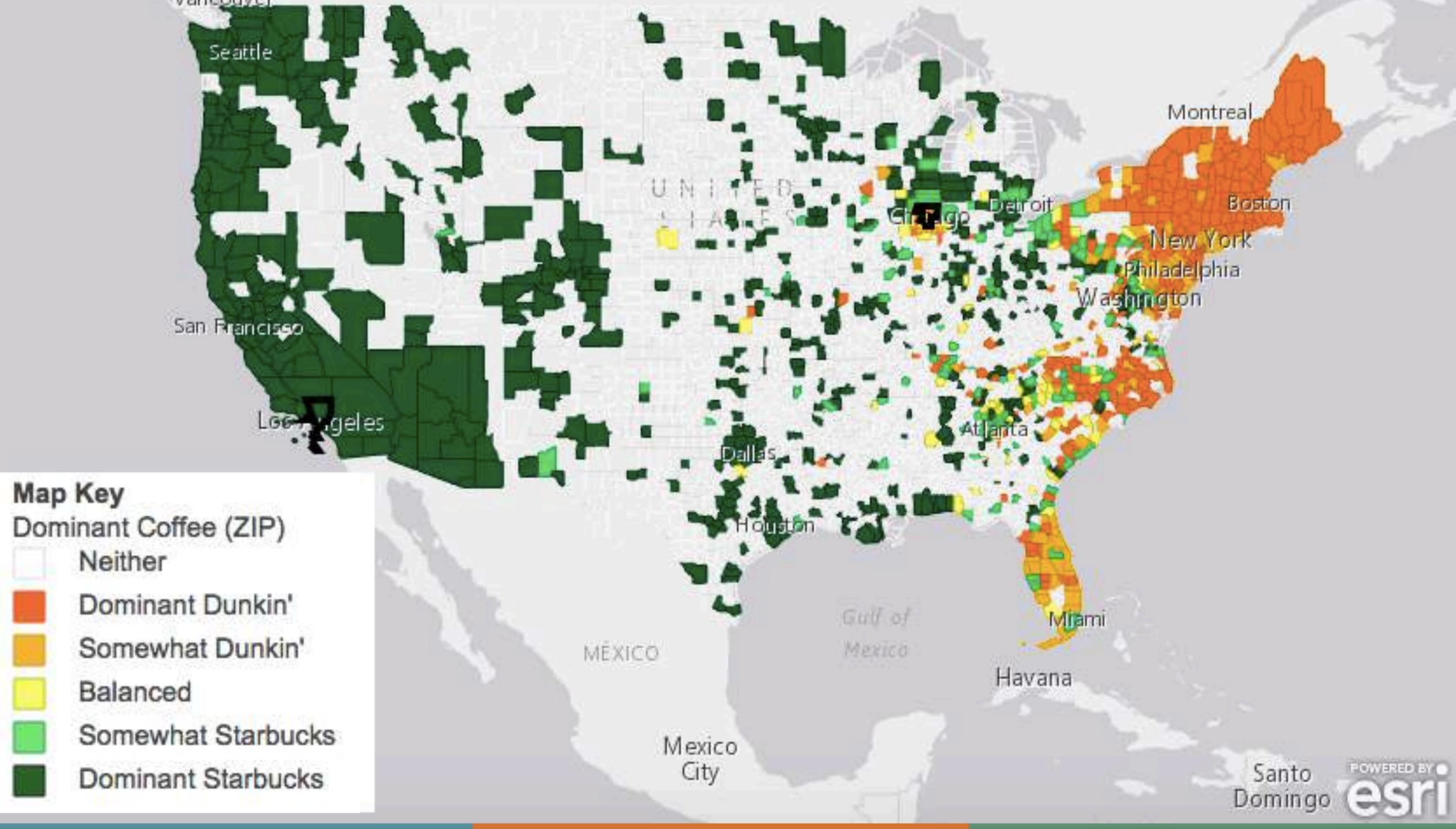
VS.

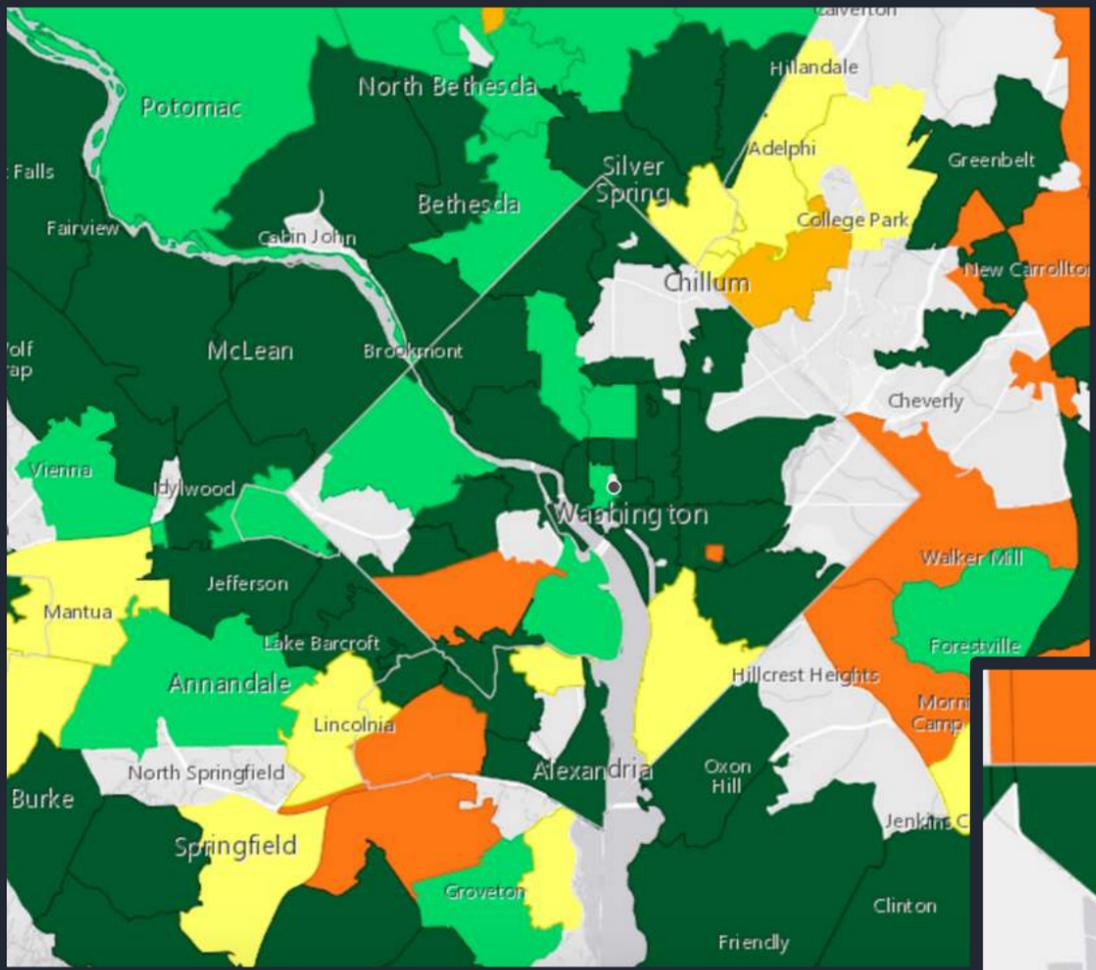


Map Key

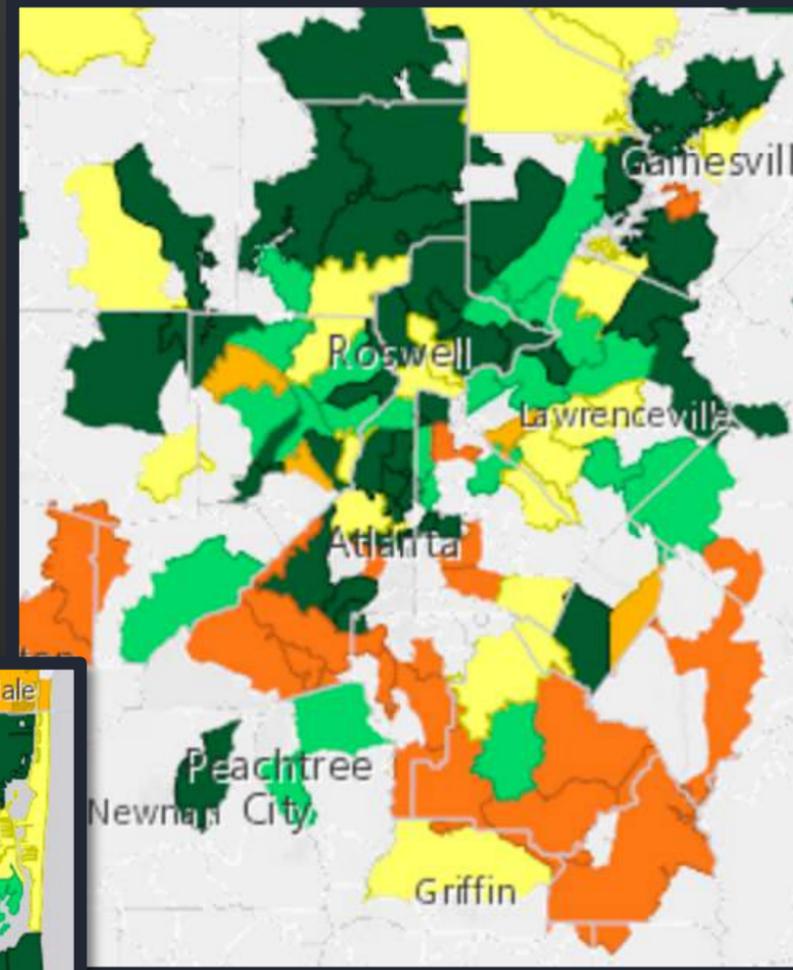
Dominant Coffee (ZIP)

- Neither
- Dominant Dunkin'
- Somewhat Dunkin'
- Balanced
- Somewhat Starbucks
- Dominant Starbucks

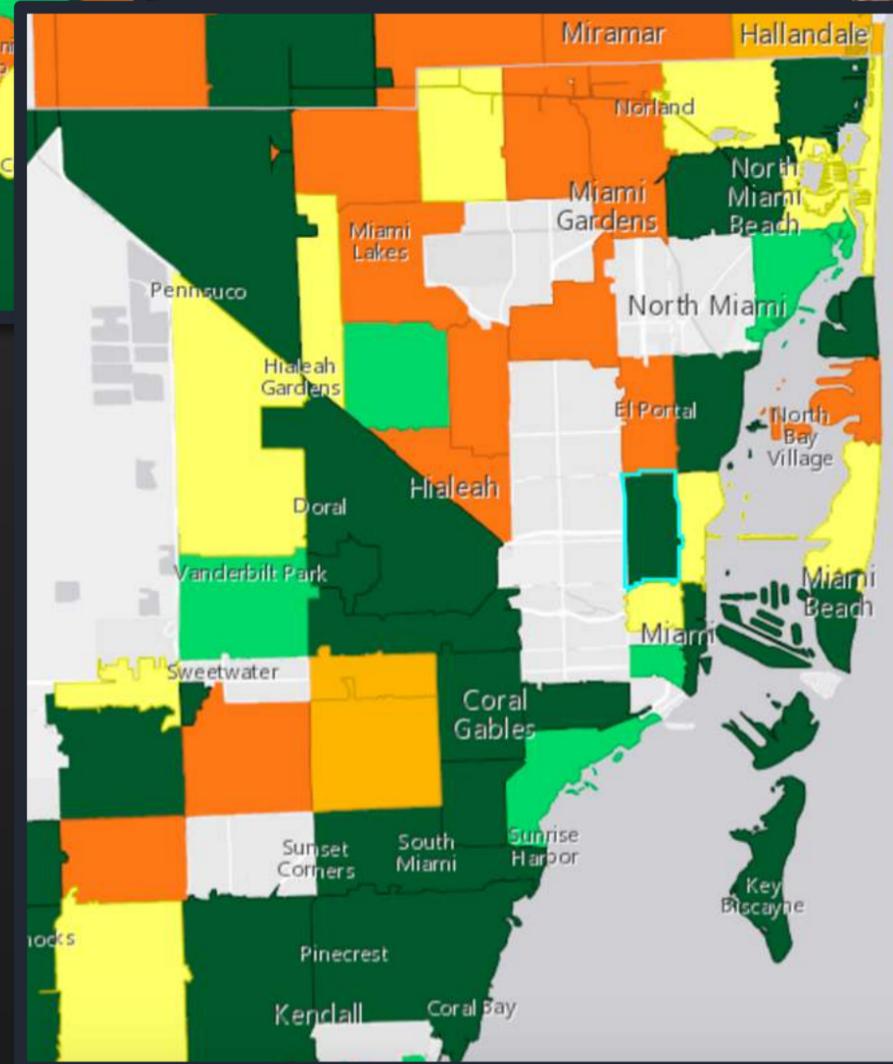




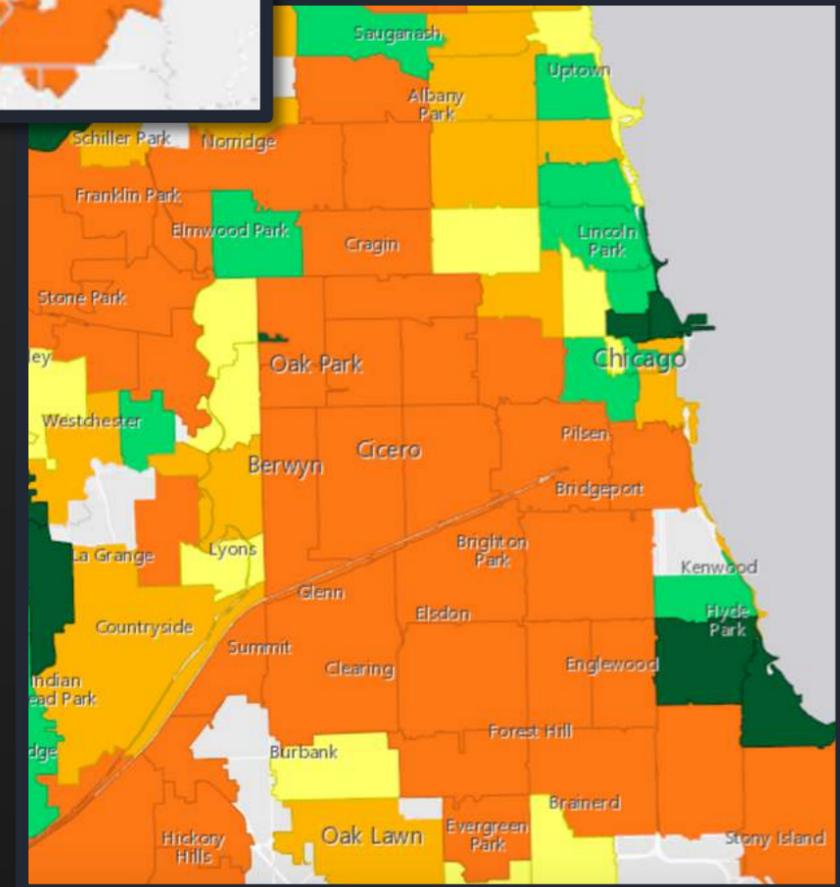
Washington DC



Atlanta

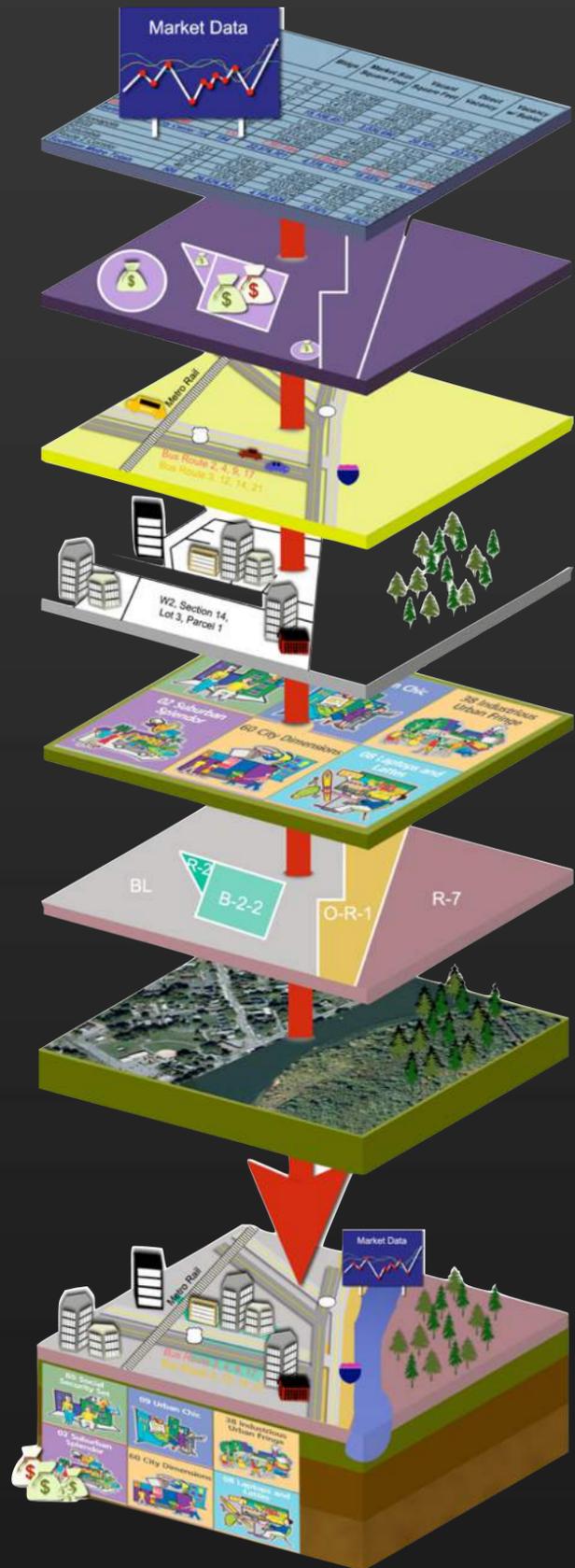


Miami



Chicago





Location Analytics

(we call it revealing a hidden datastory)



LOCATION ANALYTICS MAKE DATA **MEANINGFUL**

What is the average distance my parishioners / students travel ?

How can we re-orient our ministry to better serve the local community?

Which areas of the community are underserved ?

How can we consolidate locations, services, and programs to efficiently allocate our resources?

CASE STUDY - 2012

DISPOSITION OF CARDINAL GIBBONS HIGH SCHOOL



News Release

The map shows a 32-acre mixed-use community with various buildings, green spaces, and parking areas. It is bounded by Wilkens Avenue to the north, De Soto Blvd to the east, and A. C. Don Avenue to the south. Several partner logos are placed on the map: Catholic Charities (top left), the Y of Central Maryland (top right), Saint Agnes Hospital (middle left), Kibby's (middle left), Obrecht Properties LLC (bottom left), and Royal Farms (bottom left). A small figure of Cal Ripken Sr. is also visible on the right side of the map.

Saint Agnes Hospital Unveils Plans & Partners at Gibbons Commons Groundbreaking

Royal Farms, Kibby's, and Y of Central Maryland, Among New Health, Wellness and Recreation Partners to Join the 32-Acre Mixed Use Community

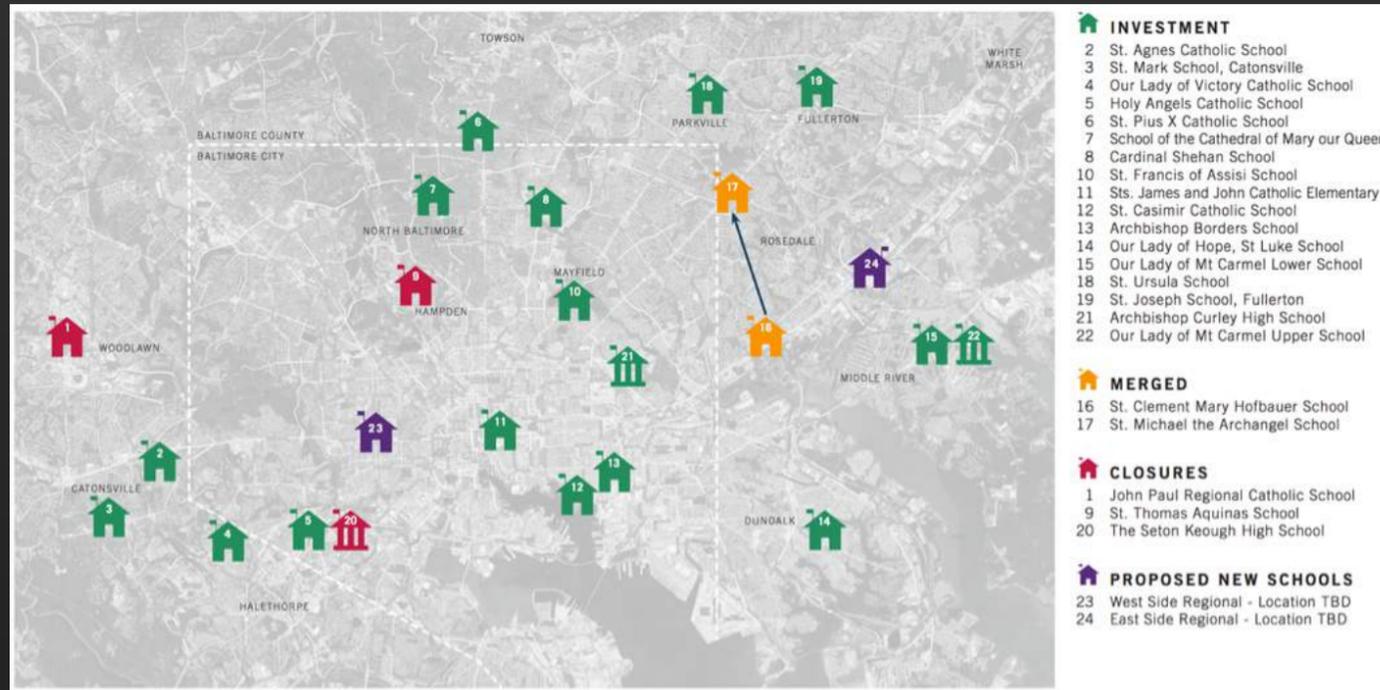
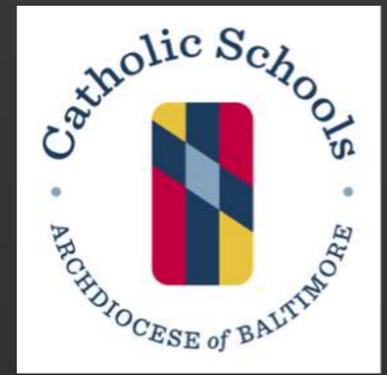
Bon Secours Breaks Ground on Four-Story Apartment Complex, "Bon Secours Gibbons Apartments"

<http://Gibbons.WhatsTheDatastory.com>

CASE STUDY - 2016

STRATEGIC FACILITIES PLAN

ARCHDIOCESE OF BALTIMORE SCHOOLS



ARCHDIOCESAN EDUCATIONAL PLAN AT A GLANCE

INVESTMENTS

- \$18.5 million for deferred maintenance and infrastructure improvements
- \$67.5 million for renovations and additions in support of academic outcomes
- \$31 million (aspirational) for two new pre-K-8 schools on the east and west sides of Baltimore metropolitan area

MERGER

- St. Mary Clement Hofbauer in Rosedale will merge with St. Michael the Archangel in Overlea

CLOSURES

- St. Thomas Aquinas School, Hampden
- John Paul Regional Catholic School, Woodlawn
- The Seton Keough High School, Baltimore

AYERS
SAINT
GROSS

Datastory
consulting

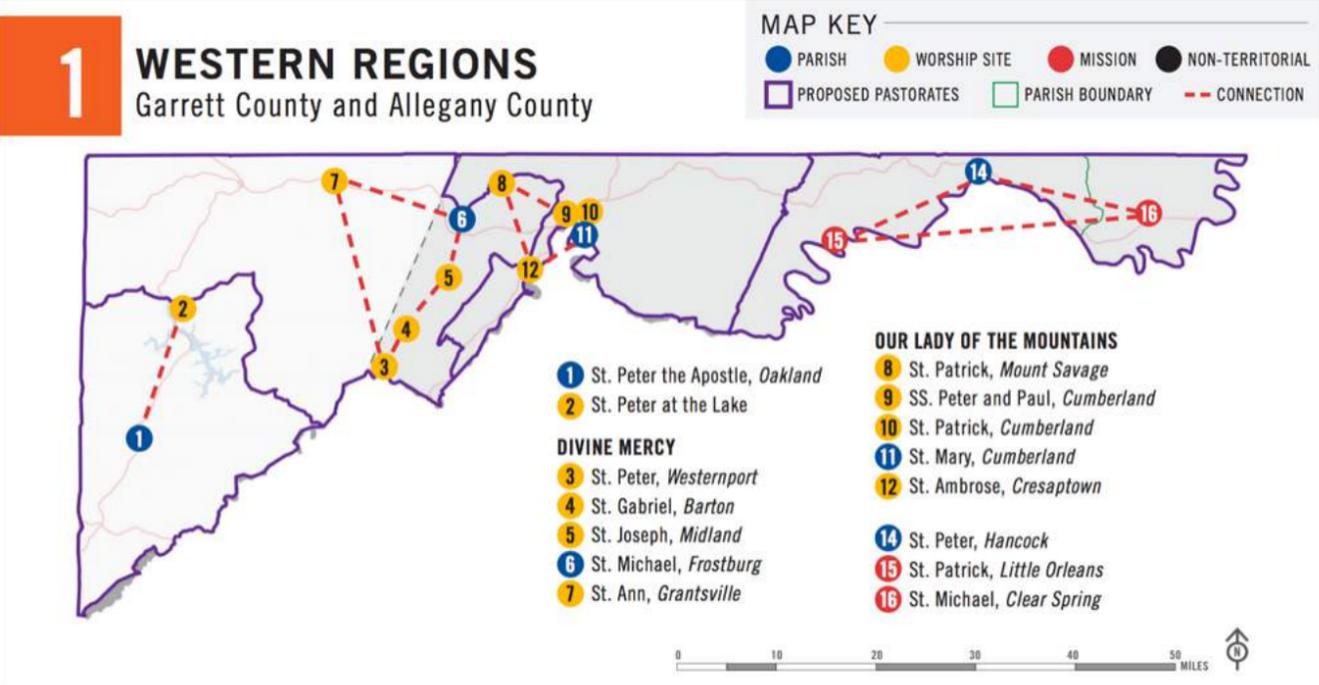


<http://AOBSchools.WhatsTheDatastory.com>

Source: Archdiocese of Baltimore

CASE STUDY - 2017 PASTORATE PLAN ARCHDIOCESE OF BALTIMORE

Example Map from Draft Plan



THE ARCHDIOCESE of BALTIMORE

Be Missionary Disciples

ARCHDIOCESAN PASTORAL PLAN

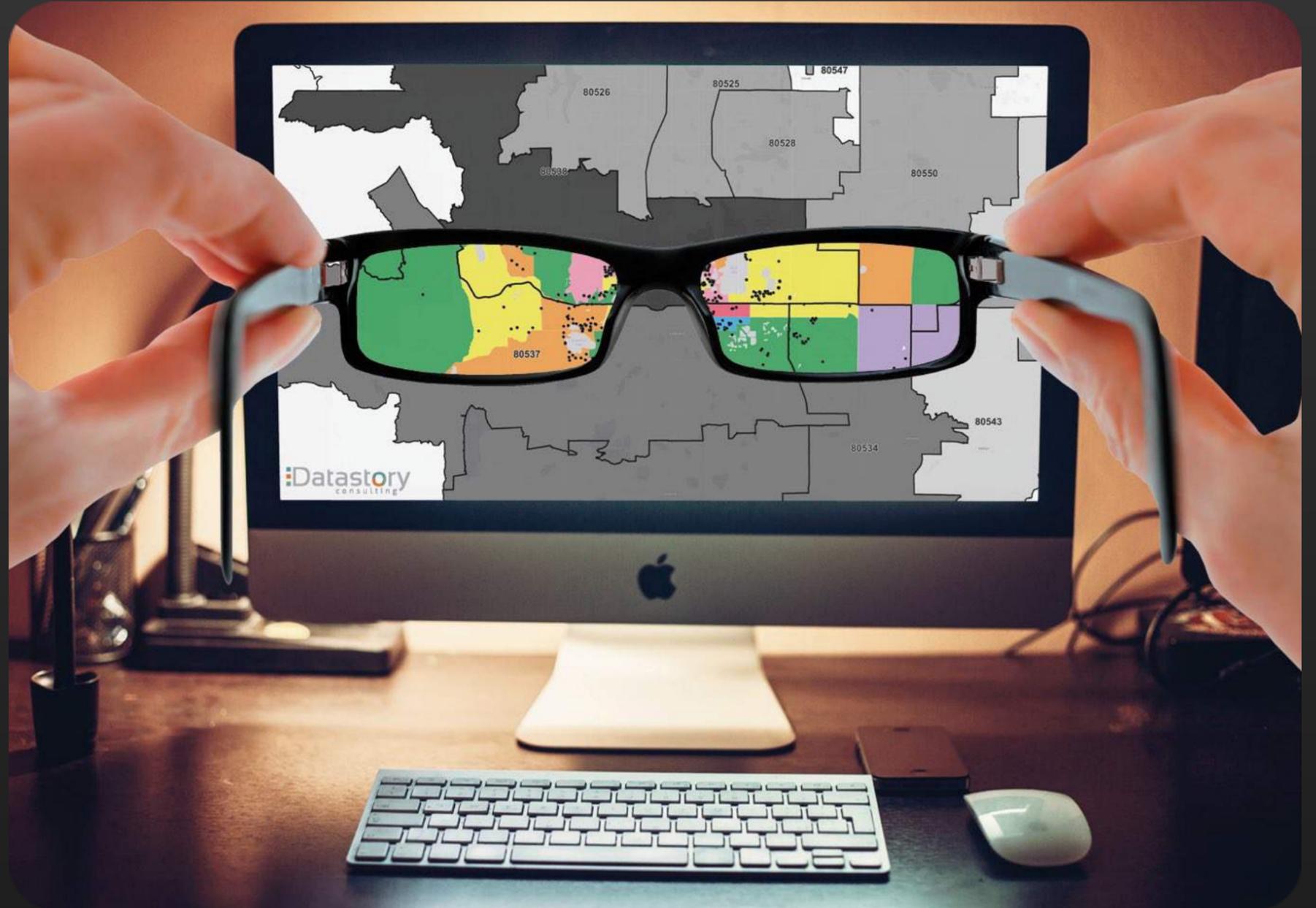
ARCHBALT.ORG BEMISSIONARYDISCIPLES.ORG



Maps Cure Your
Analytic Blindspot

RECIPE FOR SUCCESS

1. Get your data onto a map.
2. Put your data into context.
3. Interrogate your data.
4. Share insights.



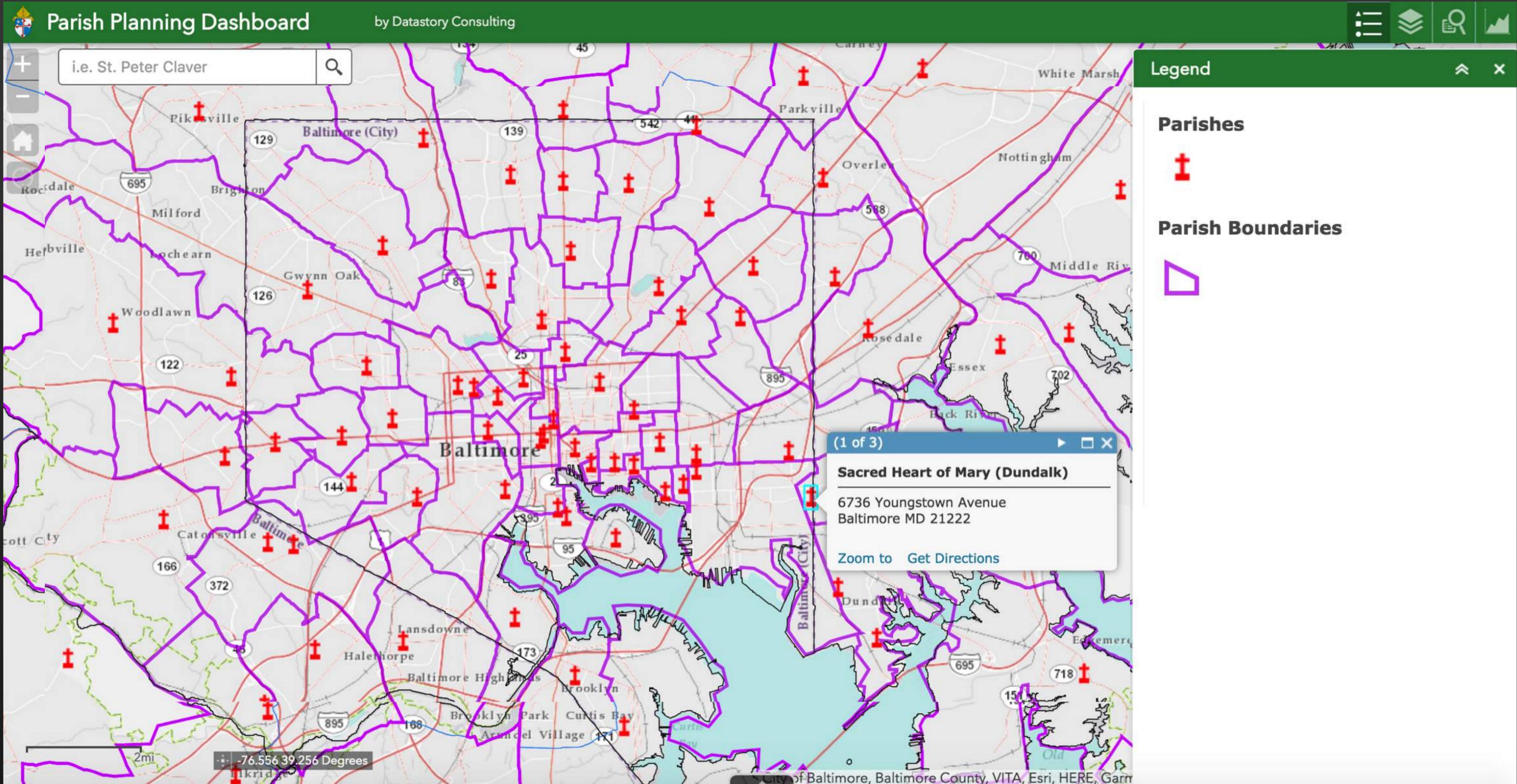
RECIPE FOR SUCCESS

Step 1:
Get your data onto a map.



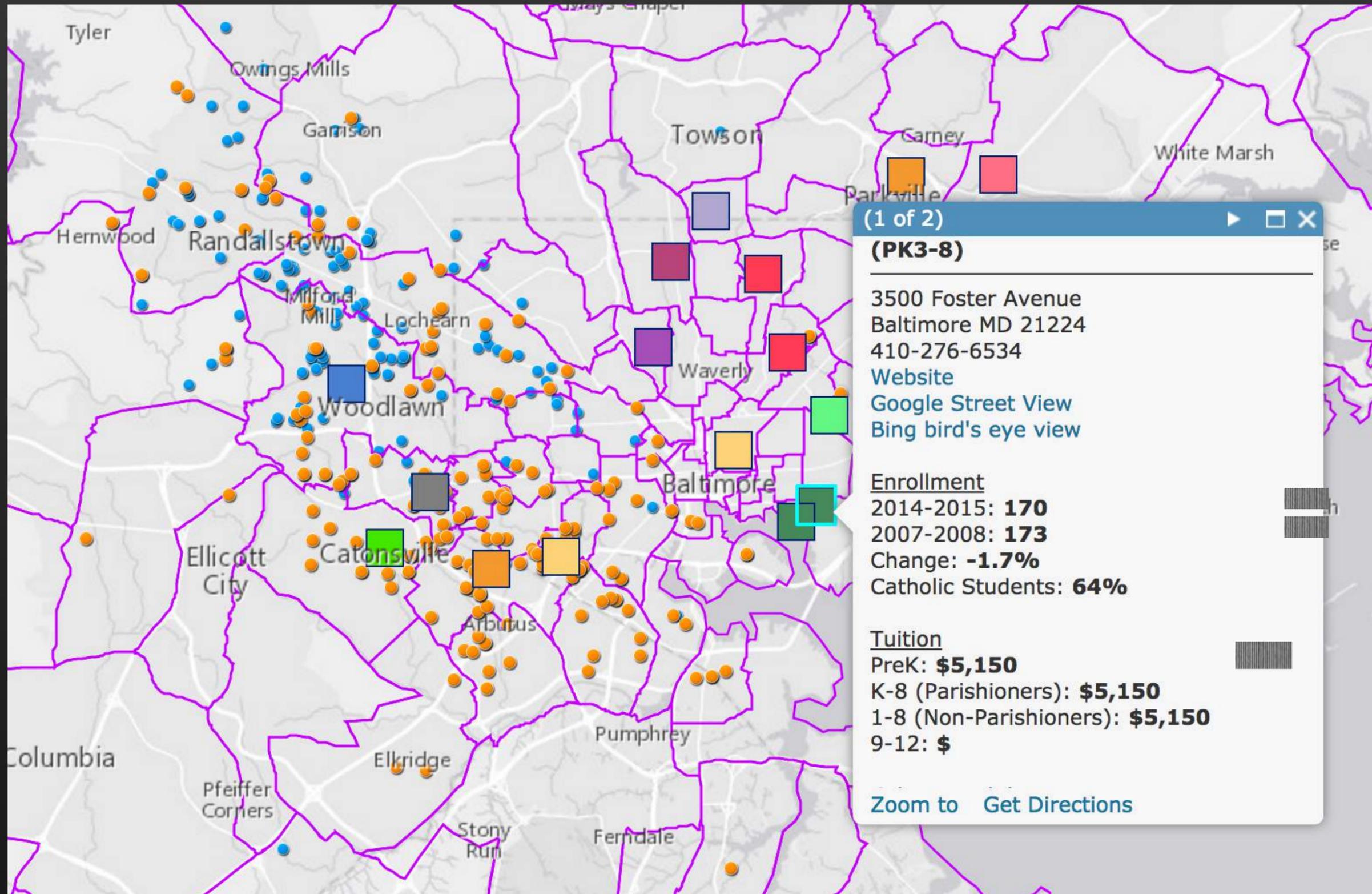
"Where are my parishes?"

Step 1:
Get your data onto a map.



“Where are my schools & students?”

Step 1:
Get your data onto a map.



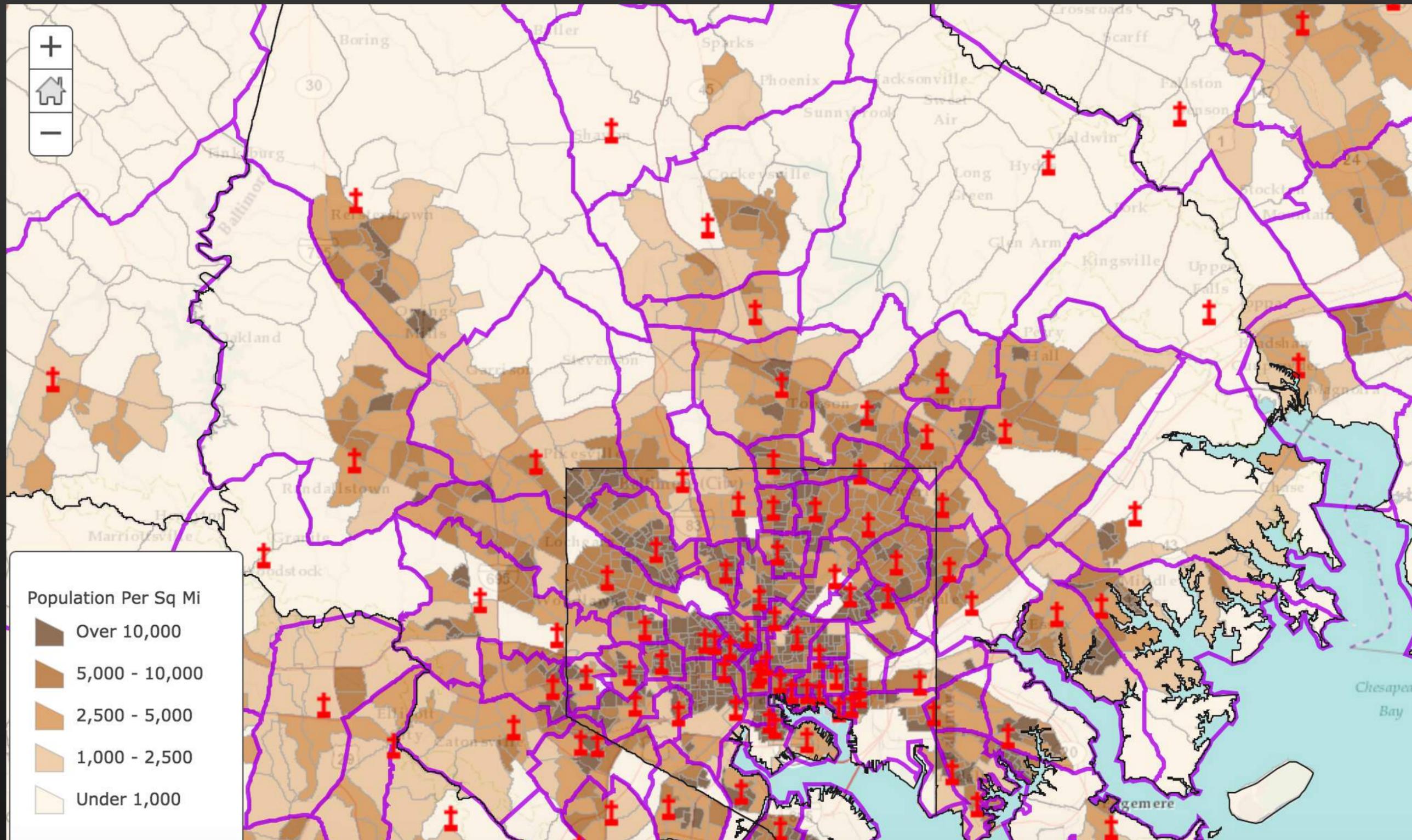
RECIPE FOR SUCCESS

Step 2:
Put your data into context.



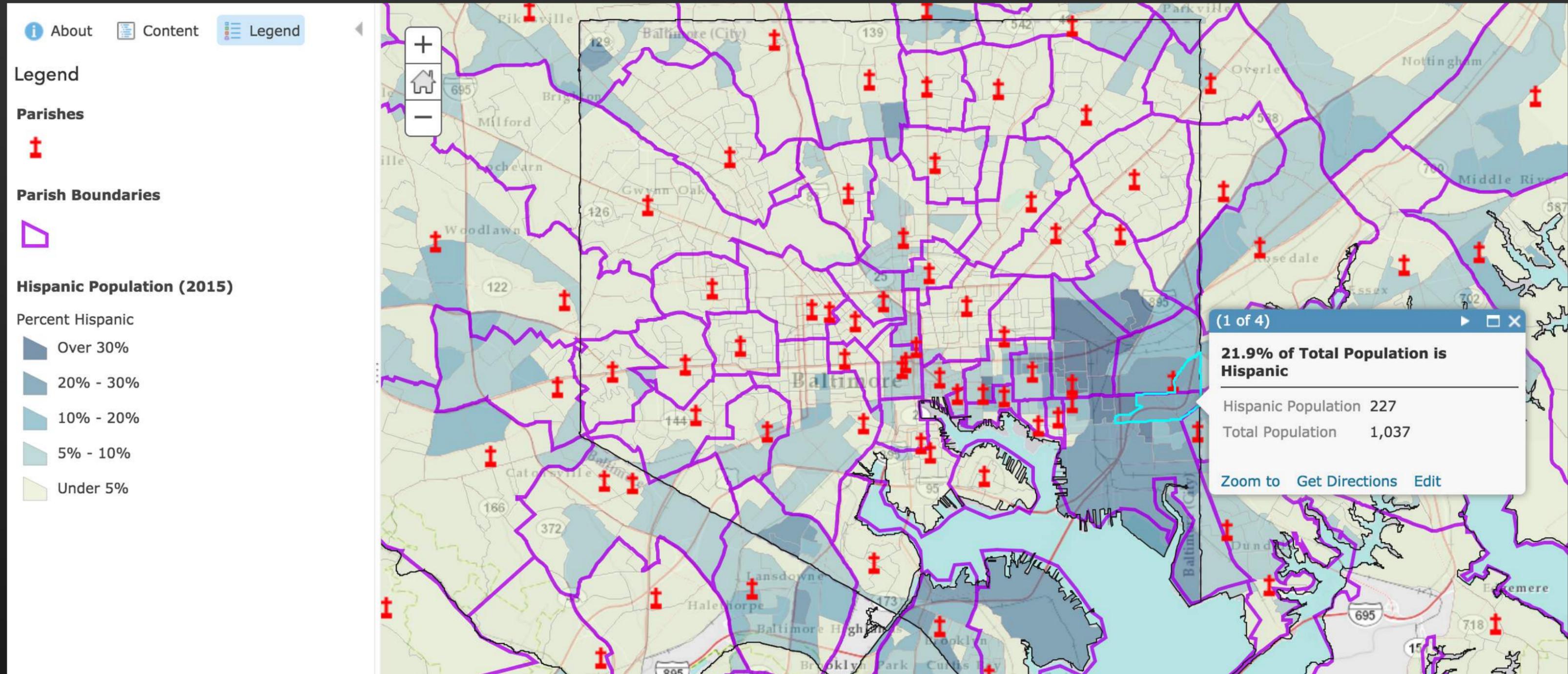
“What is the population density?”

Step 2:
Put your data into context.



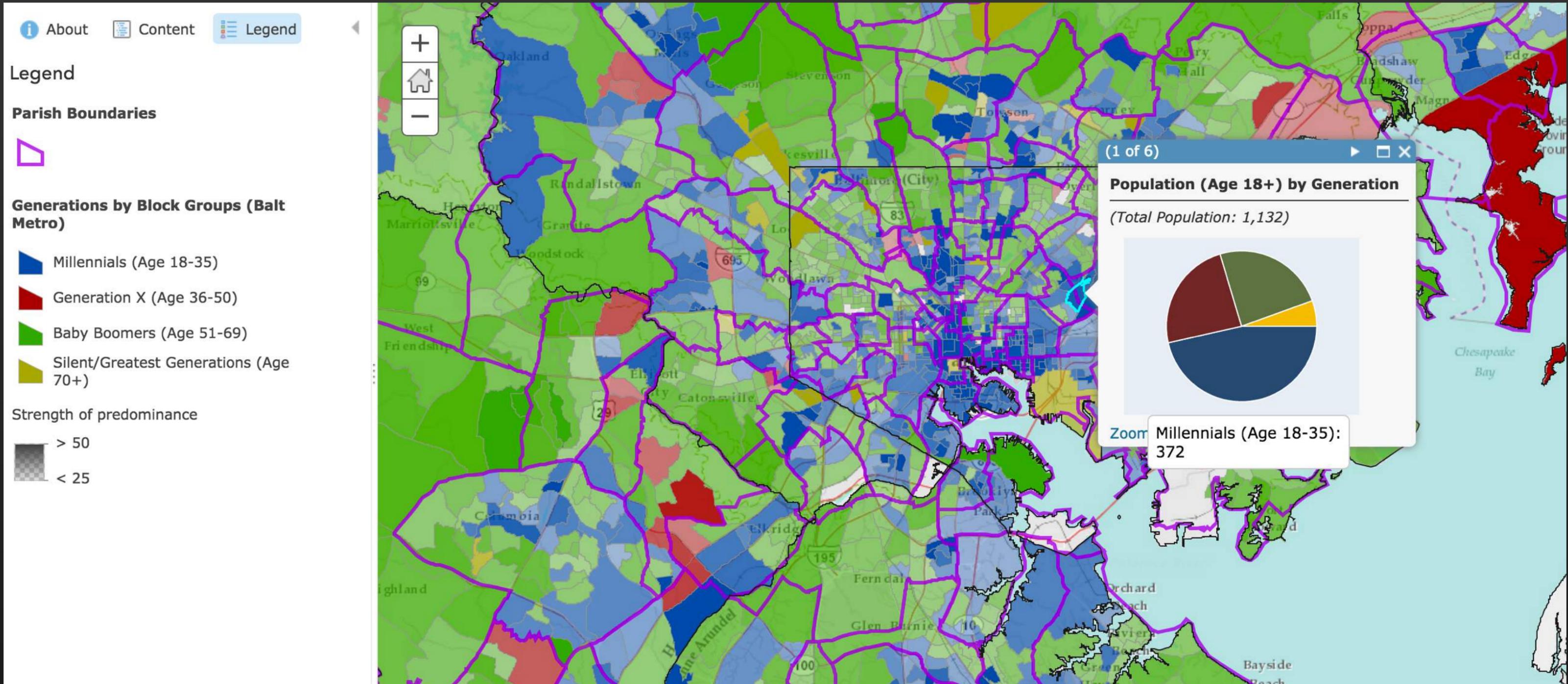
“Where are higher concentrations of Hispanic population?”

Step 2:
Put your data into context.



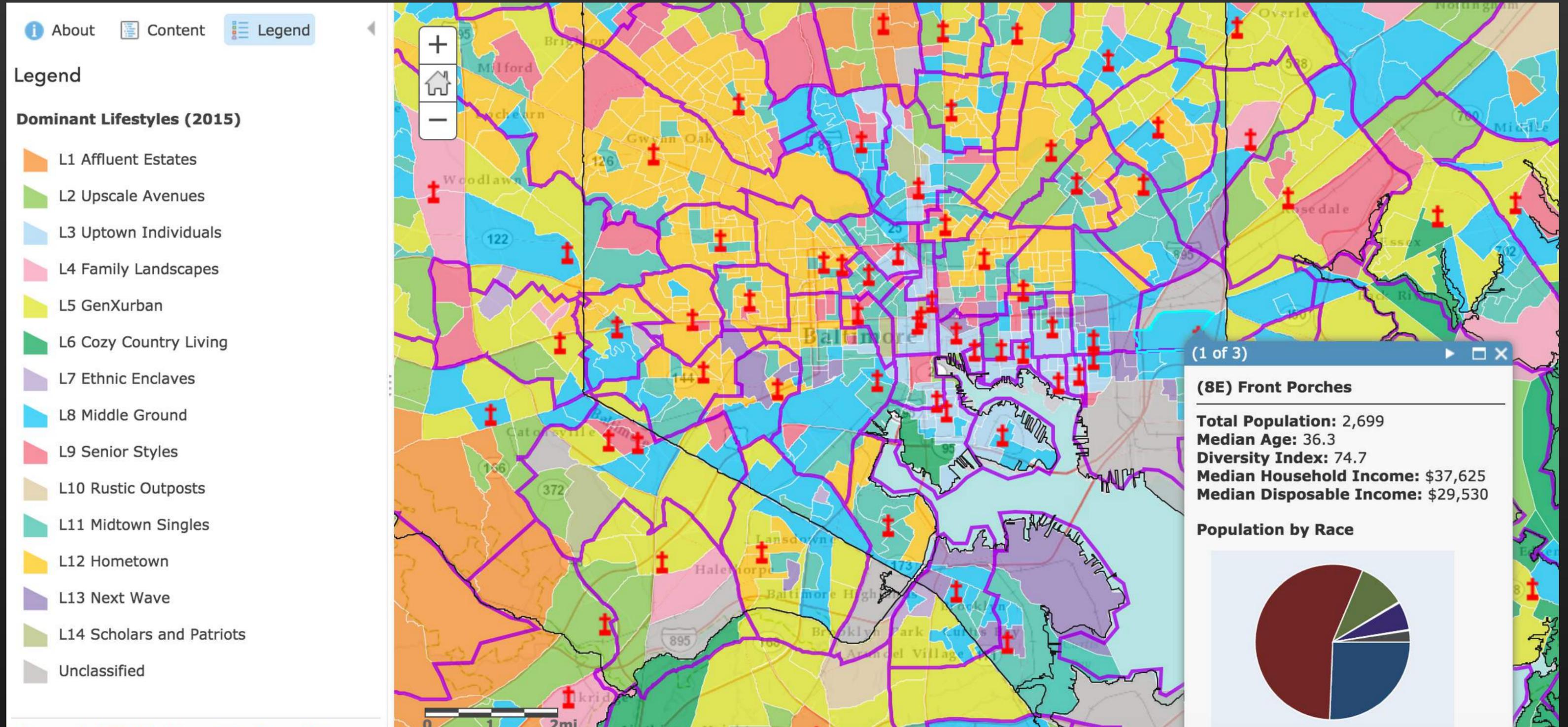
“Which generations are most represented in each parish?”

Step 2:
Put your data into context.



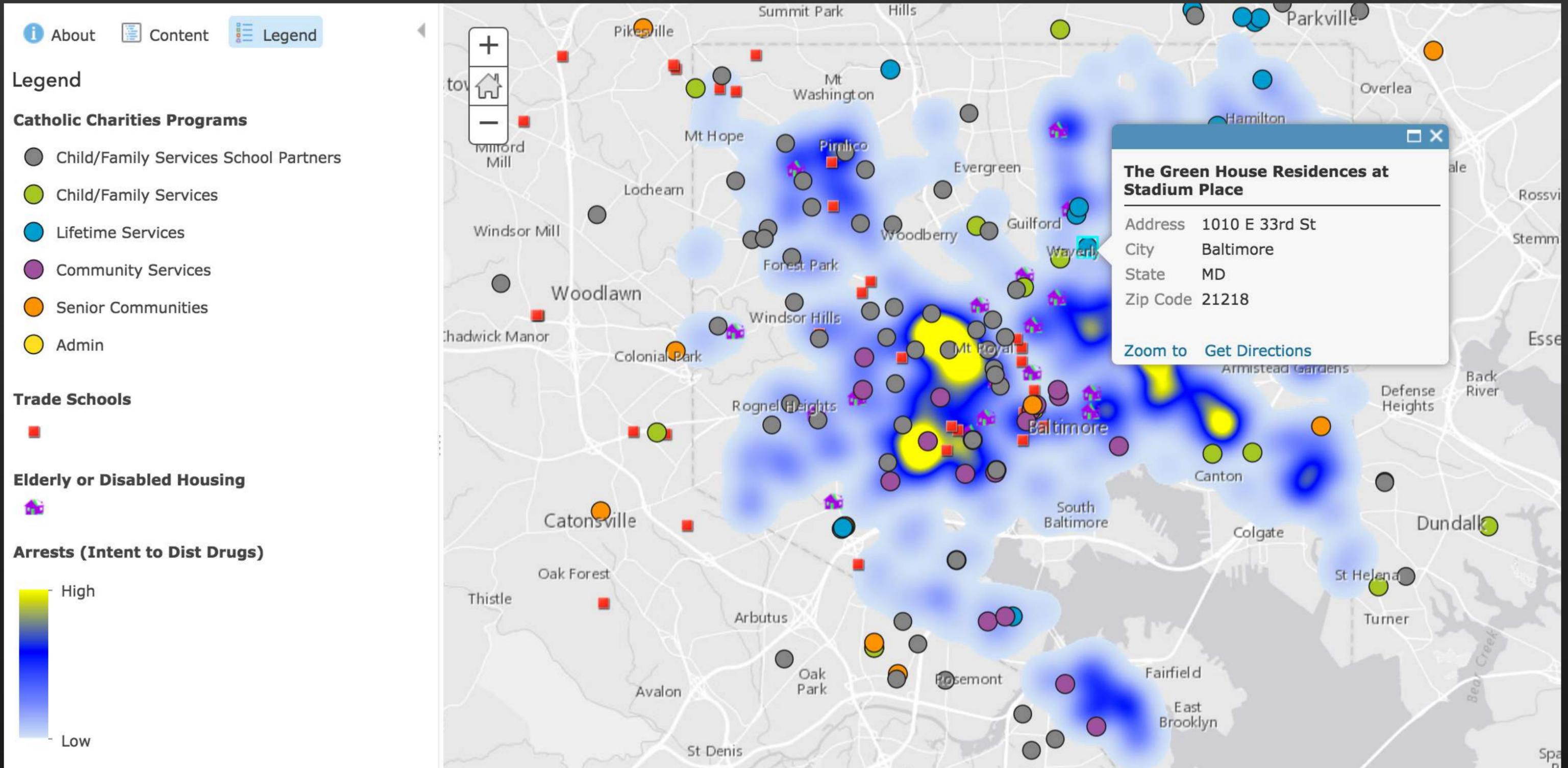
“Which lifestyles are most dominant in each parish?”

Step 2:
Put your data into context.



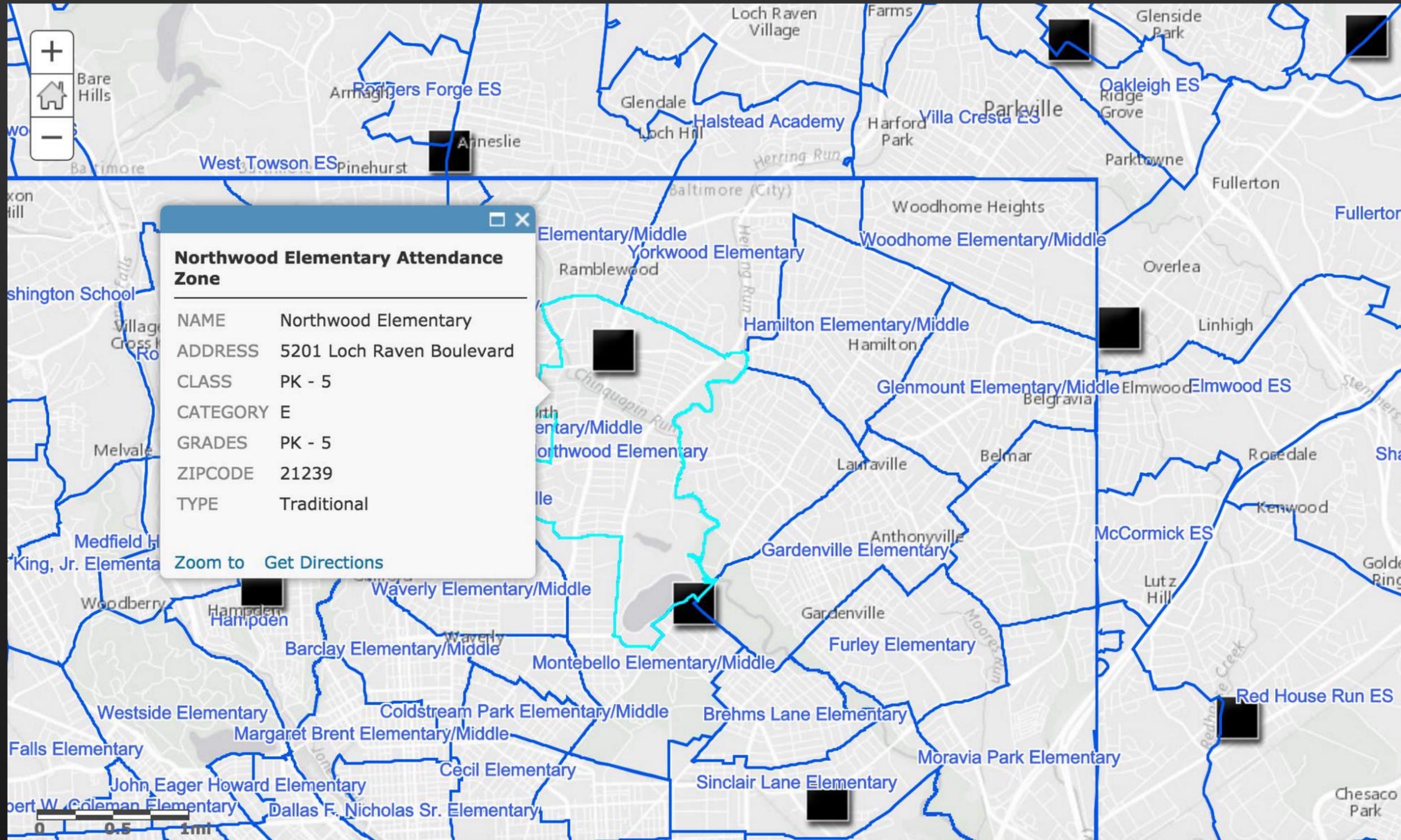
“What community services are available on the west side of town?”

Step 2:
Put your data into context.



“In which public school districts are my parish schools?”

Step 2:
Put your data into context.



Northwood Elementary Attendance Zone	
NAME	Northwood Elementary
ADDRESS	5201 Loch Raven Boulevard
CLASS	PK - 5
CATEGORY	E
GRADES	PK - 5
ZIPCODE	21239
TYPE	Traditional
Zoom to Get Directions	

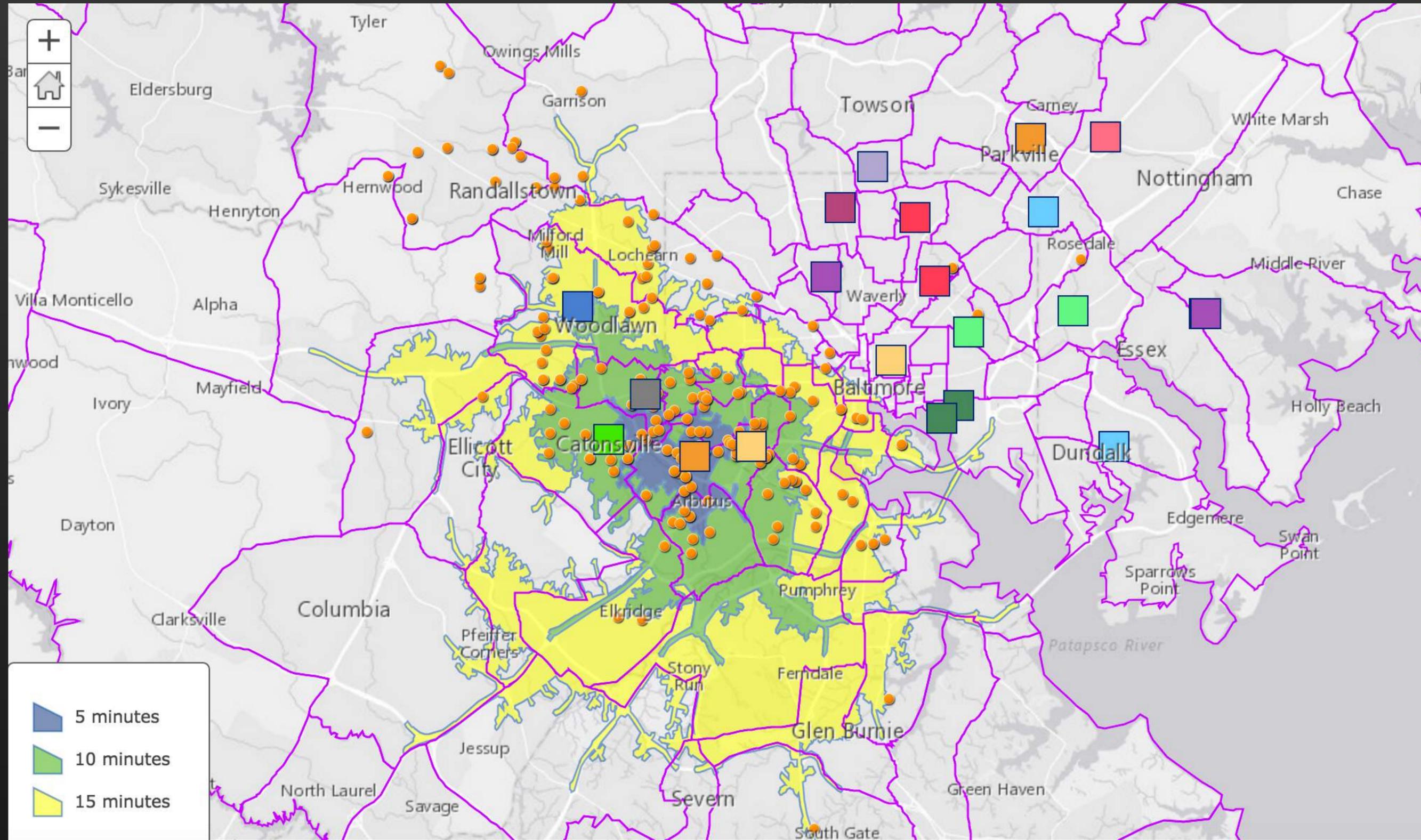
RECIPE FOR SUCCESS

Step 3: Interrogate your data.



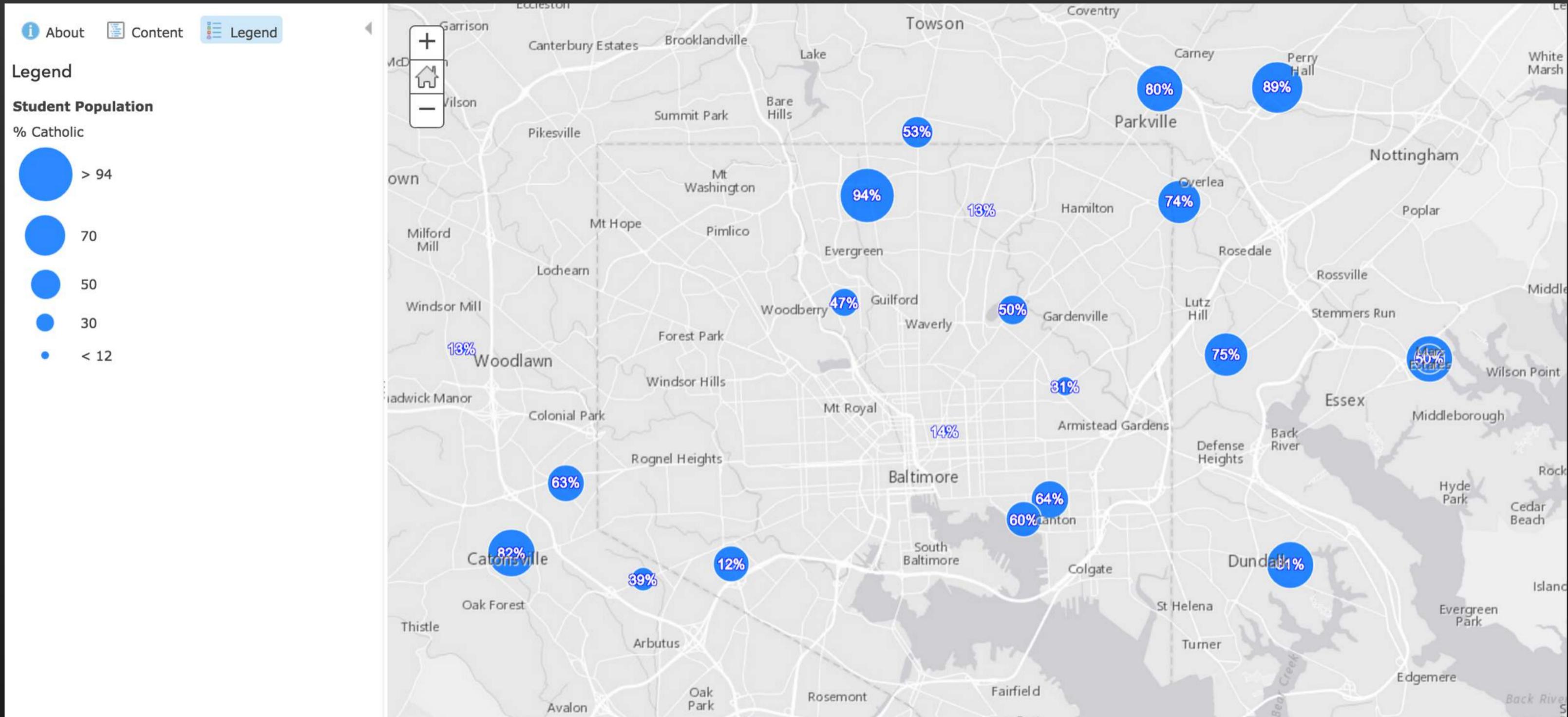
“How far are my students driving?”

Step 3:
Interrogate your data.



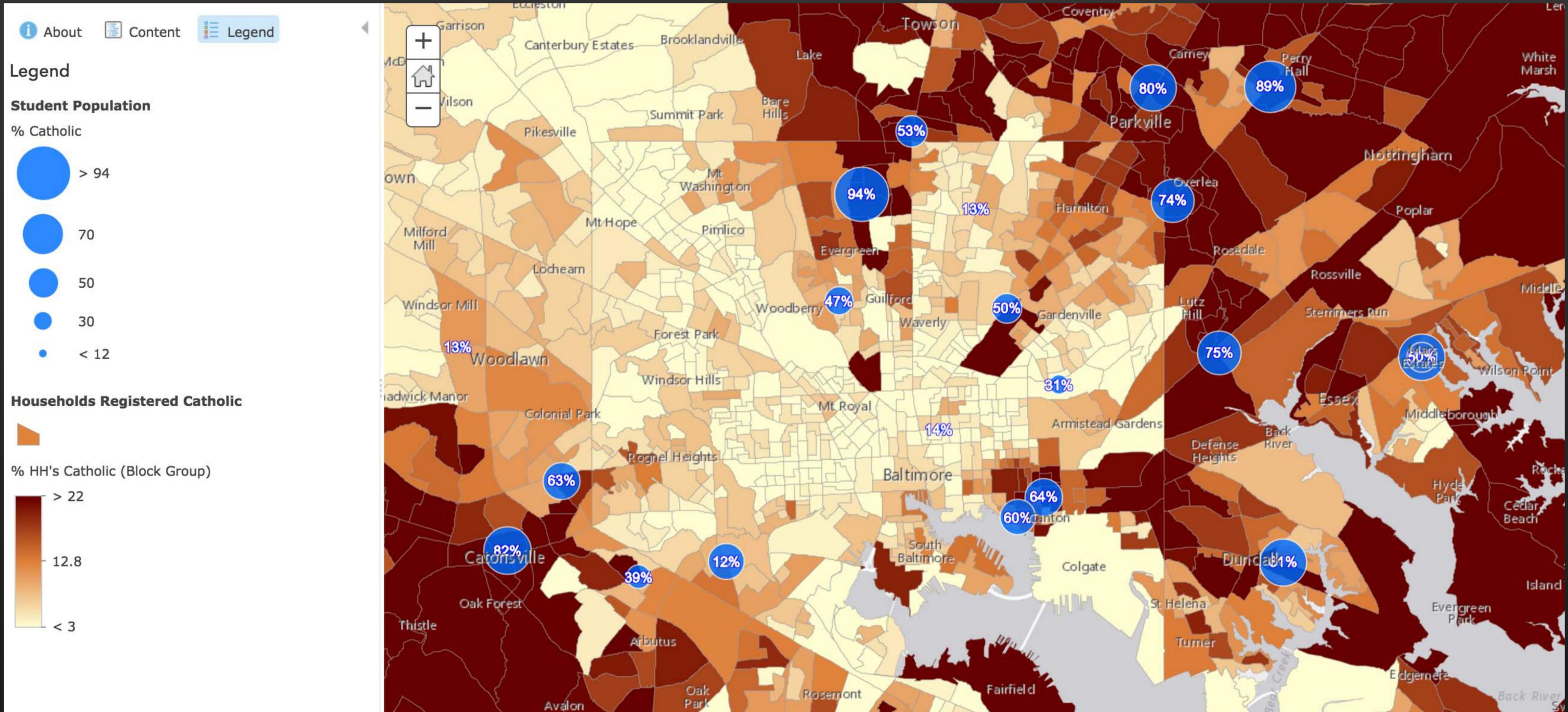
“Which schools have higher or lower percentages of Catholic students?”

Step 3:
Interrogate your data.



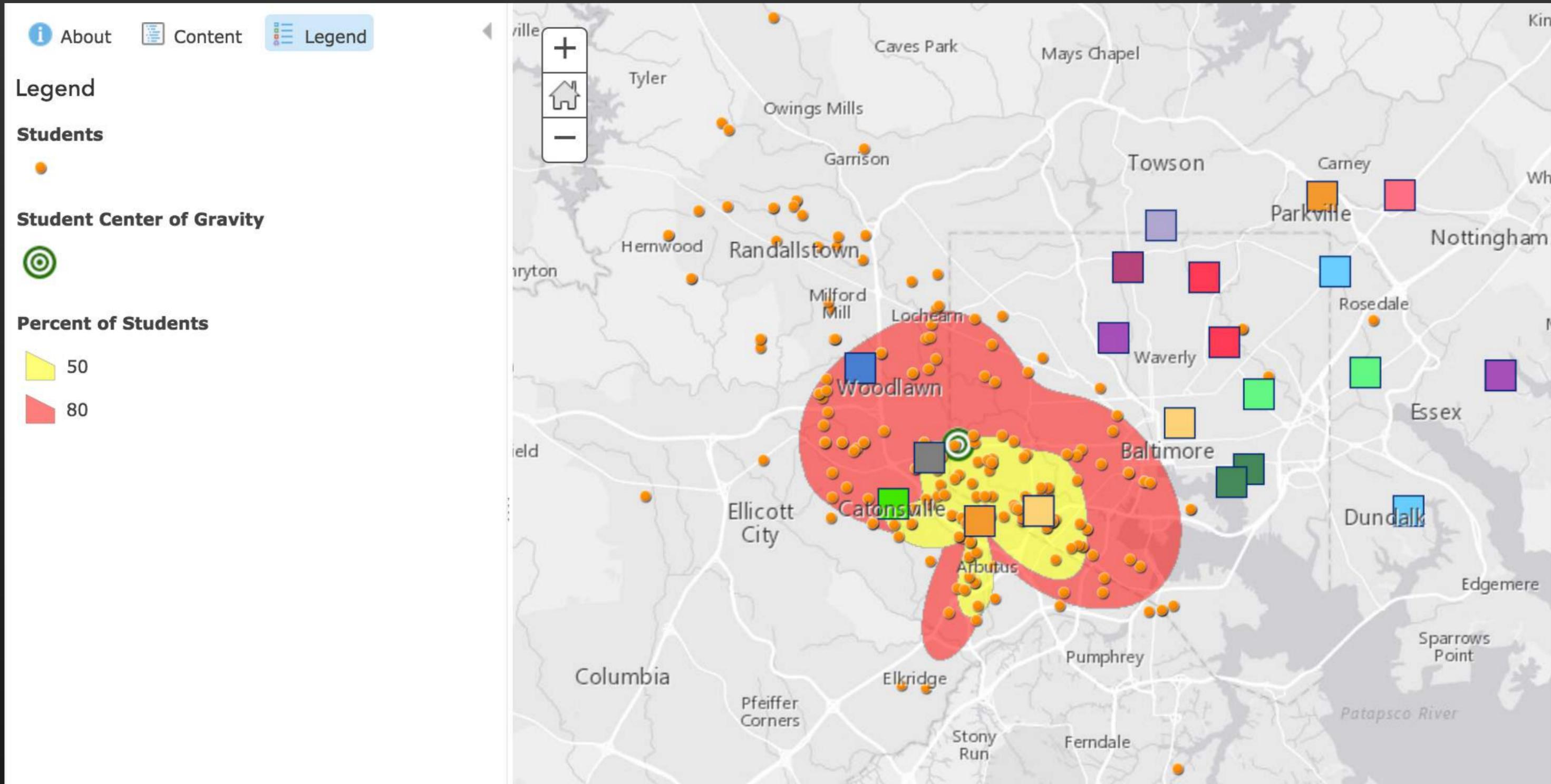
“Where are there higher proportions of Catholic families?”

Step 3:
Interrogate your data.



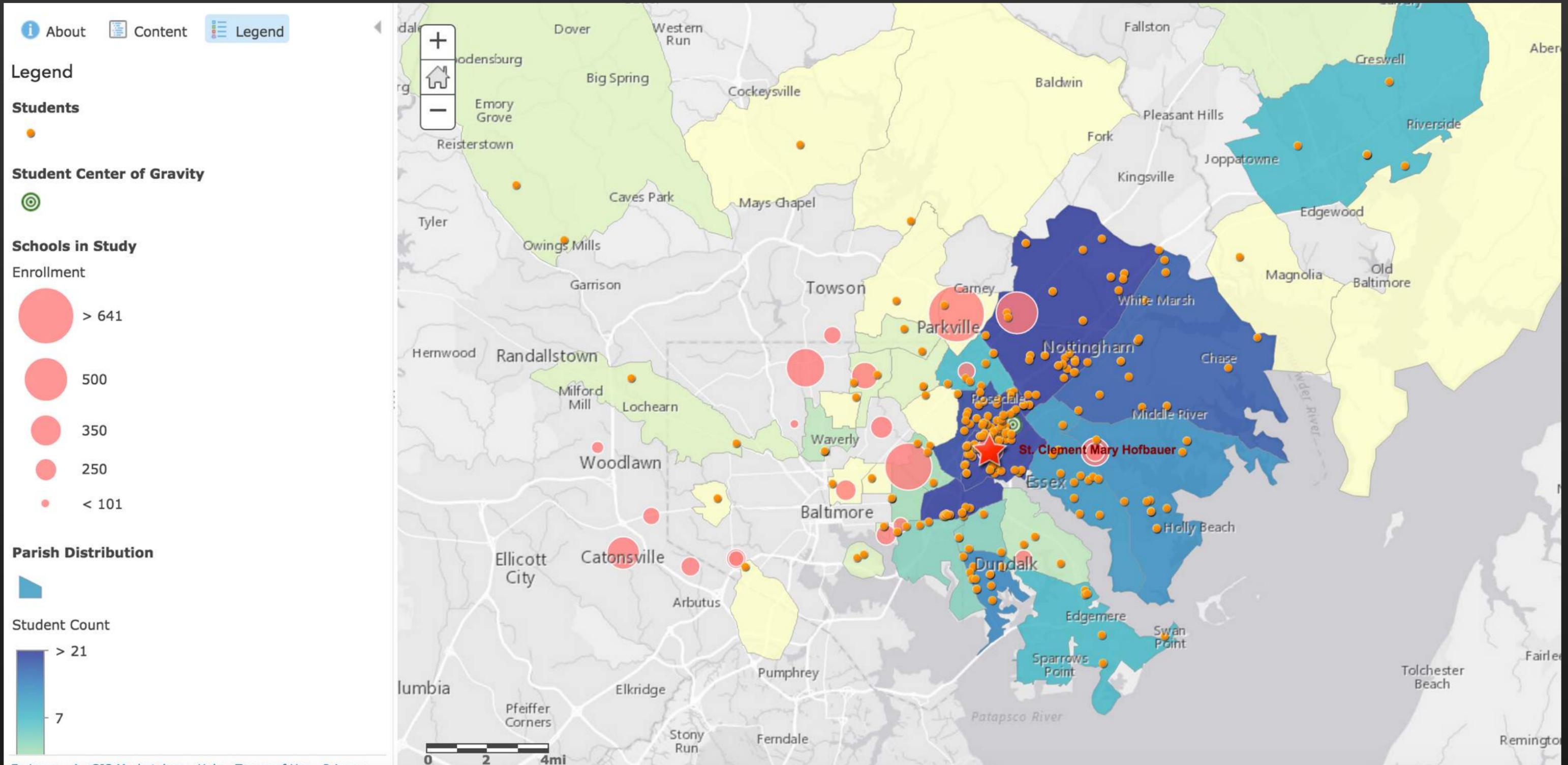
“How local / regional is our school attendance?”

Step 3:
Interrogate your data.



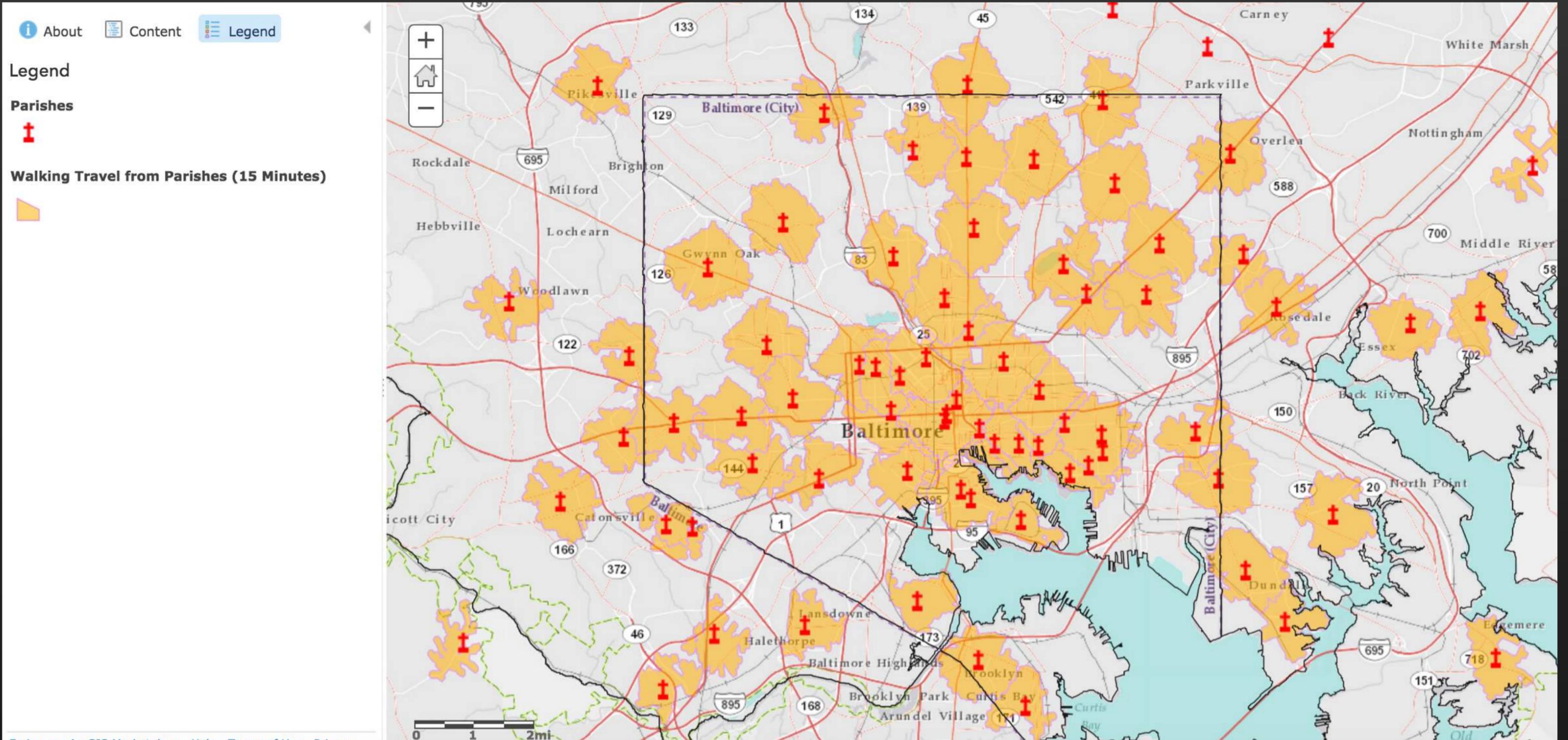
"In which parishes do most of my students live?"

Step 3:
Interrogate your data.



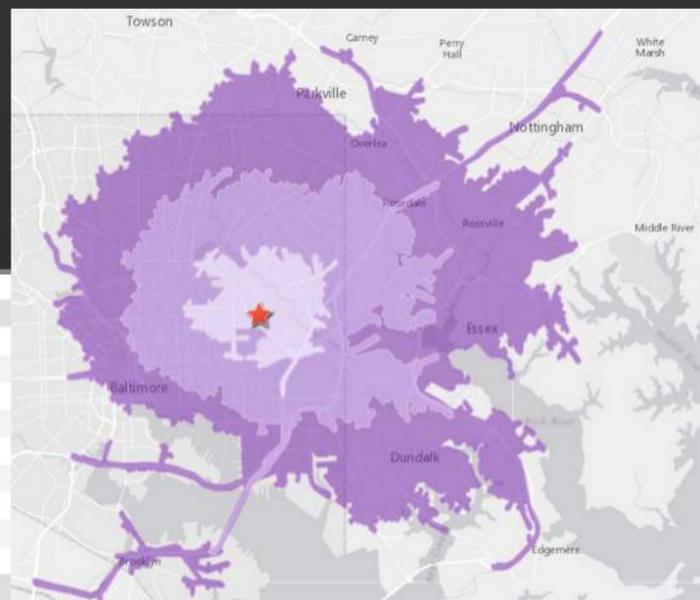
“How accessible are we to parishioners without cars?”

Step 3:
Interrogate your data.



“What are the summary statistics for all people living within 15-minutes?”

Step 3:
Interrogate your data.



3 miles

Population Summary

2000 Total Population	81,863
2010 Total Population	97,903
2016 Total Population	106,265
2016 Group Quarters	3,815
2021 Total Population	112,924
2016-2021 Annual Rate	1.22%
2016 Total Daytime Population	101,550
Workers	44,938
Residents	56,612

Household Summary

2000 Households	29,687
2000 Average Household Size	2.62
2010 Households	36,000
2010 Average Household Size	2.72
2016 Households	38,841
2016 Average Household Size	2.74
2021 Households	41,184
2021 Average Household Size	2.74
2016-2021 Annual Rate	0.58%
2010 Families	26,000
2010 Average Family Size	2.73
2016 Families	28,000
2016 Average Family Size	2.73
2021 Families	29,000
2021 Average Family Size	2.73
2016-2021 Annual Rate	0.37%

2016 Population 25+ by Educational Attainment

Total	84,017
Less than 9th Grade	0.4%
9th - 12th Grade, No Diploma	8.0%
High School Graduate	21.6%
GED/Alternative Credential	4.8%
Some College, No Degree	23.3%
Associate Degree	8.3%
Bachelor's Degree	16.3%
Graduate/Professional Degree	9.2%

2016 Population 15+ by Marital Status

Total	84,017
Never Married	36.6%
Married	46.6%
Widowed	4.6%
Divorced	12.1%

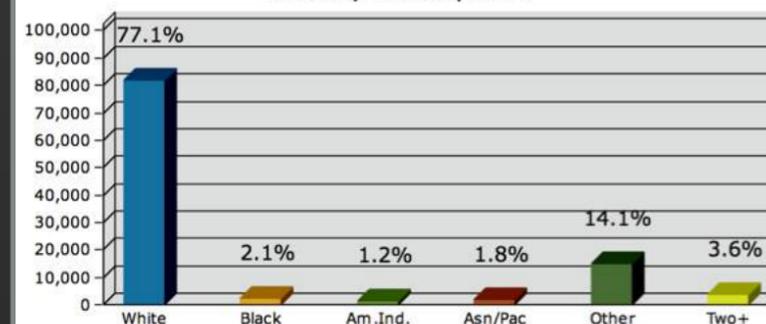
2016 Civilian Population 16+ in Labor Force

Civilian Employed	95.8%
Civilian Unemployed	4.2%

2016 Employed Population 16+ by Industry

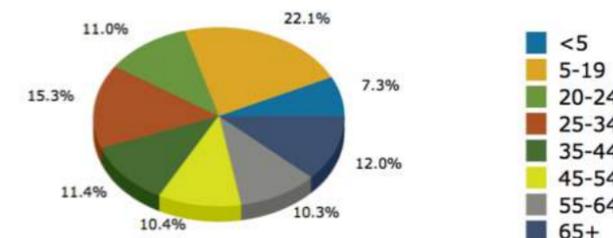
Total	50,696
Agriculture/Mining	4.2%
Construction	8.5%
Manufacturing	8.7%
Wholesale Trade	2.8%
Retail Trade	12.3%
Transportation/Utilities	3.9%
Information	1.5%
Finance/Insurance/Real Estate	5.7%
Services	49.2%
Public Administration	3.2%

2016 Population by Race

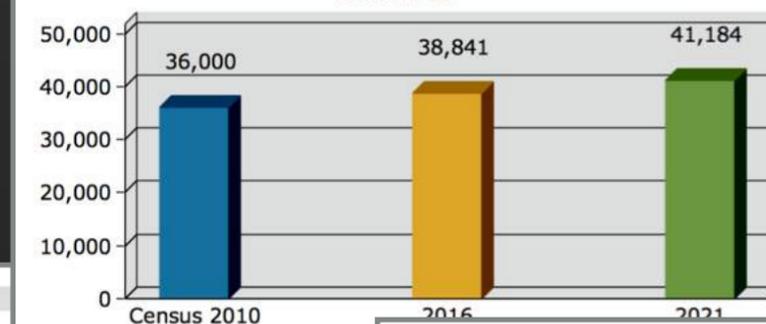


2016 Percent Hispanic Origin: 36.4%

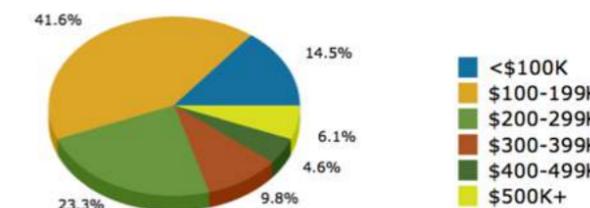
2016 Population by Age



Households



2016 Home Value

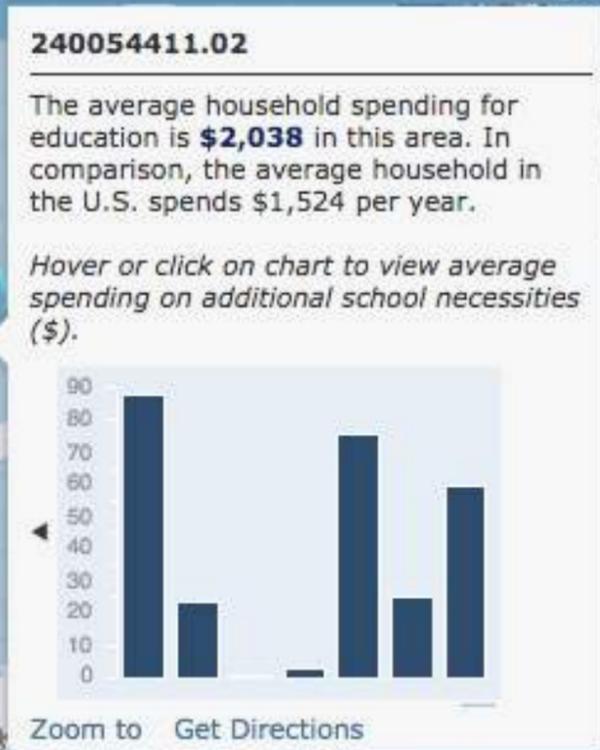
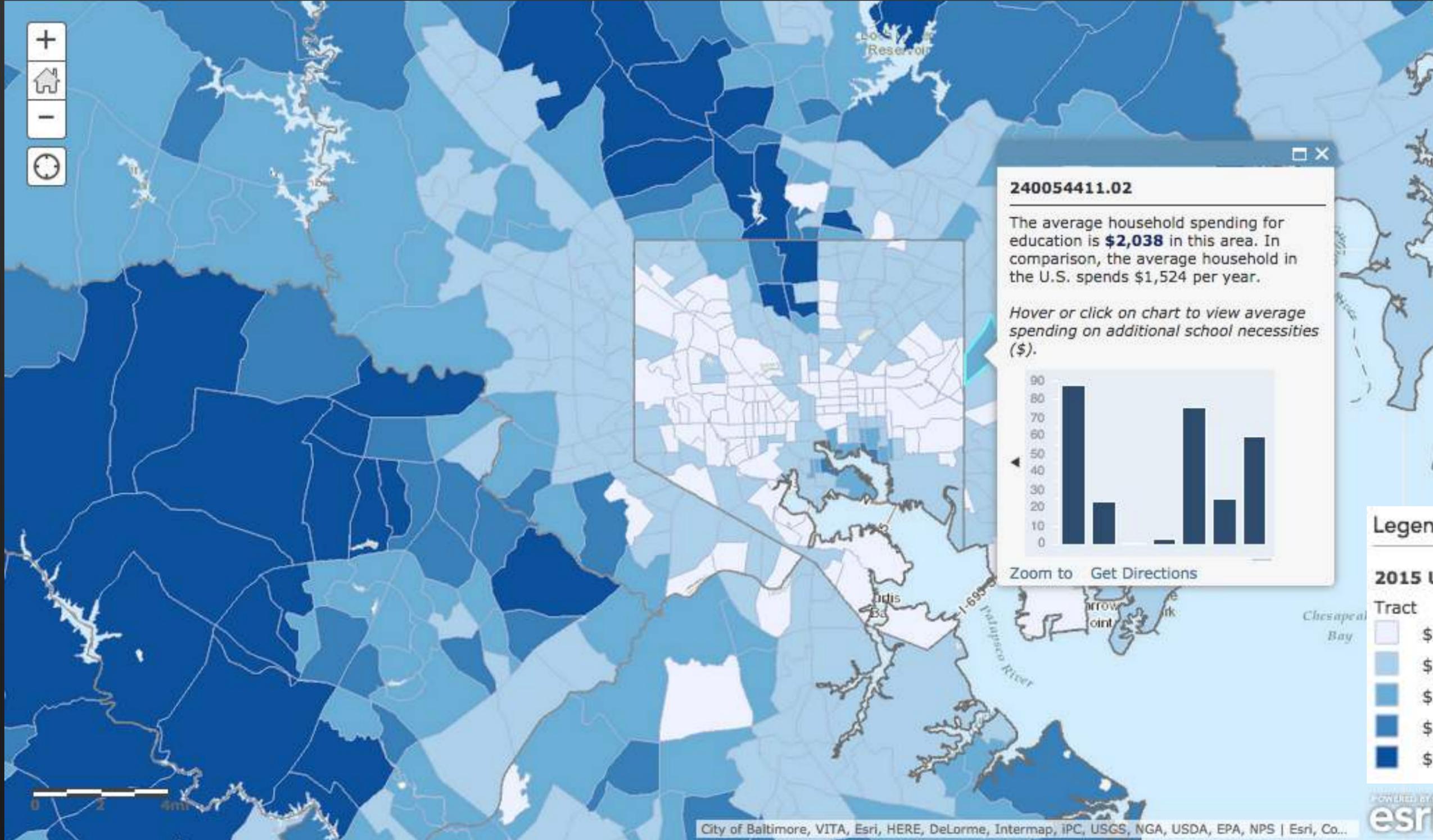


Top Twenty Tapestry Segments

Rank	Tapestry Segment	2016 Households		2016 U.S. Households		Index
		Percent	Cumulative Percent	Percent	Cumulative Percent	
1	Bright Young Professionals (8C)	7.4%	7.4%	2.2%	2.2%	332
2	Metro Fusion (11C)	6.6%	14.0%	1.4%	3.6%	467
3	Up and Coming Families (7A)	6.4%	20.4%	2.3%	5.9%	280
4	Parks and Rec (5C)	5.5%	25.9%	2.0%	7.9%	273
5	Down the Road (10D)	4.8%	30.7%	1.1%	9.0%	422
Subtotal		30.7%		9.0%		
6	Front Porches (8E)	4.6%	35.3%	1.6%	10.6%	289
7	Soccer Moms (4A)	4.6%	39.9%	2.8%	13.4%	162
8	Old and Newcomers (8F)	4.4%	44.3%	2.3%	15.7%	190
9	Barrios Urbanos (7D)	4.3%	48.6%	1.0%	16.7%	410
10	Exurbanites (1E)	4.2%	52.8%	1.9%	18.6%	217
Subtotal		22.1%		9.6%		
11	Dorms to Diplomas (14C)	4.1%	56.9%	0.5%	19.1%	806
12	College Towns (14B)	3.8%	60.7%	0.9%	20.0%	403
13	Middleburg (4C)	3.6%	64.3%	2.8%	22.8%	127
14	Green Acres (6A)	3.5%	67.8%	3.2%	26.0%	109
15	Rustbelt Traditions (5D)	3.5%	71.3%	2.2%	28.2%	156
Subtotal		18.5%		9.6%		
16	Social Security Set (9F)	3.5%	74.8%	0.8%	29.0%	430
17	In Style (5B)	3.3%	78.1%	2.3%	31.3%	147
18	Set to Impress (11D)	2.9%	81.0%	1.4%	32.7%	205
19	American Dreamers (7C)	2.6%	83.6%	1.5%	34.2%	175
20	NeWest Residents (13C)	2.6%	86.2%	0.8%	35.0%	332
Subtotal		14.9%		6.8%		
Total		86.0%		35.2%		244

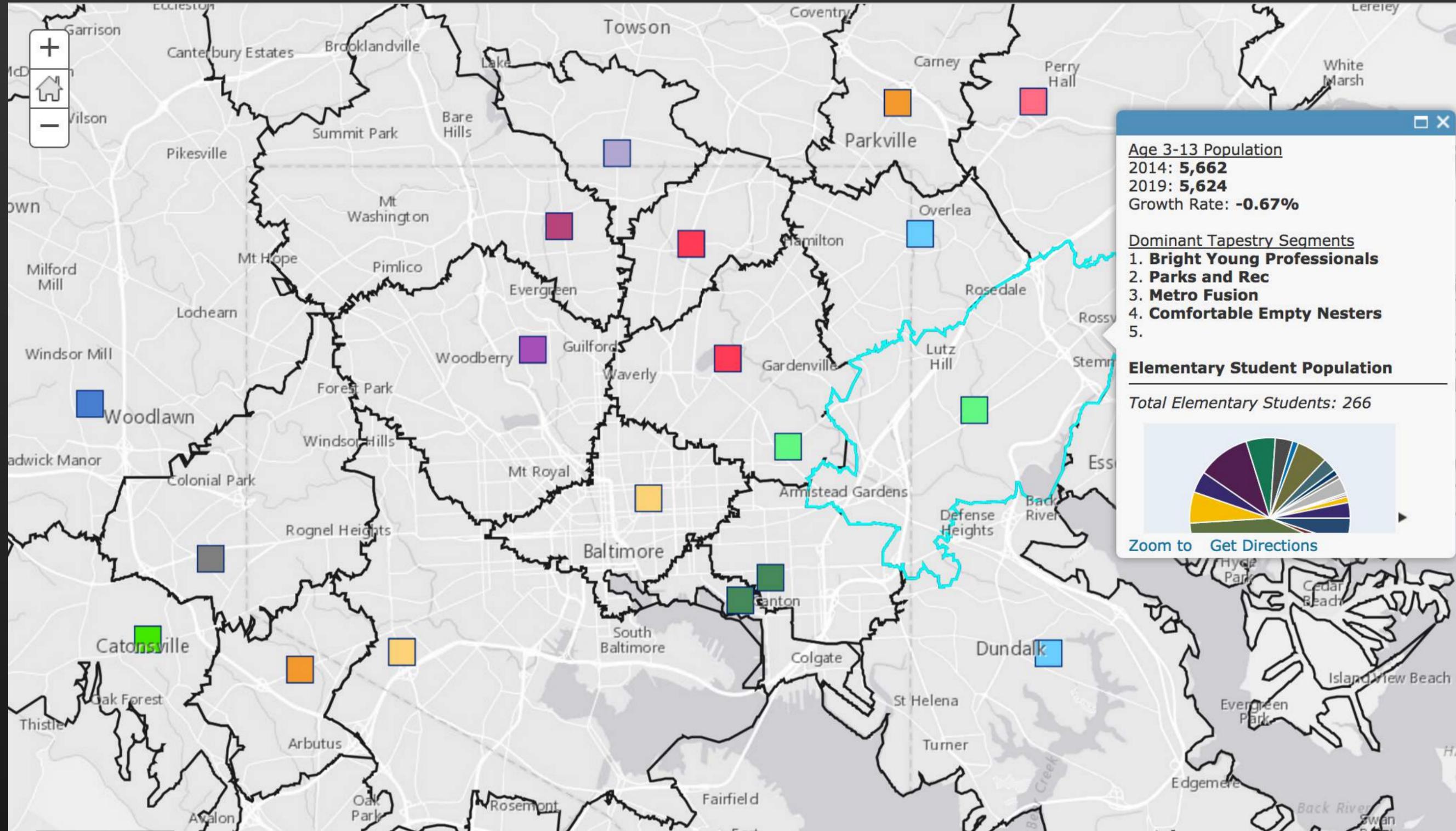
“Which neighborhoods are likely to spend more money on school tuition?”

Step 3:
Interrogate your data.



“What are the statistics on all people living closer to this parish than any other?”

Step 3:
Interrogate your data.



"Based on the dominant lifestyles in my parish, what is the best way to serve this community?"

Step 3: Interrogate your data.



LifeMode Group: Middle Ground Bright Young Professionals

Households: 2,613,000
Average Household Size: 2.40
Median Age: 32.2
Median Household Income: \$50,000

WHO ARE WE?

Bright Young Professionals is a large market, primarily located in urban outskirts of large metropolitan areas. These communities are home to young, educated, working professionals. One out of three householders is under the age of 35. Slightly more diverse couples dominate this market, with more renters than homeowners. More than two-fifths of the households live in single-family homes; over a third live in 5+ unit buildings. Labor force participation is high, generally white-collar work, with a mix of food service and part-time jobs (among the college students). Median household income, median home value, and average rent are close to the US values. Residents of this segment are physically active and up on the latest technology.

OUR NEIGHBORHOOD

- Approximately 56% of the households rent; 44% own their homes.
- Household type is primarily couples, married (or unmarried), with above average concentrations of both single-parent (Index 125) and single-person (Index 115) households.
- Multiunit buildings or row housing make up 55% of the housing stock (row housing (Index 182), buildings with 5-19 units (Index 277)); 44% built 1980-99.
- Average rent is slightly higher than the US (Index 102).
- Lower vacancy rate is at 8.9%.

SOCIOECONOMIC

- Education completed: 3 college or an associate's a bachelor's degree or higher in progress is 10% (Index 102).
- Unemployment rate is 1% and labor force participation is higher than the US rate.
- These consumers are up on latest technology.
- They get most of their information from the Internet.
- Concern about the environment impacts their purchasing decisions.

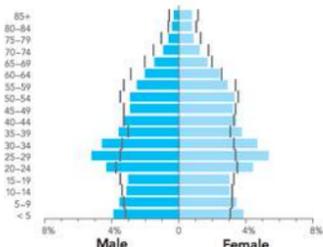


Note: The index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by CIR MR.

8C LifeMode Group: Middle Ground Bright Young Professionals

AGE BY SEX

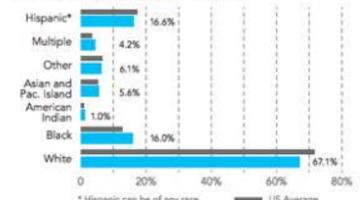
Median Age: 32.2 US: 37.6



RACE AND ETHNICITY

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 65.4 US: 62.1



INCOME AND NET WORTH

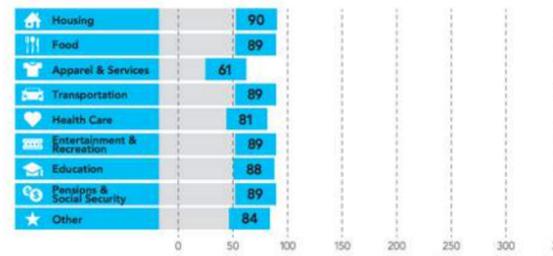
Net worth measures total household investments, etc.) less any credit card or unsecured (credit card) net worth are estimated by Esri.

Median Household Income: \$50,000 US Median \$51,000



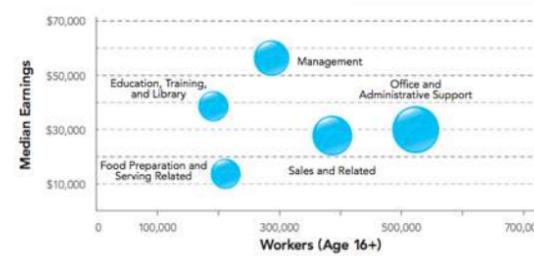
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers by median earnings. Data from the Census Bureau's American Community Survey.



8C LifeMode Group: Middle Ground Bright Young Professionals



MARKET PROFILE

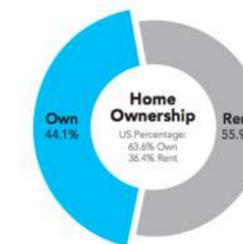
- Own US savings bonds.
- Own newer computers (desktop, laptop, or both), iPods, and 2+ TVs.
- Go online to do banking, access YouTube or Facebook, visit blogs, and play games.
- Use cell phones to text, redeem mobile coupons, listen to music, and check for news and financial information.
- Find leisure going to bars/clubs, attending concerts, going to the zoo, and renting DVDs from Redbox or Netflix.
- Read sports magazines and participate in a variety of sports, including backpacking, basketball, football, bowling, Pilates, weight lifting, and yoga.
- Eat out often at fast-food and family restaurants.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

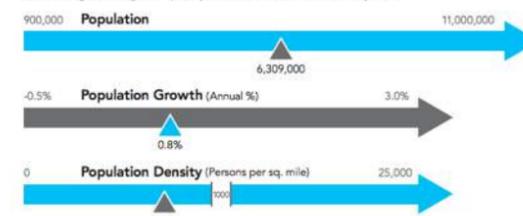


Typical Housing: Single Family; Multiunits
Average Rent: \$1,000 US Average: \$990



POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



RECIPE FOR SUCCESS

Step 4: Share insights.



“Here’s a glimpse into the future of the east side of Baltimore.”

Step 4:
Share insights.



An interactive map journal



Archdiocese of Baltimore Schools (East Side Findings)

Economic Development and Growth

This map shows key indicators of economic activity in the Baltimore metro area. Click a theme below to change the map and zoom/click the map for more info.

Population Growth (5-year Projection)

NOTE: Areas of expected growth are shown as **green**. Expected decline is shown as **orange**. Open the legend (upper right of map) for more info.

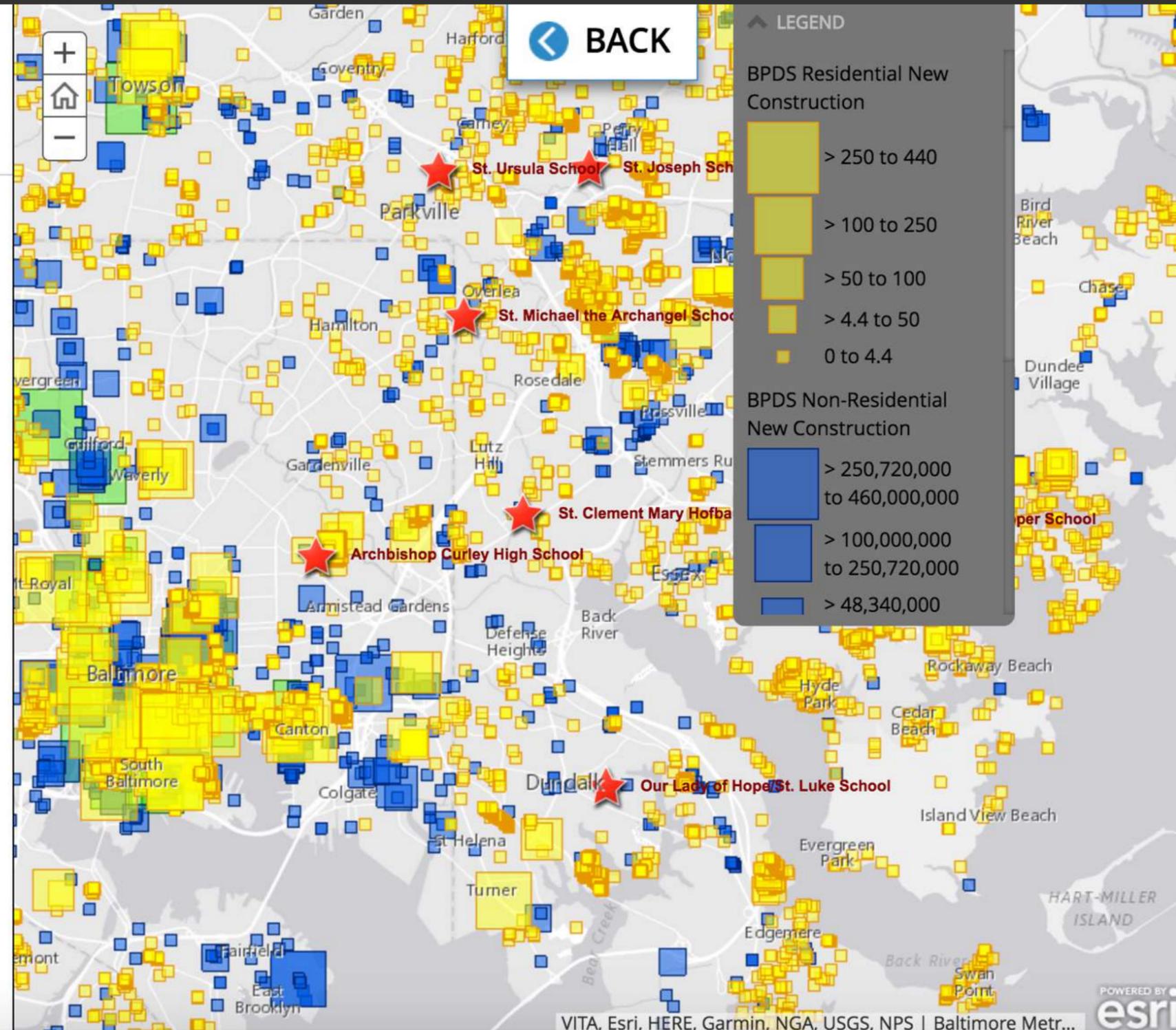
All Permits (New Construction)

NOTE: Residential is shown in **yellow**. Commercial in **blue**. Mixed use in **green**. Dots are sized by dollar value or square feet. Open the legend (upper right of map) for more info.

Development Pipeline (Significant):

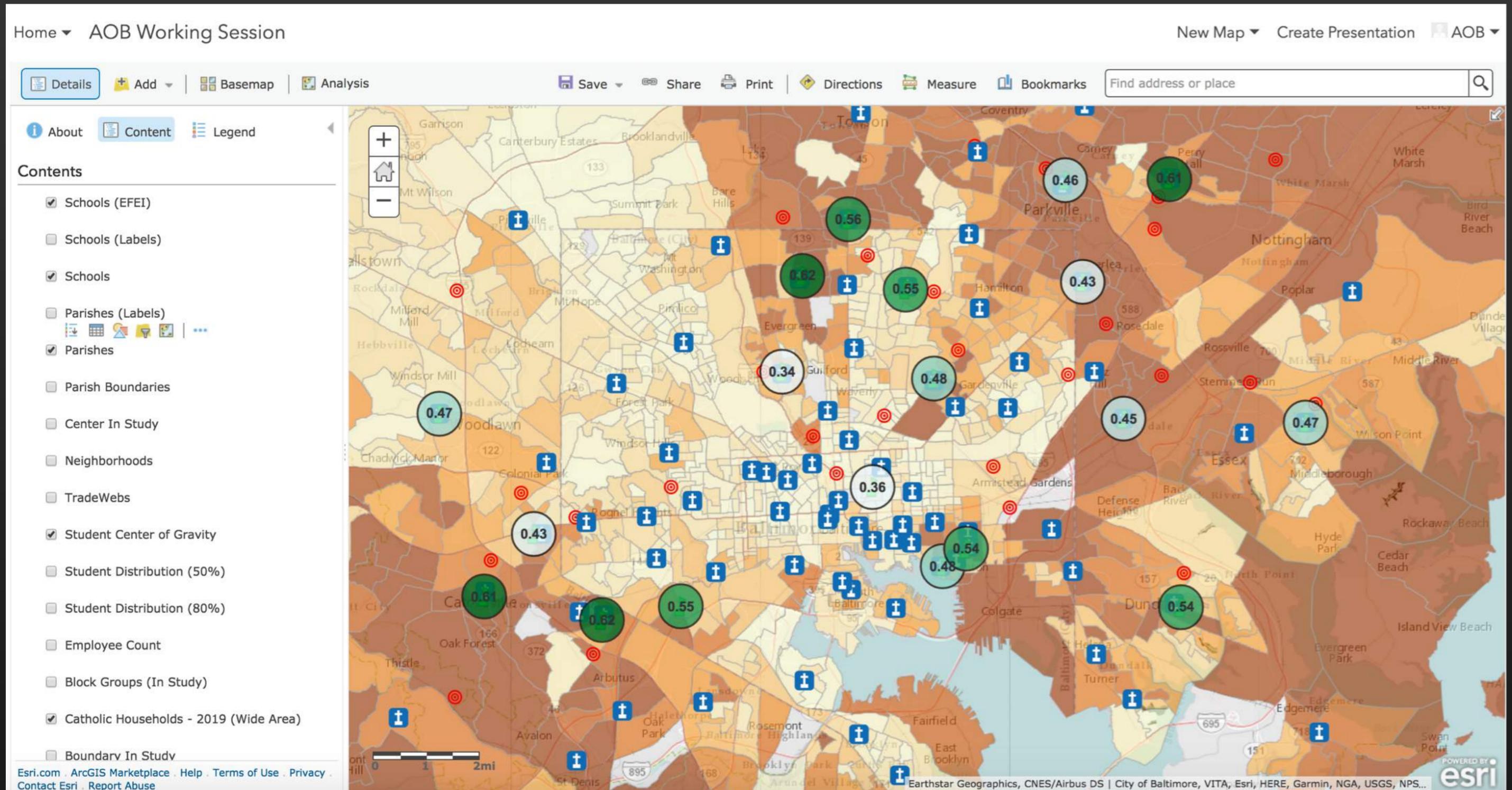
- Baltimore County
- Baltimore City

Public Schools



“Let’s explore which schools need the most attention.”

Step 4:
Share insights.



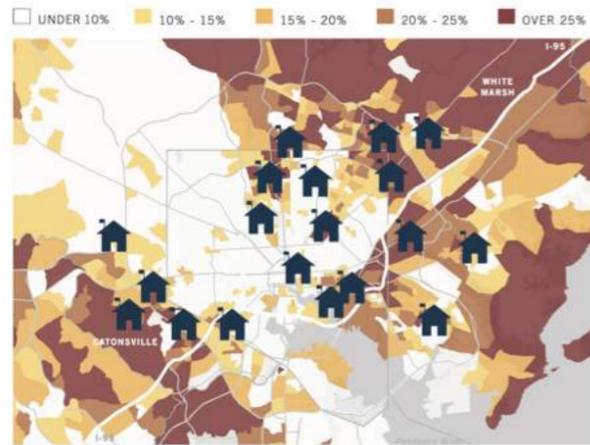
“Here is a summary of our master plan for schools.”

Step 4:
Share insights.



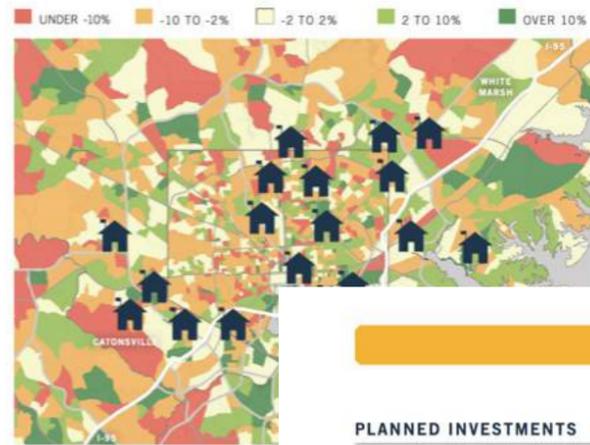
HOW

PERCENTAGE OF CATHOLIC HOUSEHOLDS



ANALYSIS:
Population projections indicate shifts in Catholics away from Baltimore City. North along I-95 towards White Marsh and south along I-95 towards Catonsville.

SCHOOL AGE POPULATION GROWTH



ANALYSIS:
Population projections indicate a rise in the northern Baltimore County around the area near Catonsville. Additional increases are

WHAT

PLAN OUTCOMES



- INVESTMENT**
 - 2 St. Agnes Catholic School
 - 3 St. Mark School, Catonsville
 - 4 Our Lady of Victory Catholic School
 - 5 Holy Angels Catholic School
 - 6 St. Pius X Catholic School
 - 7 School of the Cathedral of Mary our Queen
 - 8 Cardinal Shehan School
 - 10 St. Francis of Assisi School
 - 11 Sts. James and John Catholic Elementary
 - 12 St. Casimir Catholic School
 - 13 Archbishop Borders School
 - 14 Our Lady of Hope, St. Luke School
 - 15 Our Lady of Mt Carmel Lower School
 - 18 St. Ursula School
 - 19 St. Joseph School, Fullerton
 - 21 Archbishop Curley High School
 - 22 Our Lady of Mt Carmel Upper School
- MERGED**
 - 16 St. Clement Mary Hofbauer School
 - 17 St. Michael the Archangel School
- CLOSURES**
 - 1 John Paul Regional Catholic School
 - 9 St. Thomas Aquinas School
 - 20 The Seton Keough High School
- PROPOSED NEW SCHOOLS**
 - 23 West Side Regional - Location TBD
 - 24 East Side Regional - Location TBD

WHAT

PLANNED INVESTMENTS



PROPOSED NEW FACILITIES



ASPIRATIONAL TOTAL INVESTMENT = \$117 MILLION

“Here are some resources to learn more about our pastorate planning process.”

Step 4:
Share insights.

A screenshot of the website bemissionarydisciples.org. The page features a navigation bar with links for Mission, Planning, Blog, Formation, Resources, and Contact Us. The main content area has a background image of a classical building with columns. The text on the page reads "Be Missionary Disciples ARCHDIOCESAN PASTORAL PLAN". There are two call-to-action buttons: "View the video from Archbishop Lori" and "DOWNLOAD THE DRAFT PLAN". At the bottom, there is a blue banner with the text "CLICK TO READ THE AUGUST 2016 UPDATE ON PARISH AND SCHOOL PLANNING".

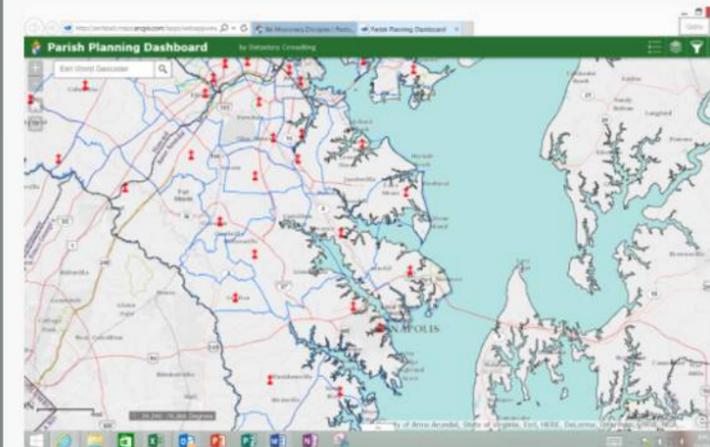
Mapping App

You can access the online mapping tool here:

(Note: This online Mapping App is for parish planning team members only. A password is required for access.)

[Mapping App](#)

[Instructions for Using the Mapping App](#)



PLANNING

What you need to know about Pastoral Planning: vision, timeline, survey, support.

[Learn More](#)



SERVICES

Find out how our team can help you and your parish make missionary disciples.

[Learn More](#)



RESOURCES

Browse the best resources: rate, comment, share, and see what's really working.

[Learn More](#)



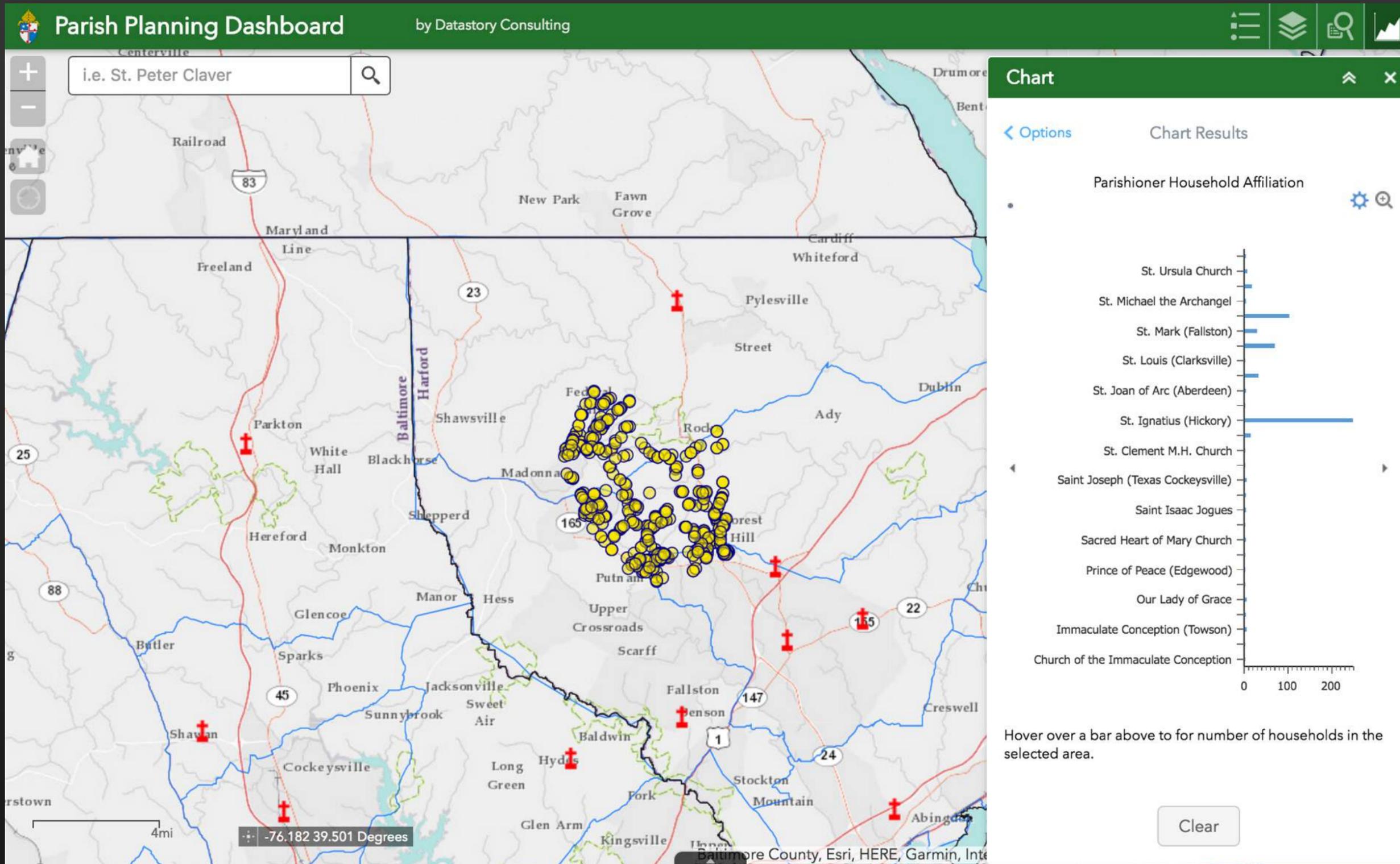
FORUM

Discuss the challenges of making missionary disciples and planning for mission.

[Learn More](#)

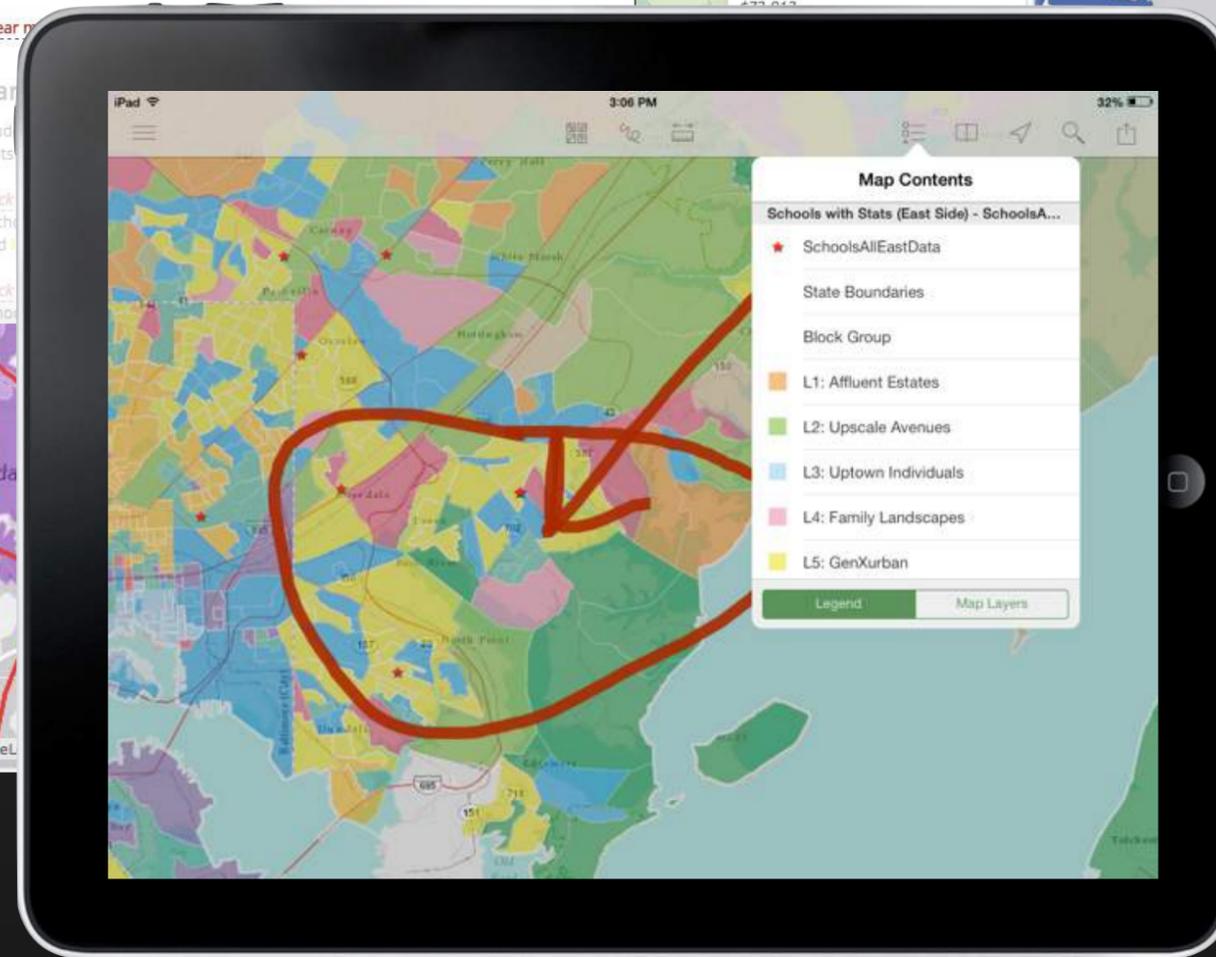
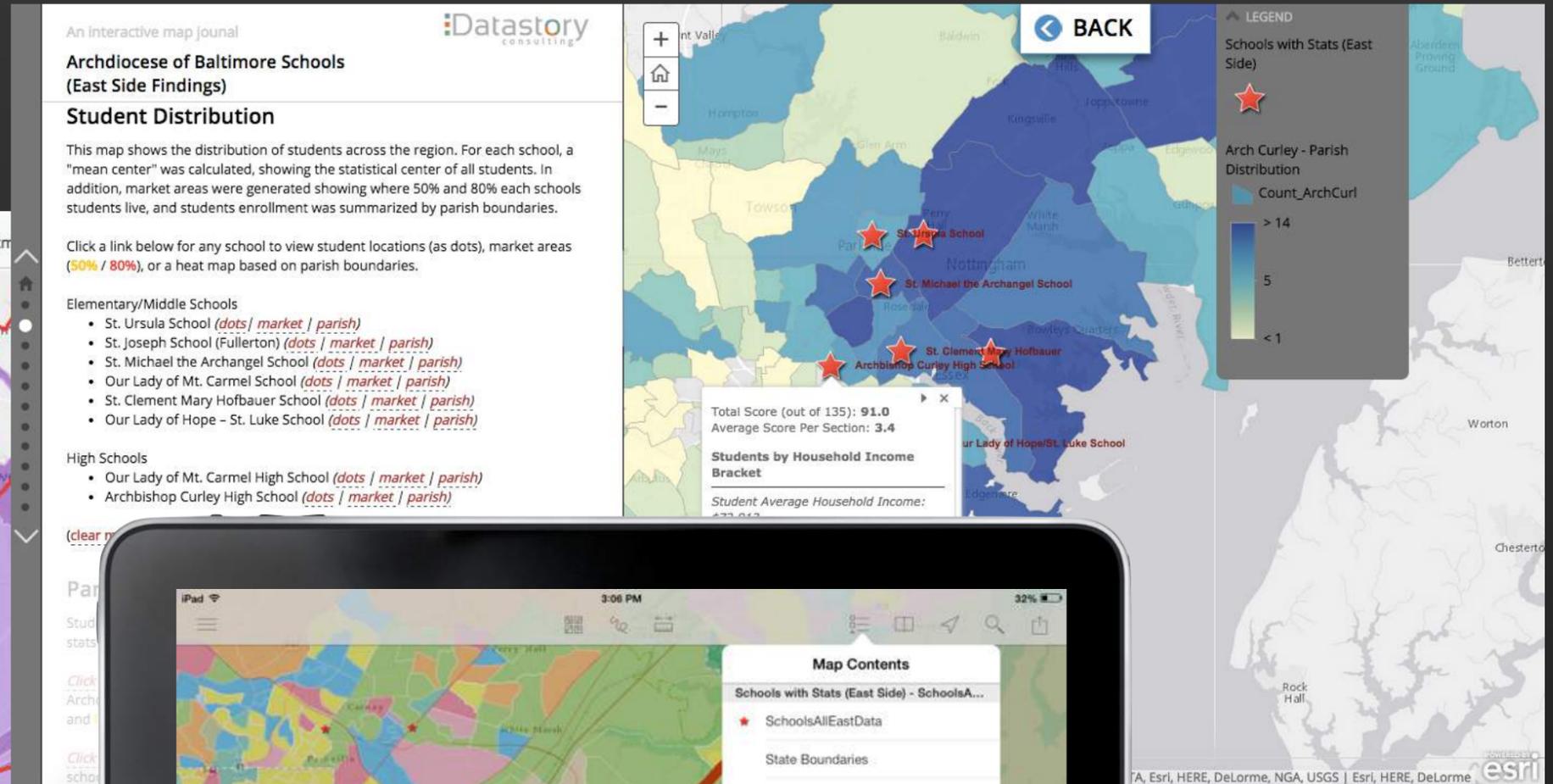
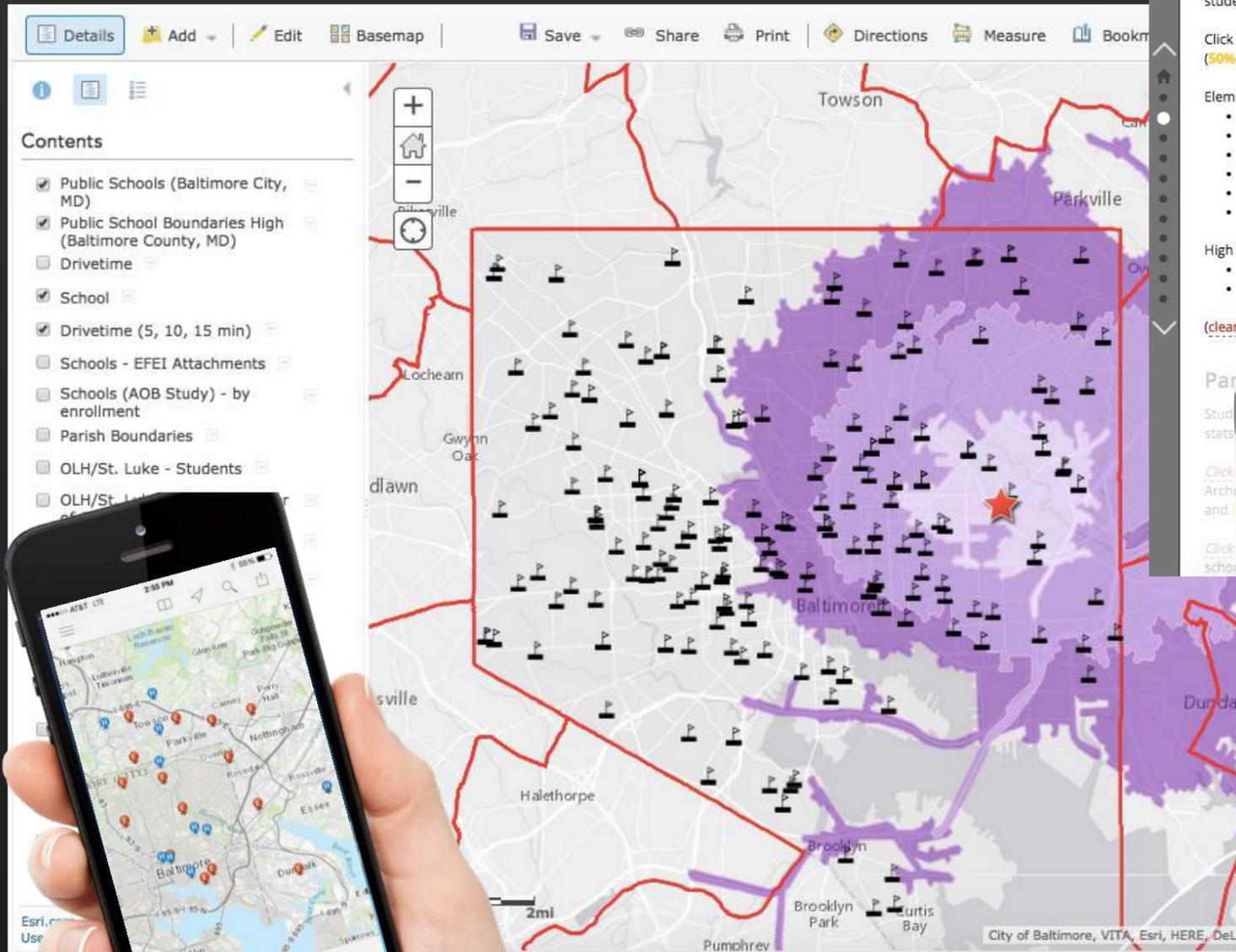
“Here is a tool to help you understand attendance and demographic patterns.”

Step 4:
Share insights.



“You access this information anytime, anywhere, from any device.”

Step 4:
Share insights.



Strategy Execution Success



This concludes The American Institute of Architects
Continuing Education Systems Course.

At this time, the course participants are free to ask questions.

Conference for Catholic Facility Management (“CCFM”)

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