Understanding GeoEnrichment

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2021 ESRI
DEVELOPER SUMMIT

Understanding GeoEnrichment

Agenda

Level set	• What is it • What can you do with it • Why you should consume it to support your own apps, workflows, and solutions
See it in action	• In Esri's apps • In the new developer docs
Jump starting your work	• Simple REST and Python examples (and how to get them) • Follow up resources
Live Q&A	• Your chance to pose questions to members of the product team

GeoEnrichment describes the action of enhancing existing data with additional location-based context.

ArcGIS

A Comprehensive Geospatial Platform

Open

Services Based

Extendable

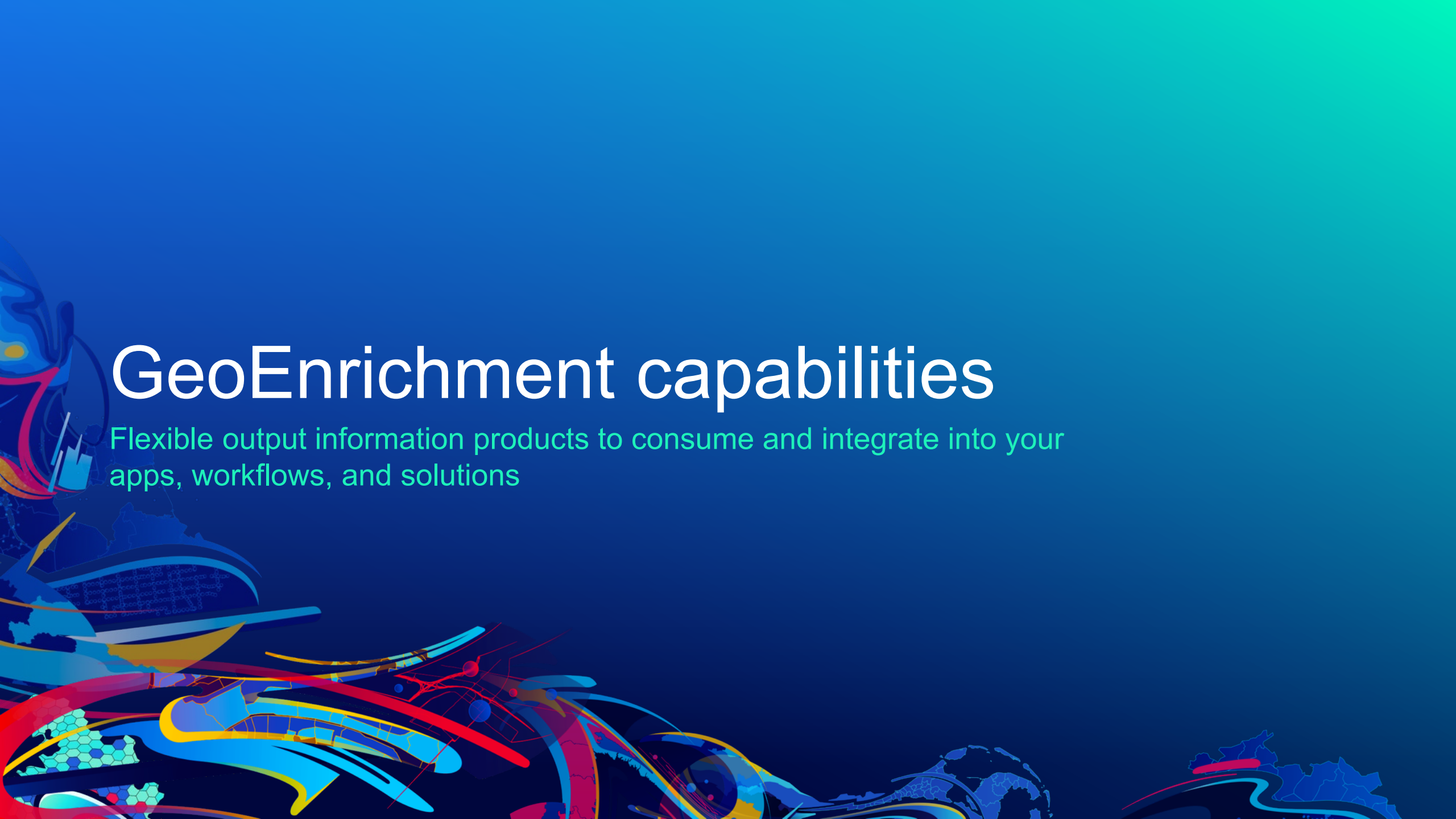
Distributed

SaaS & Software

Supporting Individuals, Teams and Organizations

GeoEnrichment capabilities

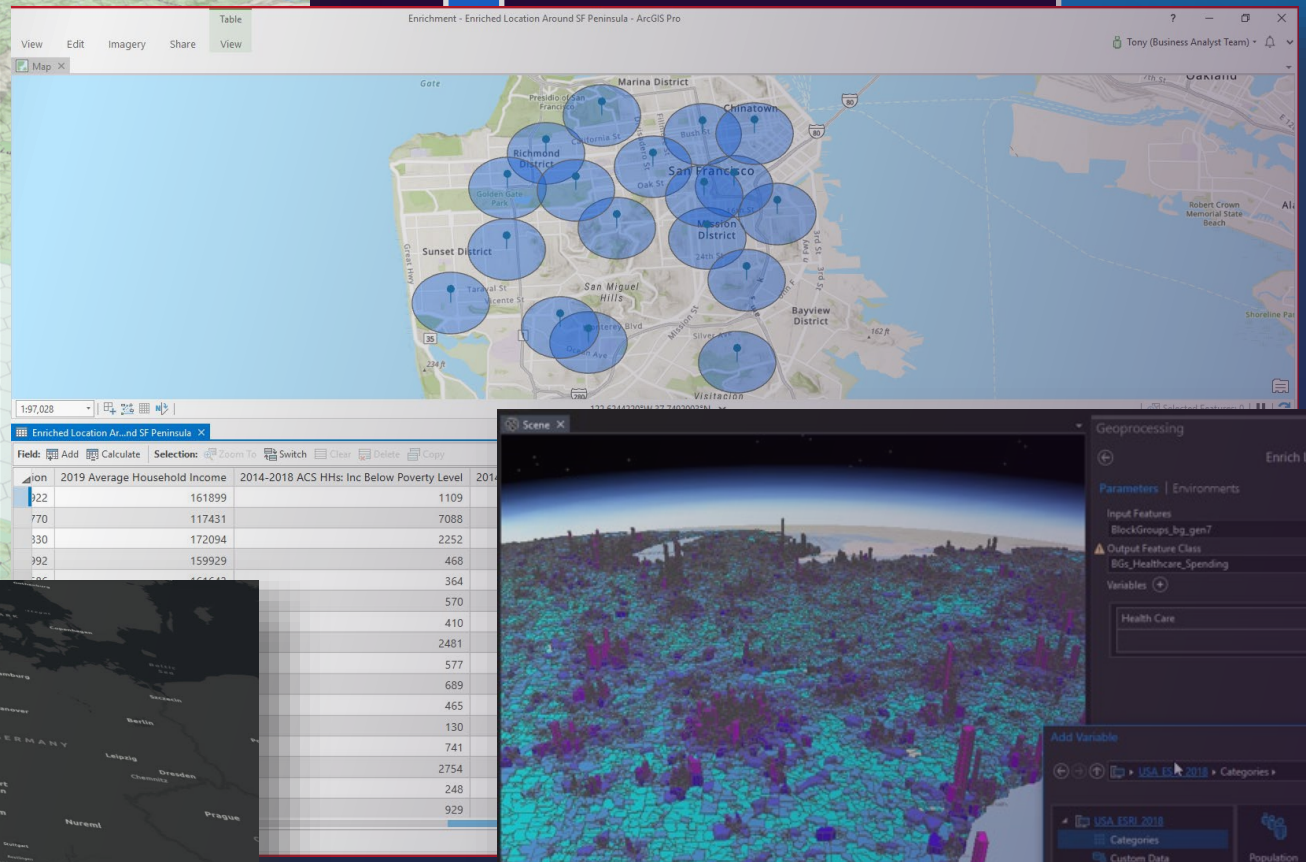
Flexible output information products to consume and integrate into your apps, workflows, and solutions

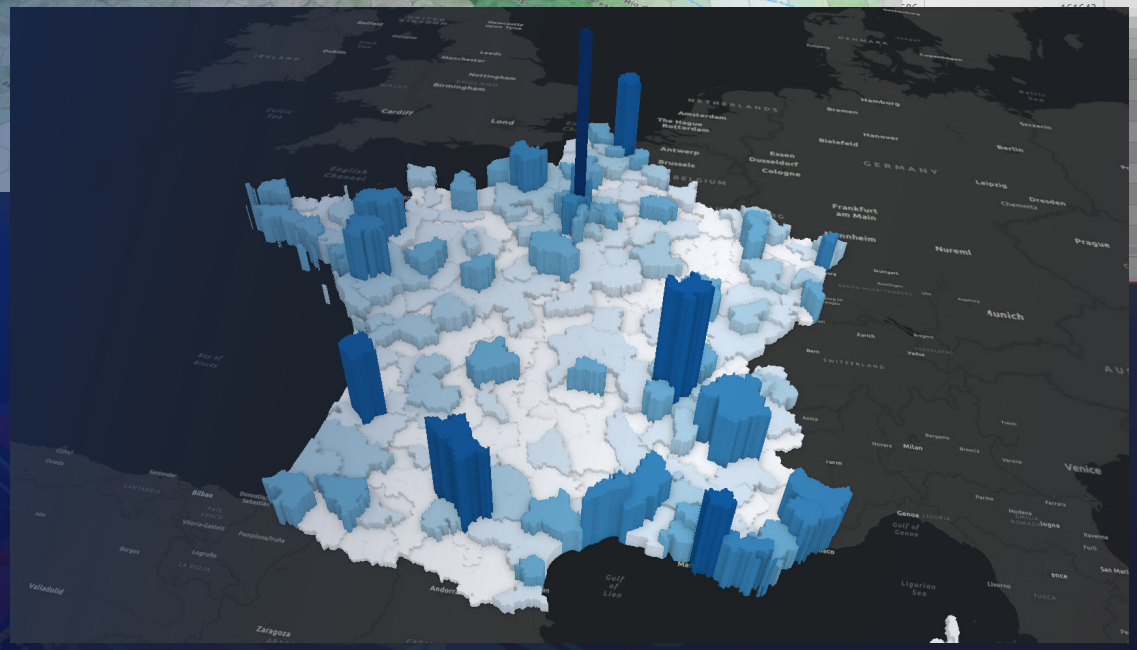


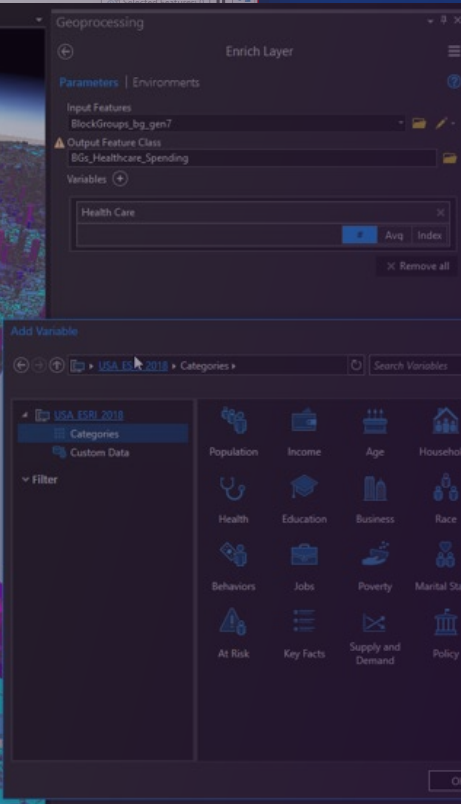
Data Enrichment

Demographic Reports

Infographic Reports







Data Enrichment

Demographic Reports

Infographic Reports

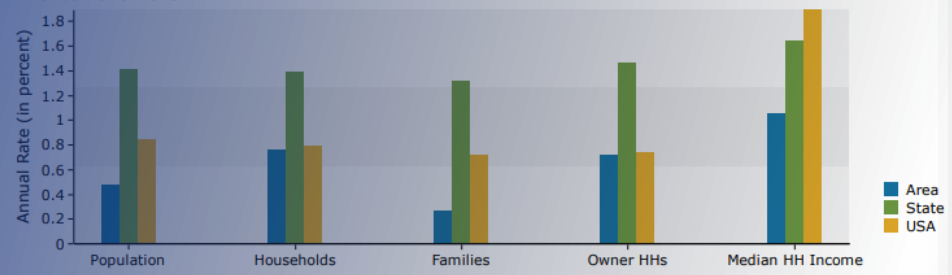
Demographic and Income Comparison Profile

CU - Boulder
University of Colorado, Boulder, Colorado, 80302
Walk Time: 5, 10, 15 minute radii

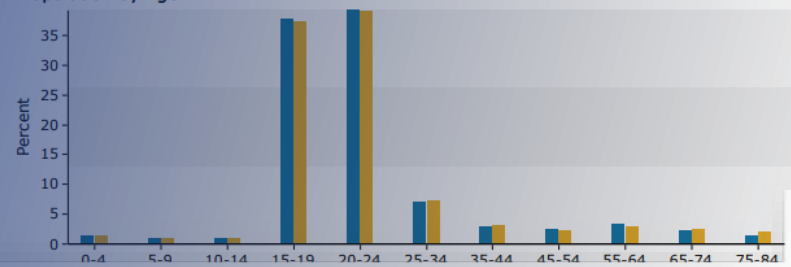
Prepared by
Latitude: 40.00
Longitude: -105.27

15 minutes

Trends 2020-2025



Population by Age



France Housing and Household Summary (Esri France)

75112 (Paris 12e Arrondissement)

Prepared by Esri

	Paris 12e Arr...
	71,909
	74,819
	76,072
	76,055
	38,897
	15,081
	23,816
	3,253
	32,674
	15,092
	12,227
	5,353
	33,577

United Kingdom Summary Report

E07000221 (Stratford on Avon)

Prepared by Esri

Geography: District

2019 Population Totals (MBR)	
2019 Total Population	129,422
2019 Population Density (per sq. km)	132.3
2019 Population Per Mill	1.9
2019 Total Population Age 0-14	20,190
2019 Total Population Age 15-29	18,474
2019 Total Population Age 30-44	20,328
2019 Total Population Age 45-59	29,174
2019 Total Population Age 60+	41,256
2019 Male Population Totals (MBR)	
2019 Total Male Population	63,063
2019 Male Population Age 0-14	
2019 Male Population Age 15-29	
2019 Male Population Age 30-44	
2019 Male Population Age 45-59	
2019 Male Population Age 60+	
2019 Female Population Totals (MBR)	
2019 Total Female Population	
2019 Female Population Age 0-14	
2019 Female Population Age 15-29	
2019 Female Population Age 30-44	
2019 Female Population Age 45-59	
2019 Female Population Age 60+	

人口統計サマリー（ESRIジャパン）

横浜マリンタワー
Yokohama Marine Tower
リング: 1, 3, 5 キロメートル 半径

作成者: Esri
緯度: 35.44394
経度: 139.65091

	1 キロメートル	3 キロメートル	5 キロメートル
2015 人口総数 (国勢調査)			
2015 人口総数	20,162	204,087	512,724
2015 人口密度（平方kmあたり）	8,650.2	10,862.8	9,496.9
	9,937	106,741	261,781
	10,225	97,346	250,943
	2,482	15,960	24,615
	1,218	7,162	11,227
	1,265	8,798	13,389
	20,160	204,087	512,732
	9,936	106,741	261,790
	10,224	97,346	250,947
	746	7,009	18,786
	760	6,971	17,866
	788	6,655	17,357
	646	7,098	18,561
	706	8,888	24,646
	1,015	11,450	32,604
	1,372	13,181	36,565
	1,643	15,504	39,664
	2,105	18,473	46,205
	2,208	18,333	43,534
	1,663	15,663	36,664
	1,271	12,718	30,006
	1,020	12,339	29,835

Demographic Summary

Around Anne Frank House
Walk Time: 1, 5, 10 minute radii

Prepared by Esri
Latitude: 52.37509
Longitude: 4.88403

	1 minute	5 minutes	10 minutes
2019 Population Totals (4orange)			
2019 Total Population	534	7,583	27,227
2019 Population Density (per sq. km)	10,624.8	17,434.2	16,739.8
2019 Household Totals (4orange)			
2019 Total Households	347	4,972	17,782
2019 Average Household Size	1.5	1.5	1.5
2019 Household Composition (4orange)			
2019 Number of People in HH: 1	229	3,231	11,584
2019 Number of People in HH: 2	77	1,183	4,169
2019 Number of People in HH: 3	21	326	1,144
2019 Number of People in HH: 4	17	166	589
2019 Number of People in HH: 5	3	58	234

Site Map

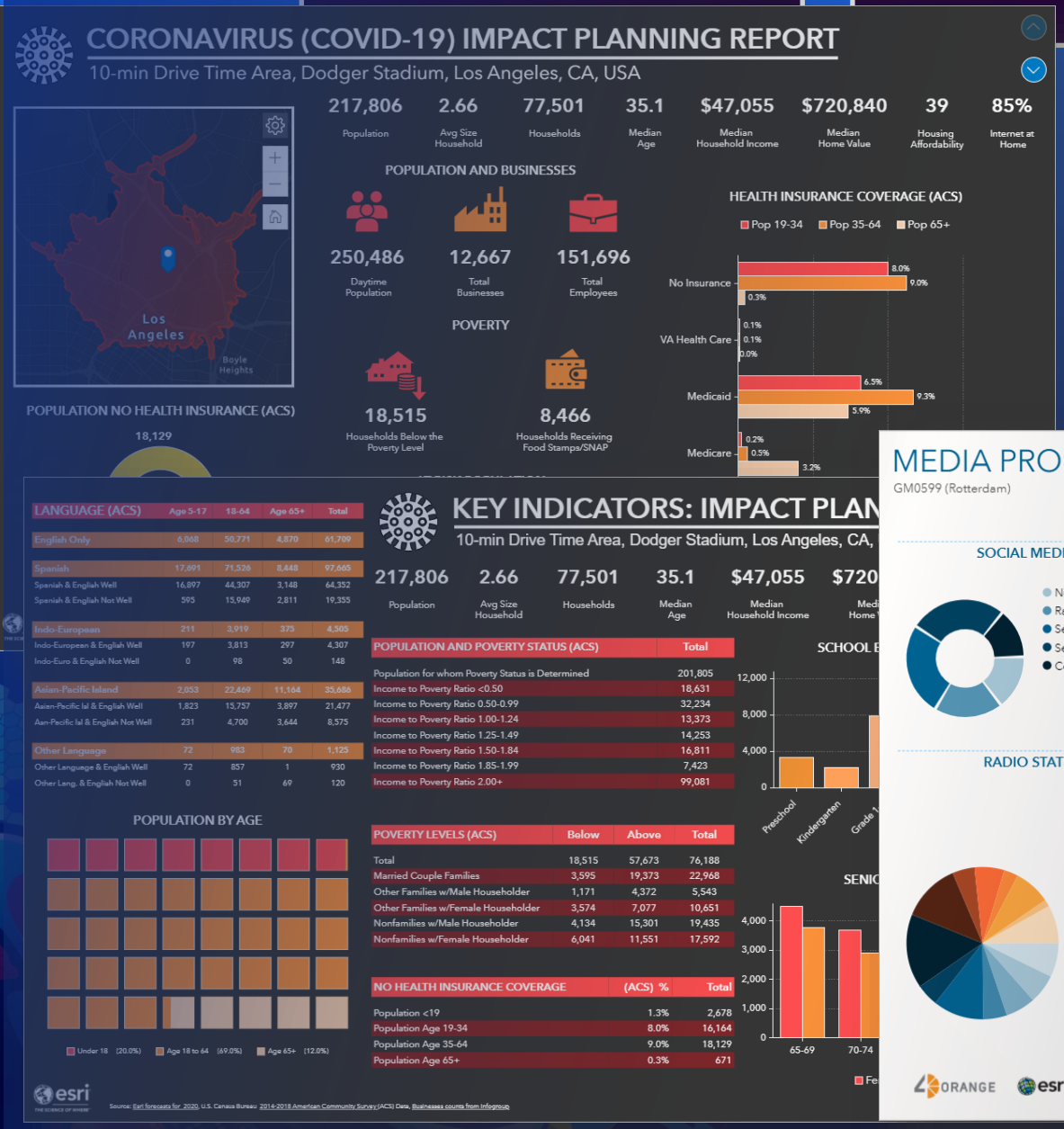
Westermarkt 20, 1016 DK Amsterdam
Walk Time: 1, 5, 10 minute radii

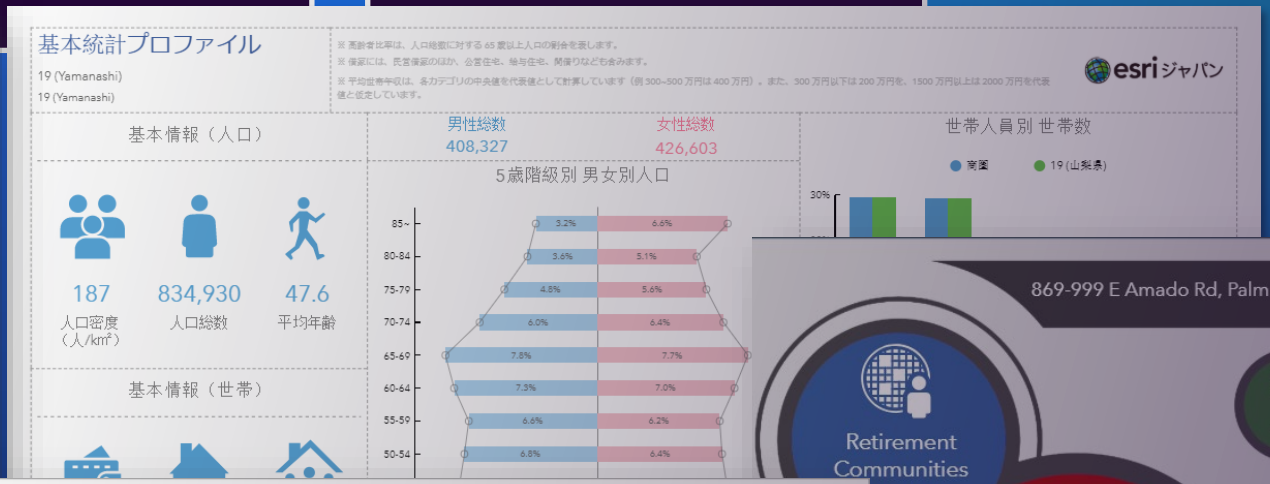
Prepared by Esri
Latitude: 52.37509
Longitude: 4.88403

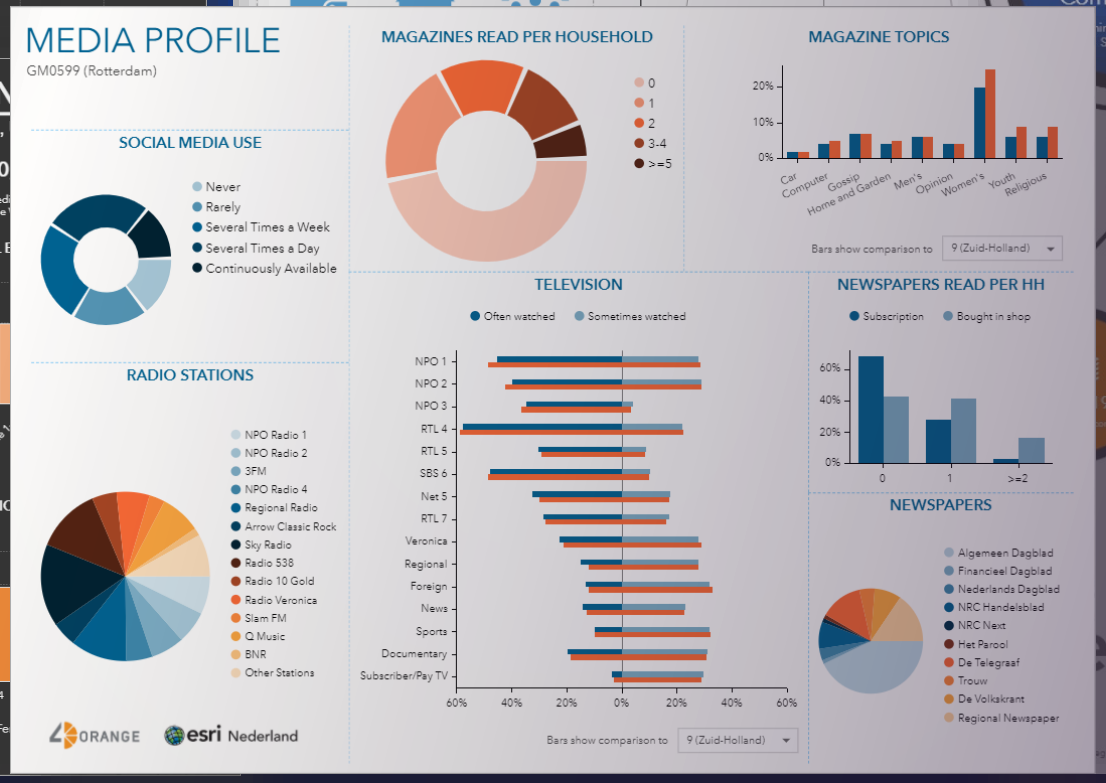
Data Enrichment

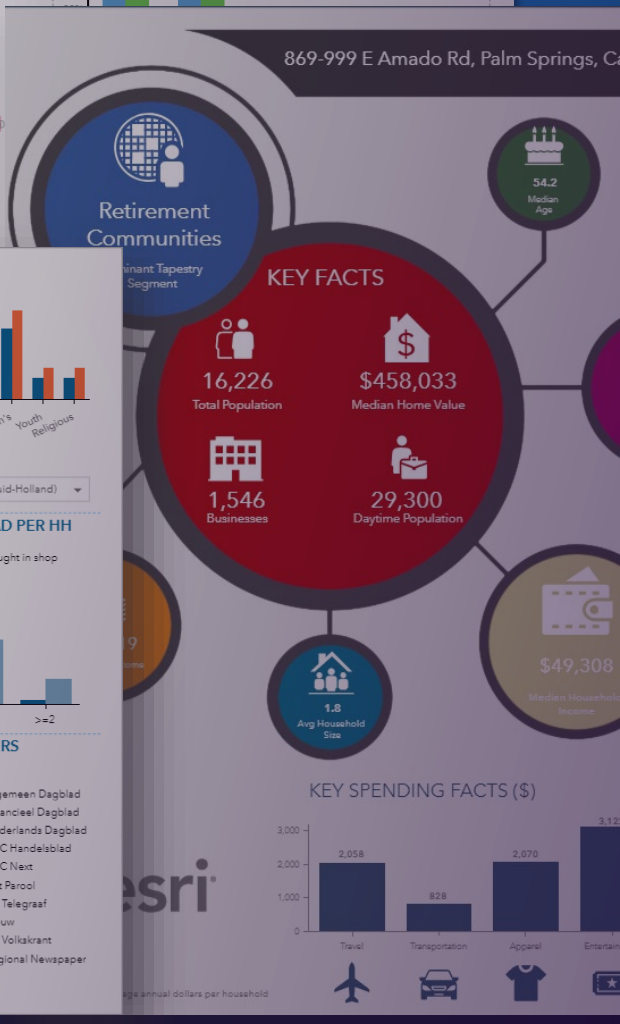
Demographic Reports

Infographic Reports







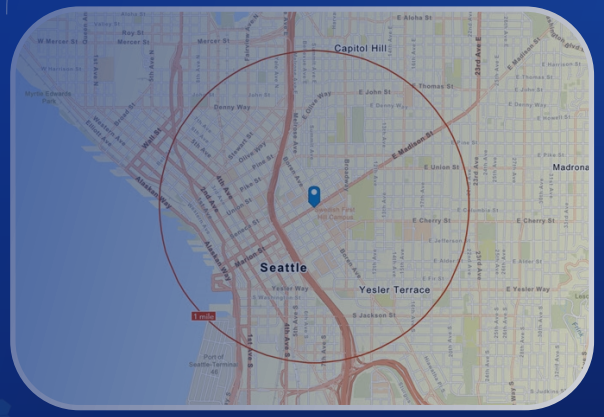


GeoEnrichment capabilities

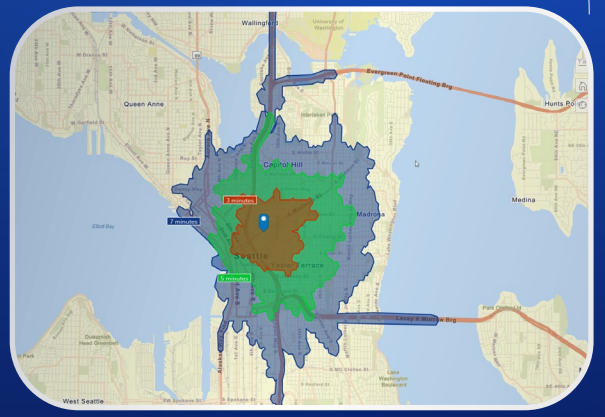
A variety of ways to define the areas you want to analyze and query

Supported input analysis area types

Areas dynamically generated around your lat/lon point coordinates or addresses

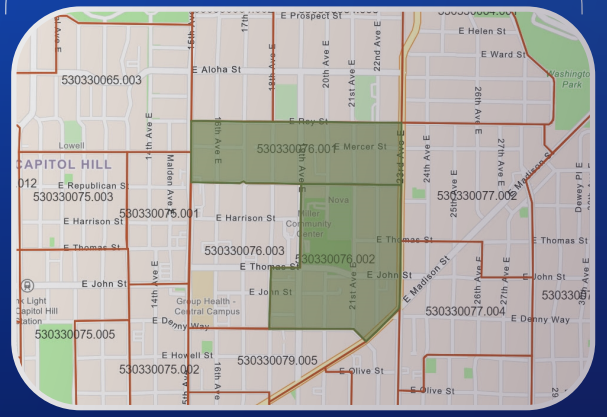


Ring-based areas



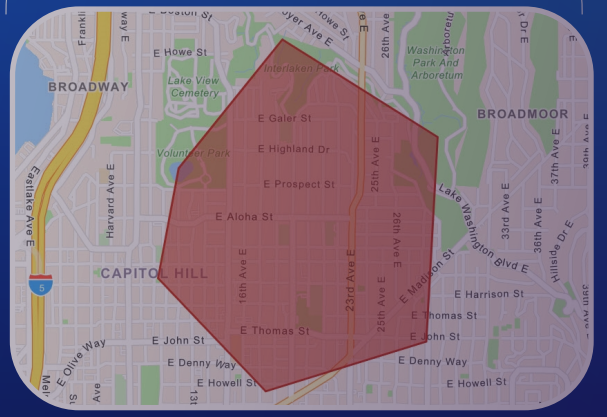
Service areas (driving/walking time or distance)

Predefined areas



Postal or administrative geographies

Areas defined by your Polygon coordinates

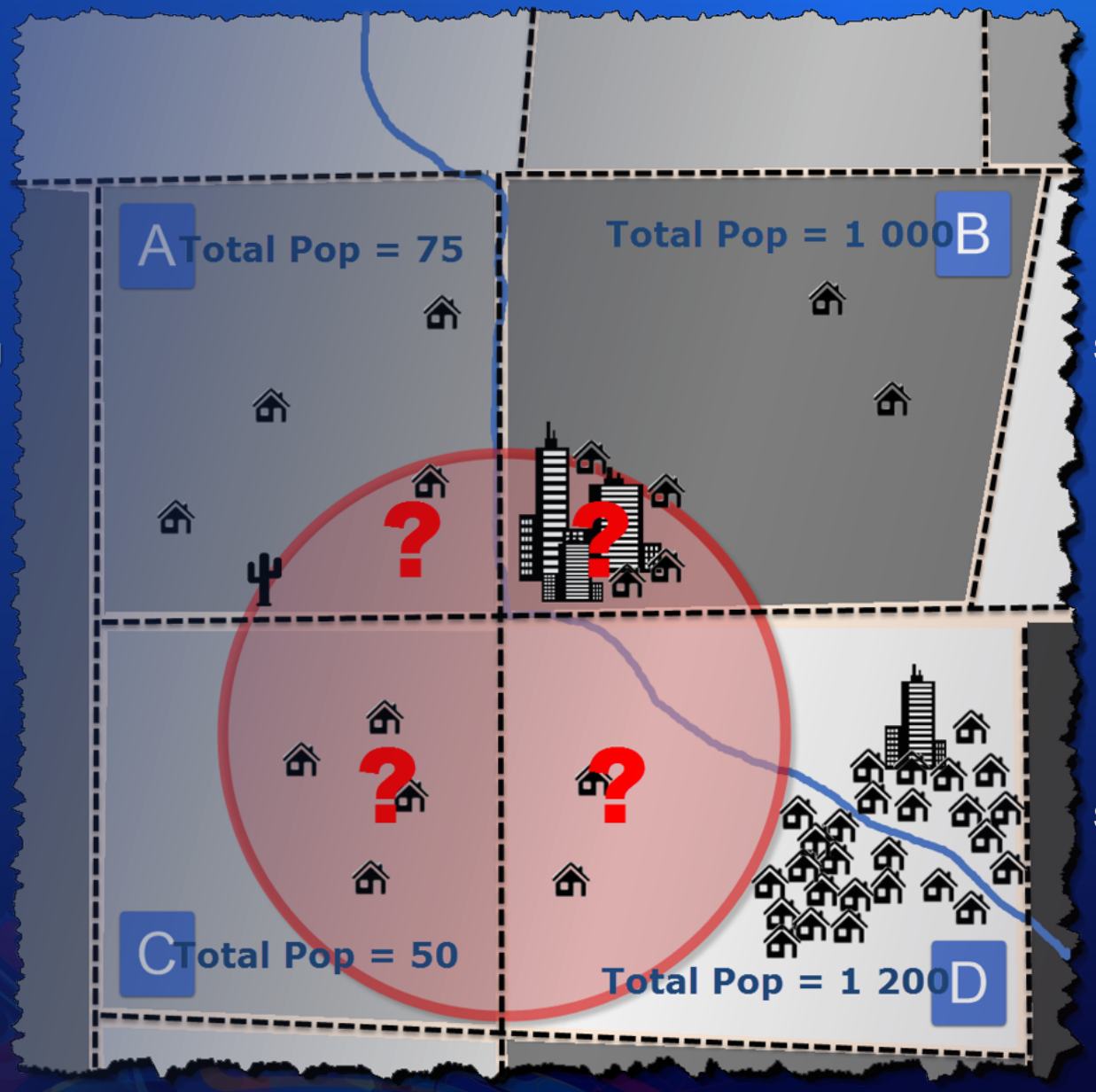


User-defined areas

Query enrichment data, generate demographic reports, and create Infographics for areas around the world

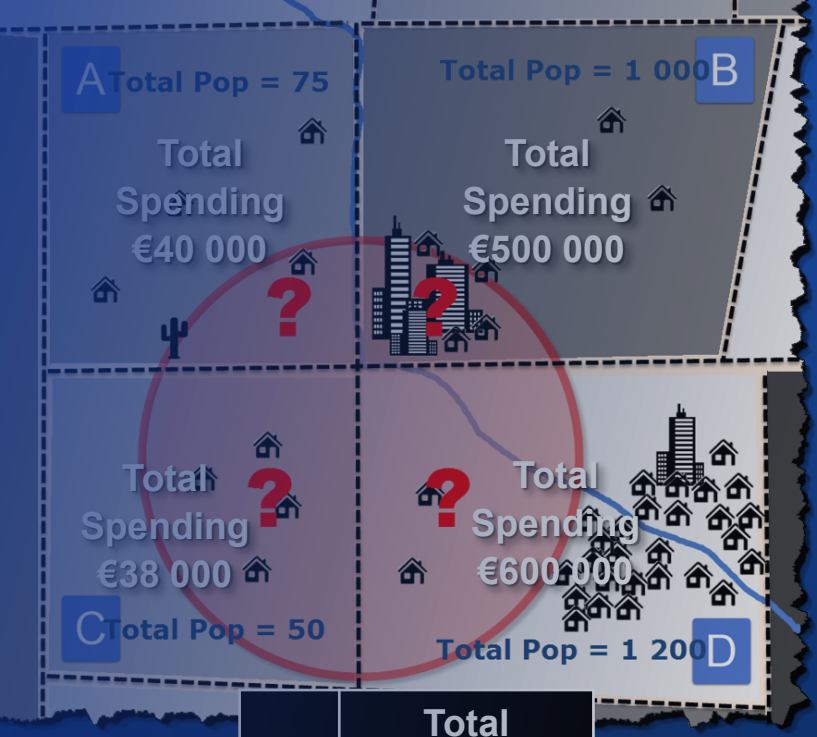
GeoEnrichment capabilities

Leverage the work of Esri's dedicated team of developers, demographers, and spatial data scientists to obtain the best possible query estimates and projections

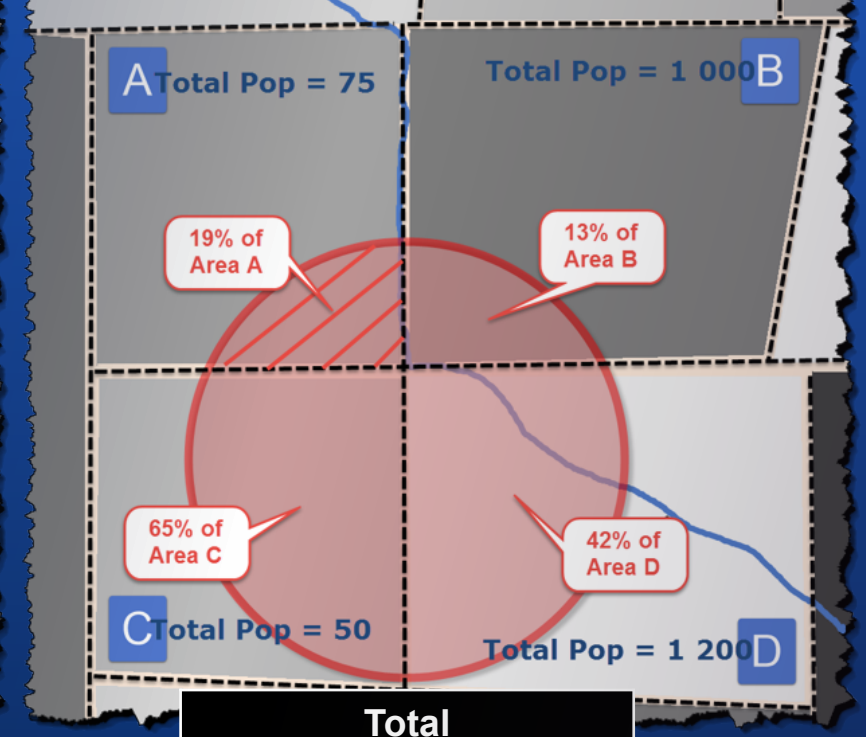


Based on the spending totals for areas A, B, C, and D…

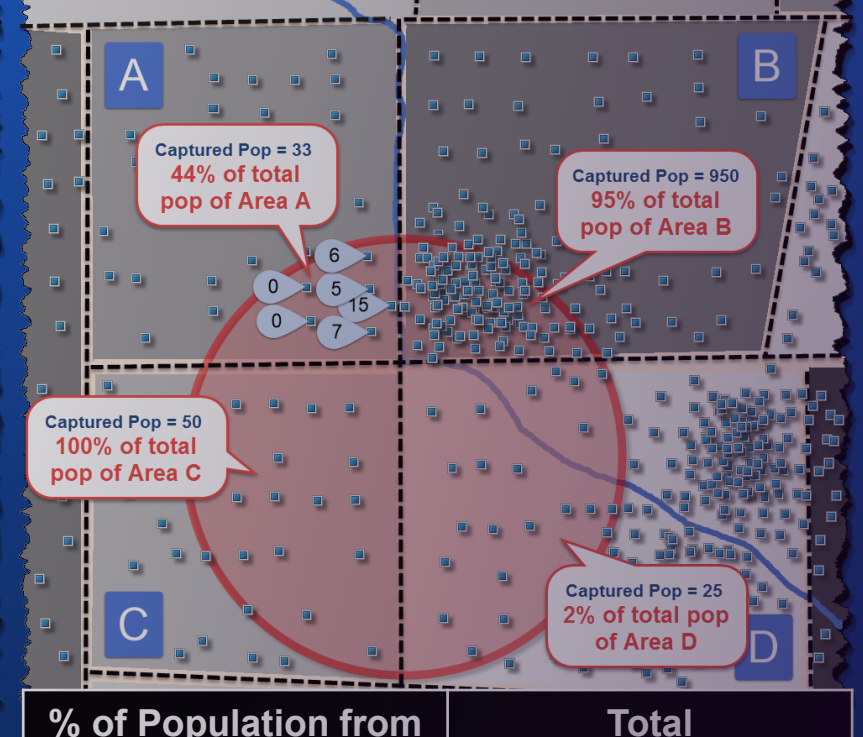
What is the estimated spending for the highlighted ring area only?



	Total Spending
A	€40 000
B	€500 000
C	€38 000
D	€600 000
	€1 178 000



Total Spending by areal interpolation
19% of €40 000 = **€7 600**
13% of €500 000 = **€65 000**
65% of €38 000 = **€24 700**
42% of €600 000 = **€252 000**
€349 300



% of Population from captured Settlement Points	Total Spending weighted by population
33 (33/75 = 44%)	44% of €40 000 = **€17 600**
950 (950/1000=95%)	95% of €500 000 = **€475 000**
50 (50/50 = 100%)	100% of €38 000 = **€38 000**
25 (25/1200 = 2%)	2% of €600 000 = **€12 000**
	€542 600

GeoEnrichment capabilities

Powered by data describing people, places, and businesses around the world

Esri Demographics

Population
Households
Purchasing Power
Age
Income
Marital Status
Education
Gender

Food
Tobacco
Clothing
Household
Medical
Electronics
Recreation

130+

countries/markets

Esri U.S. Demographics

- Developed by Esri
- Updated Annually

- Demographics
- Consumer Spending
- Tapestry Segmentation
- Daytime Population
- Market Potential
- Business Summary

- Census and ACS

See it in action

GeoEnrichment in Esri's own software and solutions
New developer documentation

Daniel Stauning

product engineer

Jump start your work

REST and Python code examples

Dmitry Kozlov

developer

Jump start your work

Resources to learn more and to start developing with GeoEnrichment

GeoEnrichment

Presentation resources

Developer docs & samples

Data Browser

Presentation code repo

GeoEnrichment

Data resources

Data docs, coverage, methodologies, FAQ, …

Data accuracy

Blog

Newsletter: go.esri.com/get-data
Follow us on Twitter: @EsriDataLS

Data pages: go.esri.com/data
U.S. data catalog (.xls): links.esri.com/data-catalog

Q&A with members of the GeoEnrichment team

Daniel Stauning

product engineer

Dmitry Kozlov

developer

Tony Howser

product manager

Lucy Guerra

product manager

Want to talk more? Come by our virtual booth after the session

Please provide your feedback for this session by clicking on the session survey link directly below the video

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