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Using Esri Community Analyst to Engage Students and Community

Demonstration
Track 1. Innovation and Impact: ATE for the Future

2019 ATE Principal Investigator's Conference, October 23 – 25, 2019
Omni Shoreham Hotel, Washington D.C.

Presented by:
Hanna L. Ford, Center For Advanced Spatial Technologies, University of Arkansas

UNIVERSITY OF ARKANSAS

NSF

CAST
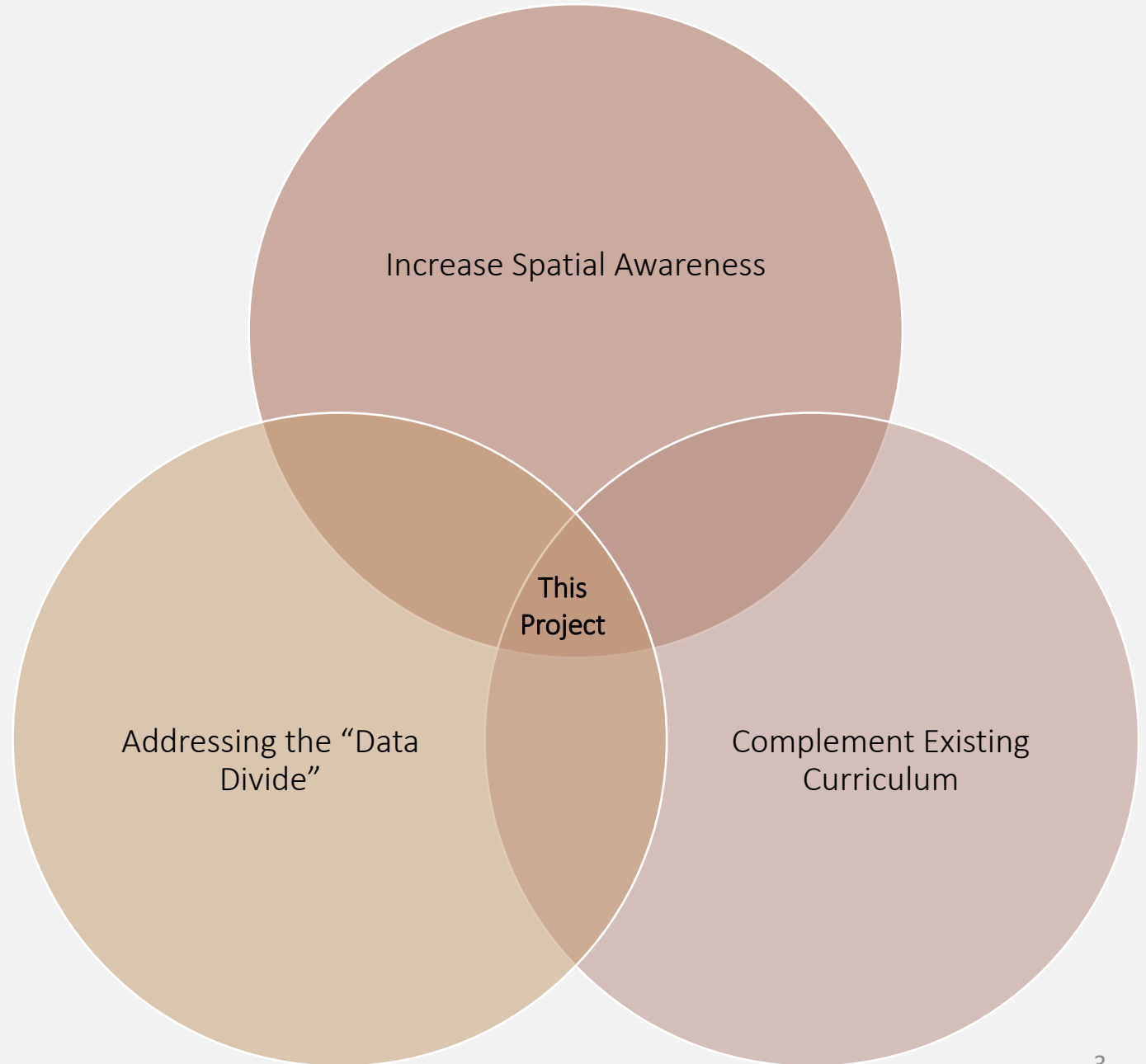Center for Advanced Spatial Technologies

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Project Goals

- Add geospatial lesson plans and activities to existing lesson plans in a broad range of courses and disciplines.

- Generate curiosity about how spatial data is generated and maintained, and how those data are used in day-to-day life and in a variety of occupations.

Increase Spatial Awareness

This Project

Addressing the "Data Divide"

Complement Existing Curriculum

1

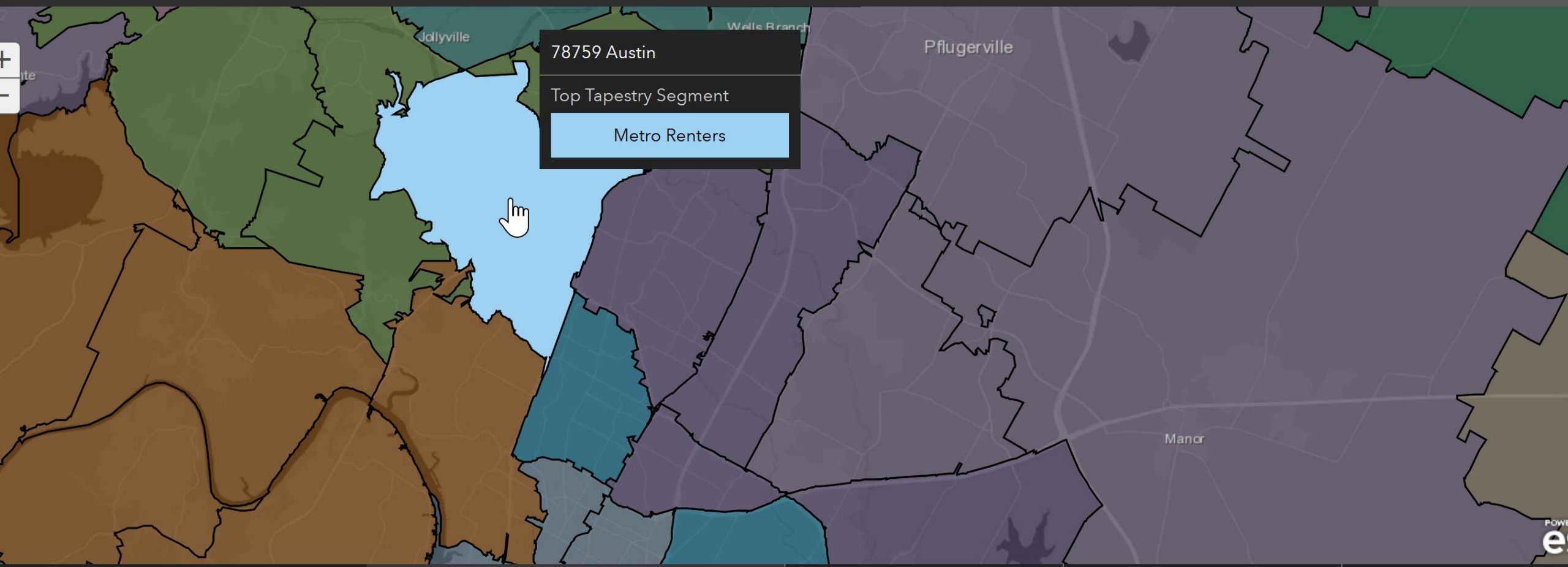Professional Development for K12 Educators

2

Faculty Development for Community College Faculty, Instructors, and Staff

3

Student Workshops and Opportunities for Involvement

Engaging the Audience

Explore Tapestry Segmentation
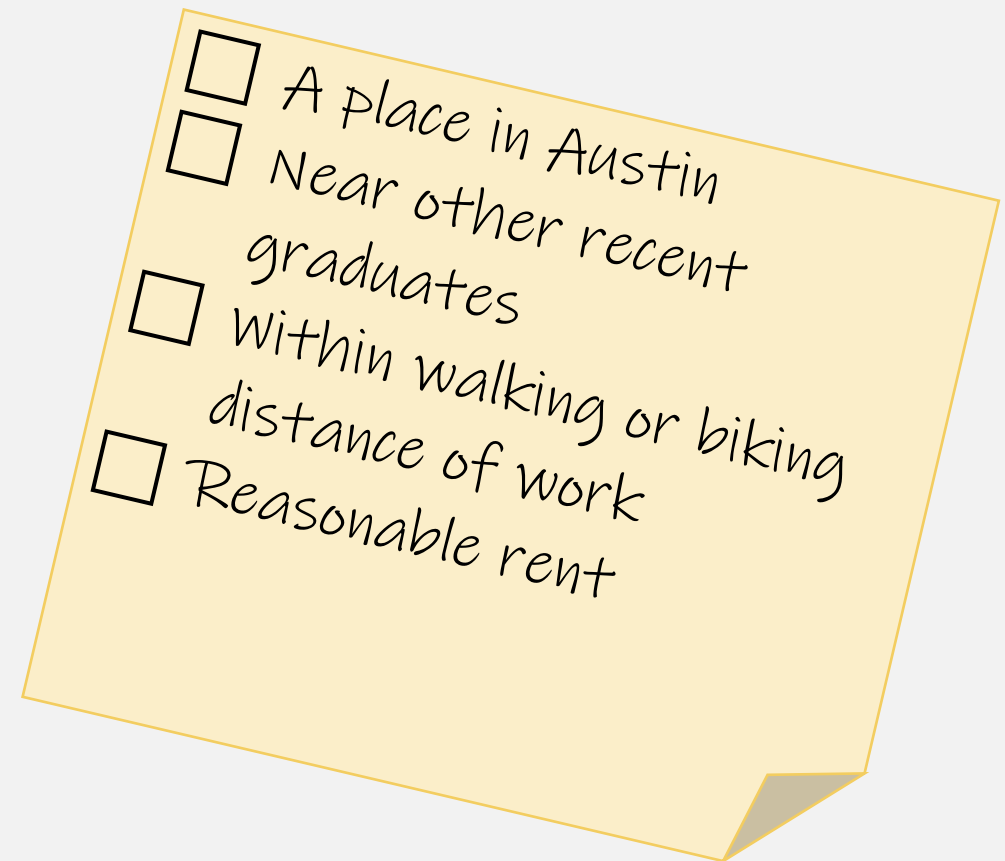Data by ZIP Codes

Help a college graduate move to Austin

A recent college graduate from DeQueen, Arkansas has landed a job at a high-tech company in Austin, Texas. She knows little about the Austin area, but wants to be within walking or biking distance of work. She also wants to live among fellow graduates and avoid high rent so she can pay down her college loans. Since her employer is located in ZIP Code 78753, she'll start there to find nearby apartments.
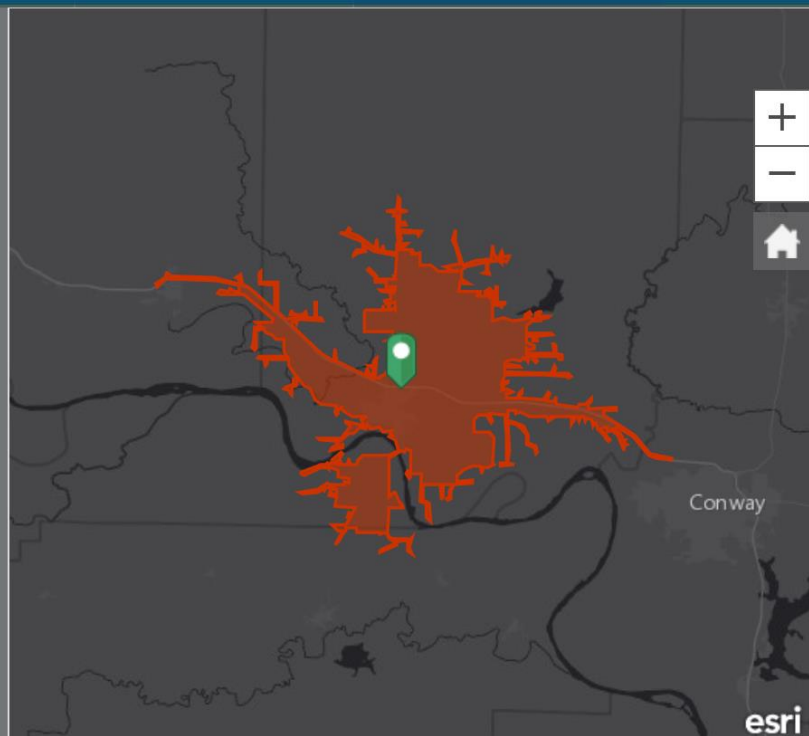
☐ A Place in Austin
☐ Near other recent graduates
☐ Within walking or biking distance of work
☐ Reasonable rent
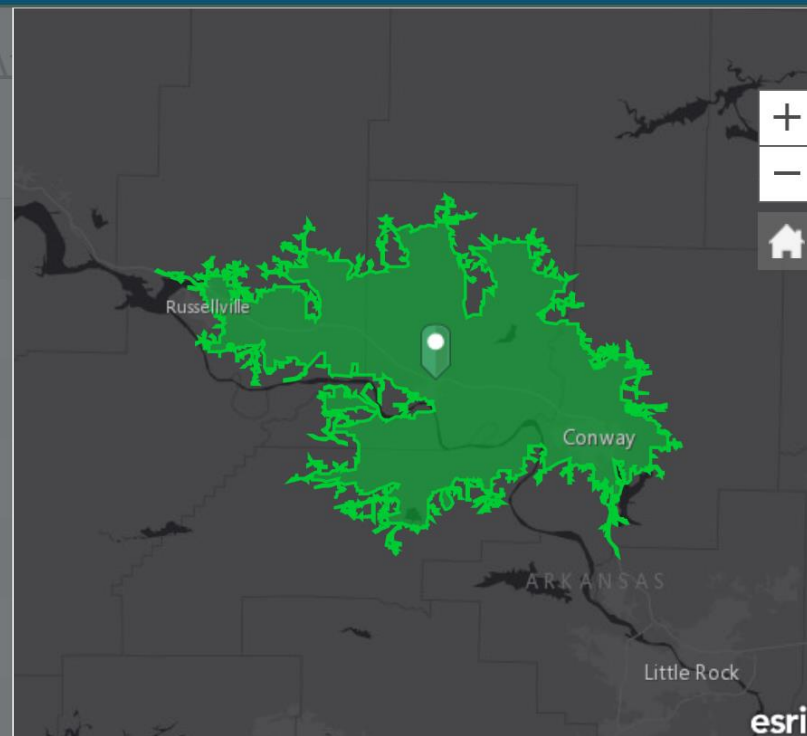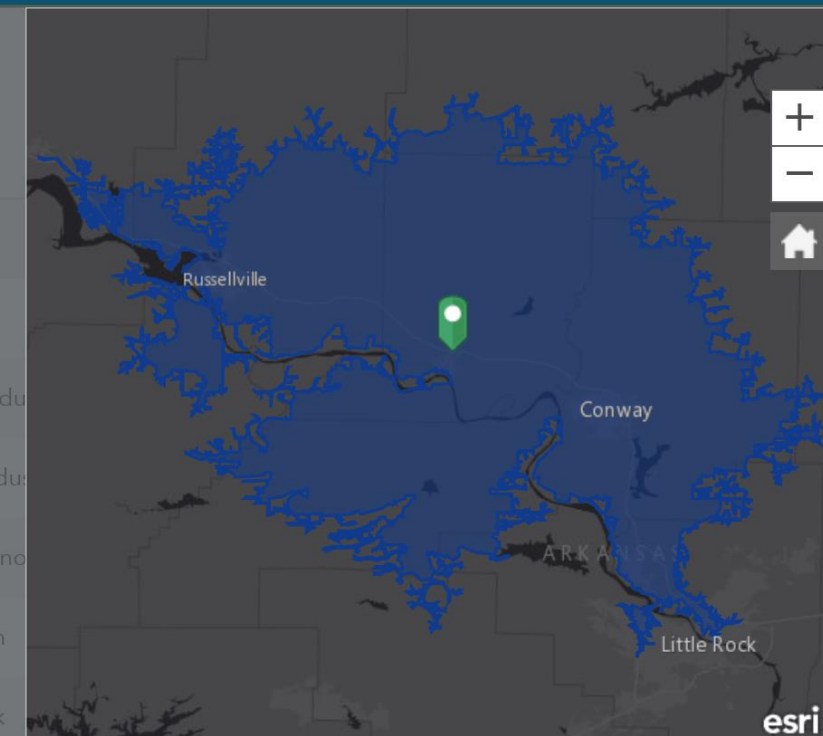
Learn More About your Service Area: An Introduction to Community Analyst

# Learn more about your service area

A group of researchers are preparing a proposal to collaborate with community colleges in the University of Arkansas System to promote the integration of data science throughout existing curricula. To better understand the demographics in each area the researchers want to generate a demographic profile at 15-, 30-, and 45-minute driving distances for each community college campus. These data will help the researchers better understand the similarities and differences of the community college service areas. Special considerations: two of the area community colleges are multi-campus; one community college is in a metropolitan area while the others are in rural areas.

☐ Locations of community colleges
☐ Demographic Profiles at 15-, 30-, and 45-minute driving distances
☐ Generate an Infographic

15 minutes •••

8% 6 4 2 0 2 4 6 8%
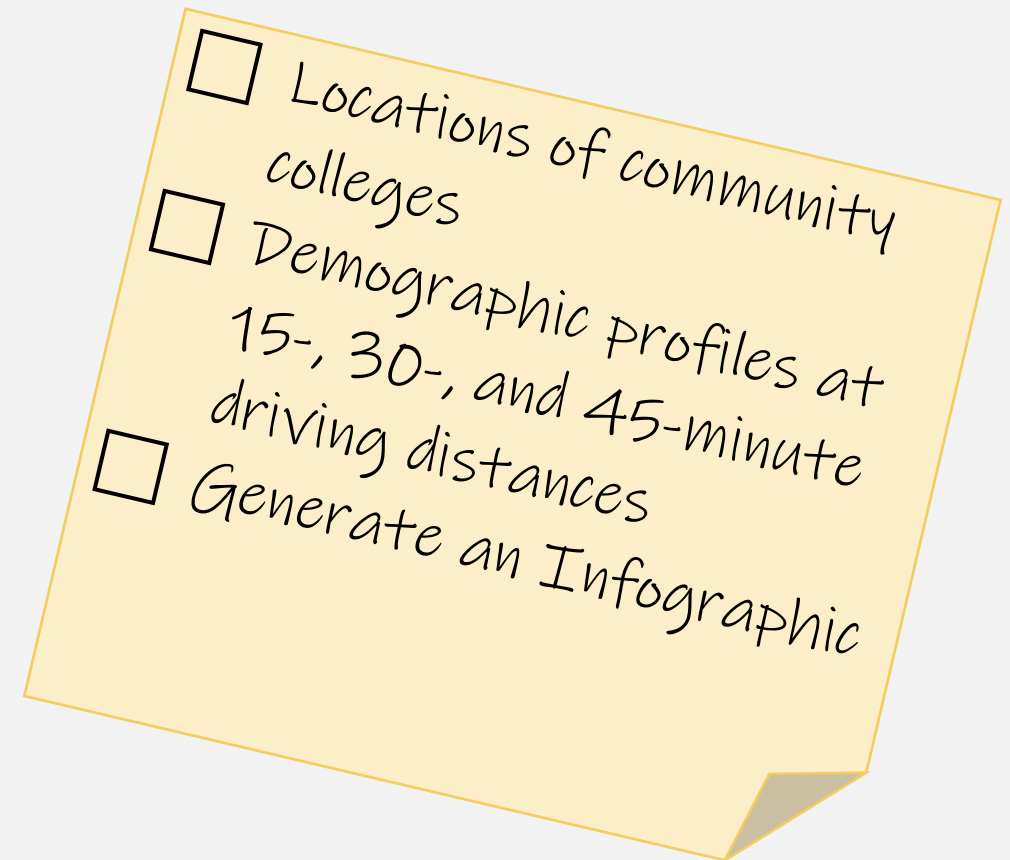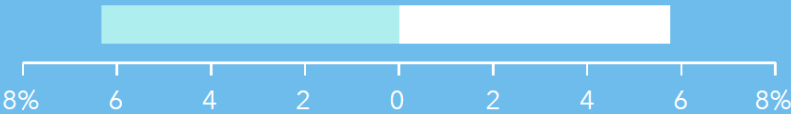
The largest group:
2019 Female Population Age 55-59 (Esri)

The smallest group:
2019 Male Population Age 85+ (Esri)

✈ **$1,329** Travel
🎟 **$32** Theatre/Operas/Concerts
⚽ **$45** Movies/Museums/ Parks
🏃 **$36** Sports Events
🎮 **$3** Online Games
🎧 **$69** Audio

12,178 Population
41.5 Median Age
2.4 Average Household Size
$39,578 Median Household Income

30 minutes •••

12% 8 4 0 4 8 12%
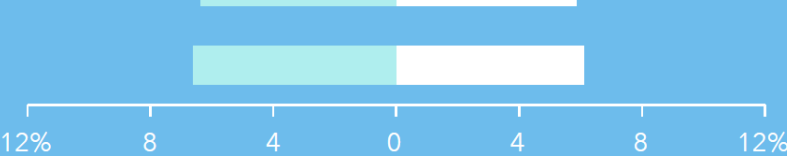
The largest group:
2019 Male Population Age 20-24 (Esri)

The smallest group:
2019 Male Population Age 85+ (Esri)

✈ **$1,586** Travel
🎟 **$48** Theatre/Operas/Concerts
⚽ **$64** Movies/Museums/ Parks
🏃 **$44** Sports Events
🎮 **$4** Online Games
🎧 **$77** Audio

131,041 Population
32.8 Median Age
2.5 Average Household Size
$45,536 Median Household Income

45 minutes •••
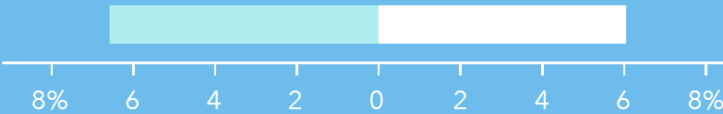
8% 6 4 2 0 2 4 6 8%

The largest group:
2019 Female Population Age 20-24 (Esri)

The smallest group:
2019 Male Population Age 85+ (Esri)

✈ **$1,701** Travel
🎟 **$52** Theatre/Operas/Concerts
⚽ **$66** Movies/Museums/ Parks
🏃 **$48** Sports Events
🎮 **$4** Online Games
🎧 **$81** Audio

269,575 Population
35.7 Median Age
2.5 Average Household Size
$49,614 Median Household Income

9

Tapestry Segments

Tapestry Segments

Tapestry Segments

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