

Democratizing Housing Affordability Data

Open Data and Data Journalism in
Charlottesville, Va

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Guiding Questions

Overarching:

How can technical community members democratize public data and leverage data-driven journalism for better public outcomes?

Charlottesville-specific:

How do we represent housing affordability data in Charlottesville so residents and policy makers can make more informed and effective decisions for the community?



Charlottesville Background

- Residents and newcomers are feeling the effects of the **housing affordability crisis**
- **Low-density zoning** and **gentrification** contribute to rising prices
- Currently undergoing the process of **rezoning**
- City is looking for public input through **Cville Plans Together**

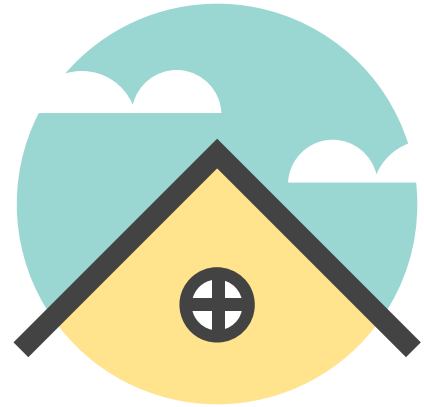


Current Housing Resources

- Search Tools (Zillow)
 - ◆ Lack historical data and context
- Real Estate Sources (Virginia Realtors)
 - ◆ Focused on investments/marketing rather than affordability
- Public Data (Census)
 - ◆ Difficult to extract data, lack of visuals

OUR SOLUTION

Collect relevant housing and demographic data to create an interactive **dashboard** that is complemented by **data-driven journalism**. Goal is to create an open-source framework that can be adapted for future community-centric data science projects.



Data Collection



CVILLE OPEN DATA PORTAL

Property sales, public transportation, and other QoL data



CENSUS (ACS)

Demographic data for each neighborhood



BUREAU OF LABOR STATISTICS

Inflation data for comparing housing prices over time



OPENSTREETMAP

GIS data for QoL mapping



ALICE PROJECT

Suggests data sources for determining personal affordability at the local level

ALICE Affordability

Typical Affordability Metric: 30% of Income

ALICE Household Survival Budget:

- Provides a realistic assessment of **estimated living costs** (housing, transportation, healthcare, food, etc.)
- Residents can describe their household to receive a complex **budget approximation** for living necessities by neighborhood

Charlottesville Specific Estimates:

- Rent : ACS, U.S. HUD
- Childcare: Childcare Aware of Virginia
- Food: USDA
- Healthcare: U.S. DOH
- Transportation: CAT, AAA
- Taxes: City Treasurer, NerdWallet, AAA
- Miscellaneous Expenses: 10% of income



Dashboard Demo

Conclusion

- “Public data” ≠ accessible information
 - Barriers of entry for the general public
 - Data cleaning
 - Merging data from different sources
 - Low volume and missing data
- Data scientists can help local communities by providing an easy way to interpret public data
 - Open-source dashboards and visualizations
 - Cooperate with local media and journalists to reach a broader audience and contextualize data



THANKS

Does anyone have any questions?

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