



Fairfax County 2019 Housing Hackathon  
Team: GMU-Geographers

# Linked House Through Spatial Thinking

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# Introduction



Capital Bikeshare Washington DC Bicycle Rental  
([https://commons.wikimedia.org/wiki/File:Capital\\_Bikeshare\\_Washington\\_DC\\_Bicycle\\_Rental\\_14326445924.jpg](https://commons.wikimedia.org/wiki/File:Capital_Bikeshare_Washington_DC_Bicycle_Rental_14326445924.jpg))



[https://www.google.com/search?q=airbnb&rlz=1C1GCEA\\_enUS813US813&source=lnms&tbm=isch&sa=X&ved=0ahUKEwuj89CTxYngAhUGUt8KHaPkCoUQ\\_AUIDygC&biw=1366&bih=577#imgrc=dFoDrPYdPJq8cM](https://www.google.com/search?q=airbnb&rlz=1C1GCEA_enUS813US813&source=lnms&tbm=isch&sa=X&ved=0ahUKEwuj89CTxYngAhUGUt8KHaPkCoUQ_AUIDygC&biw=1366&bih=577#imgrc=dFoDrPYdPJq8cM)

# Link house with individuals

A sharing economy to create synergy between government and industry.

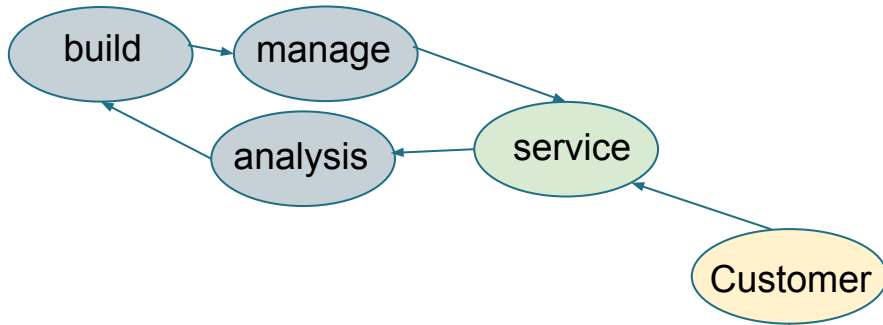


*Government is about fairness, market is about efficiency. How can we combine the advantages of these two sides to get synergy?*

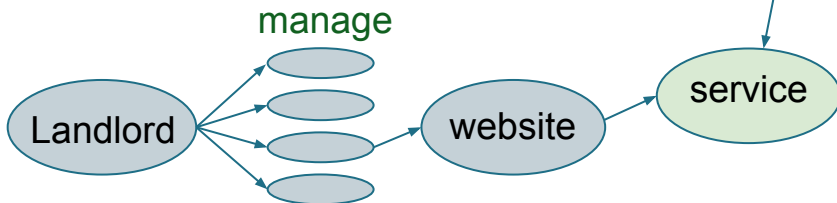
# Challenge and Solutions

## Status Quo: separation

HCD

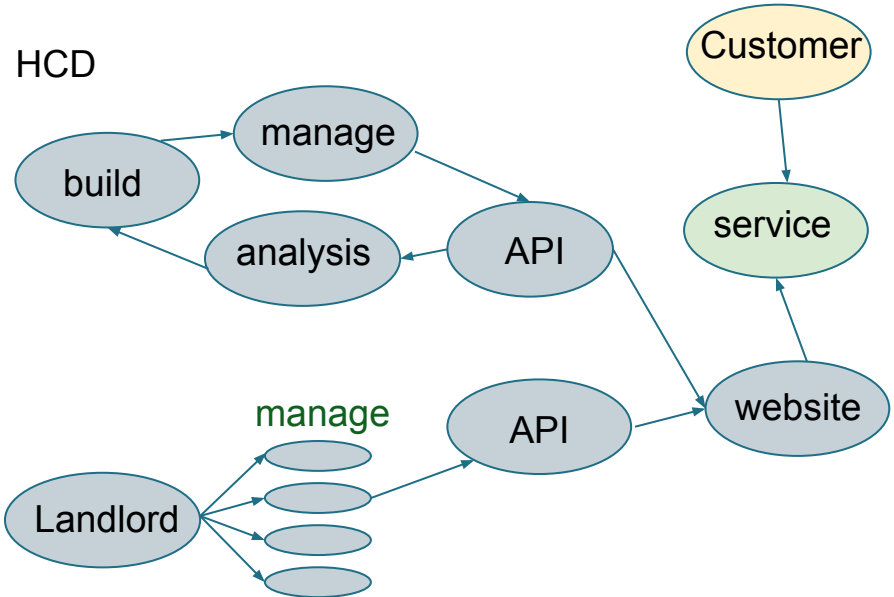


Private sector

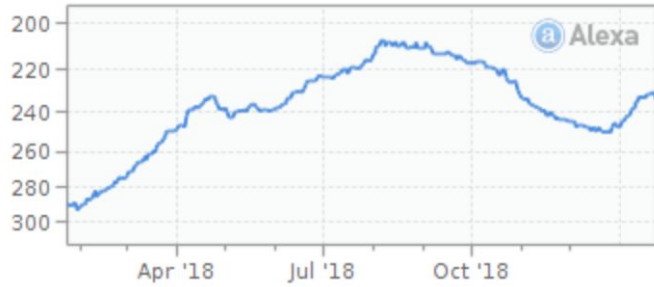


## Solution: Lined House with sharing

HCD



## Zillow Visitor Information



Global Rank ?

231 ▼ 6

Rank in United States ?

39

## VHDA Visitor Information



Global Rank ?

2,281,895 ▼ 394,436

Rank in United States ?

526,572

## Linked house advantages:

Standardizing data with accessible API

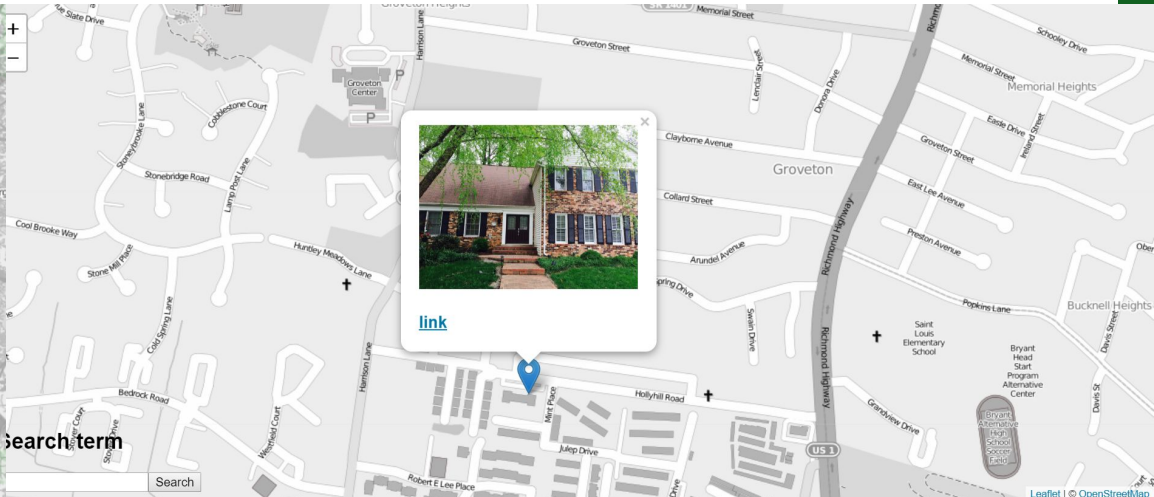
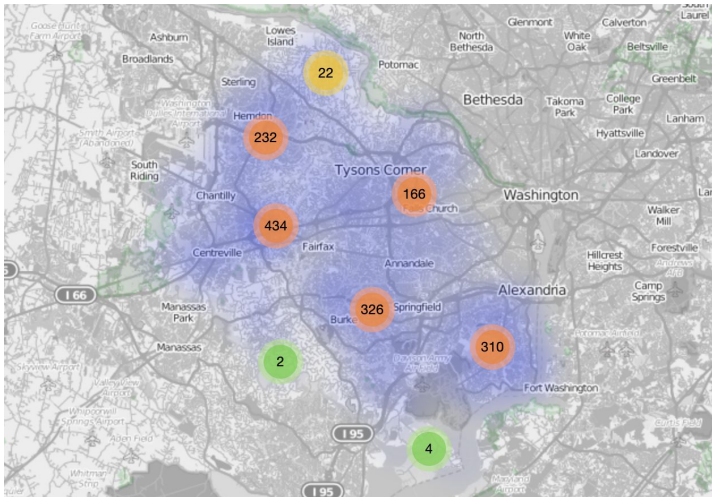
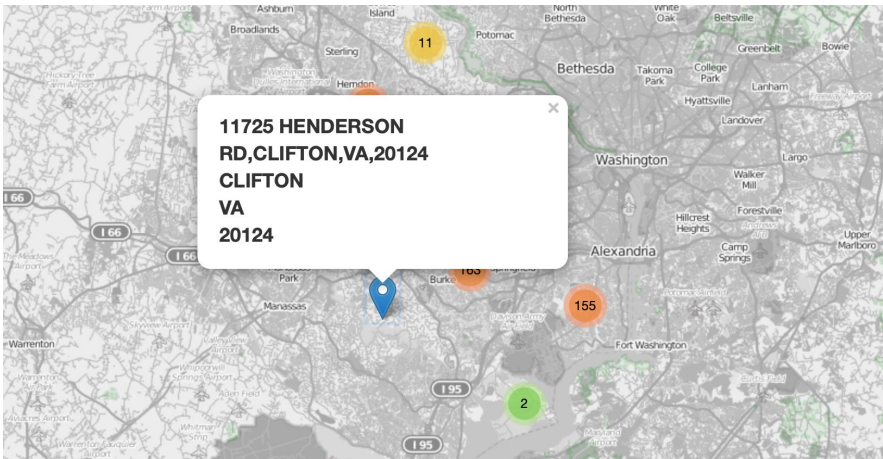
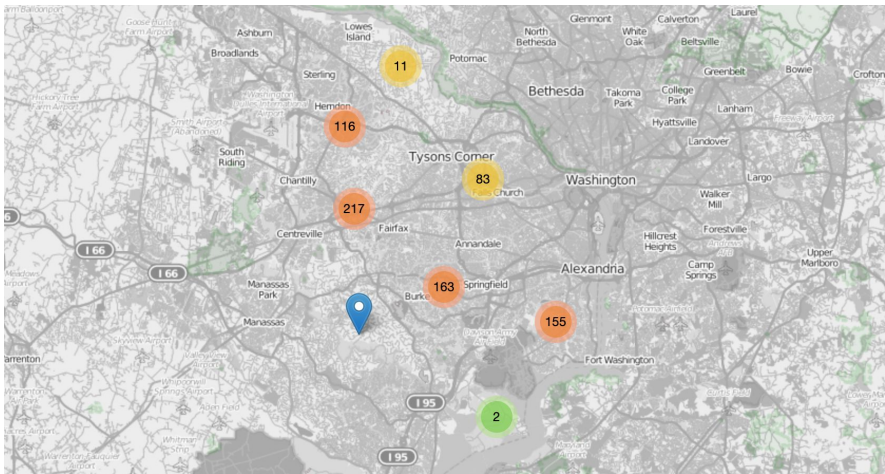
Volunteering mechanism to allow private landlords to contribute

Policy support from the government

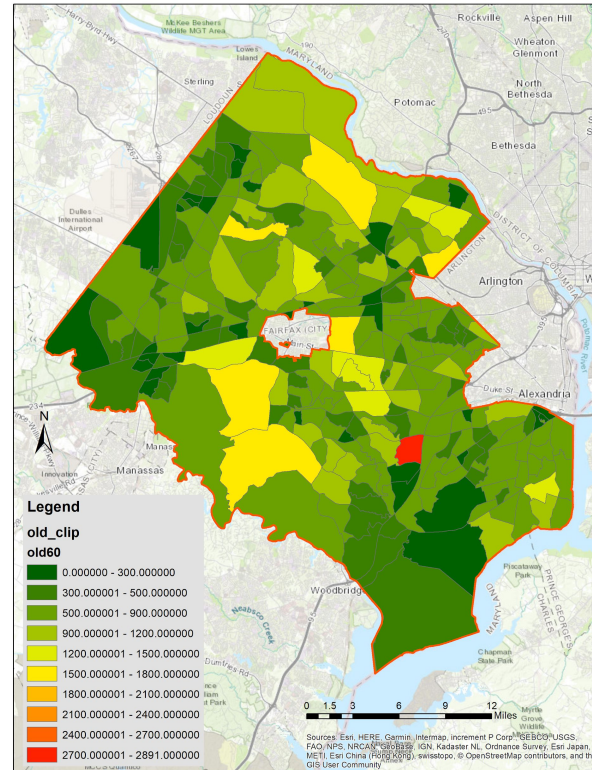
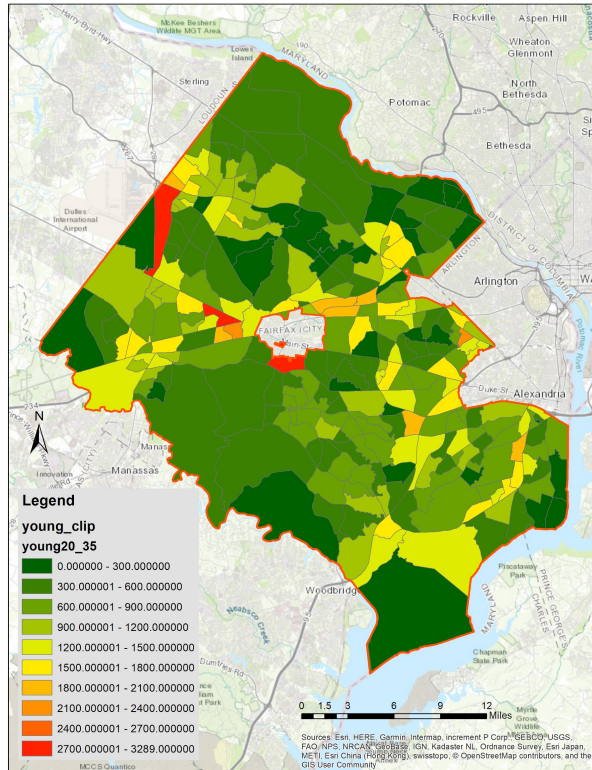
## Example

Google transit markup language to help create a huge boost of transit apps and websites markets.





# Spatial Demographic Analysis: Choropleth Map for Young (20-35) and Old (60+)





## Future Work

- Add more functions in our application and help to match older adults and young people together
- Build a platform for landlords and renters to help them communicate conveniently (directly messages)
- Add transportation information (CUE bus stops and Metro stations) to our information platform

# Thanks!

- <https://jsbin.com/yanekid/4/edit?html,js,output>