

Montgomery Parks Community Gardens

Hana Bulow, Carly Cascio, Justin Shapiro, Thalia Eigen,
Megan Williams, Theron Mercadel II



Project

- + Goal: Help the Montgomery Parks Community Gardens Program expand
- + Provide a report that includes:
 - A list of top 10 community garden locations in Montgomery County
 - Demographics information
 - Best practices for ADA compliance
 - Recommendations for fundraising





Outline

- ✚ Methodology of Site Selection
 - Map creation
 - Factors taken into account
- ✚ Analysis of our top sites
 - 8 parks
 - 3 churches
- ✚ Analysis of demographics
- ✚ ADA
- ✚ Fundraising strategy
- ✚ Further Research

Methodology



Creating the Parameters

Working with ArcMap

- Within 1 mile of red line metro
- Montgomery County Park Land
- Religious Institutions

Working with Google Earth

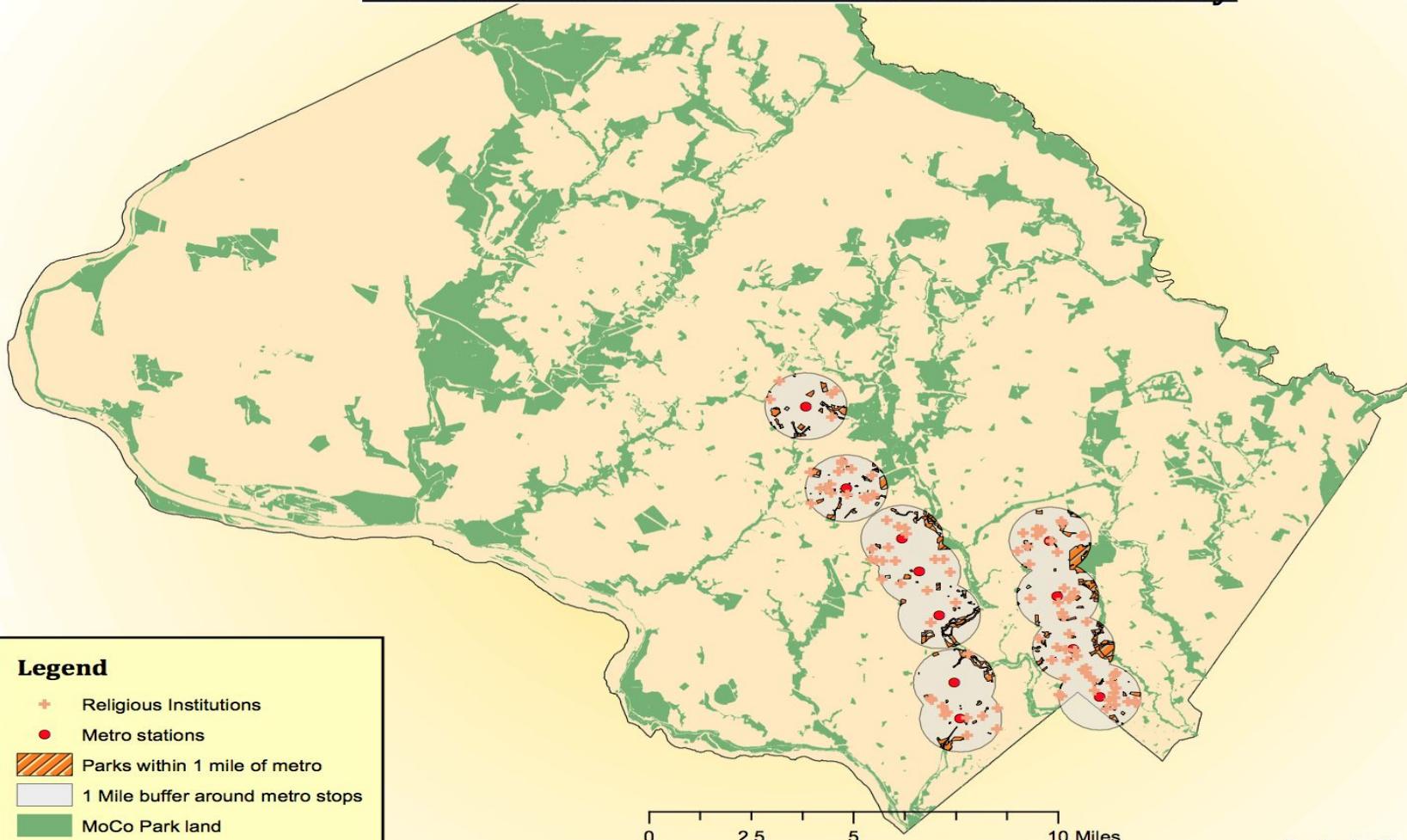
- Does the area have sun?
- What is the land being used for?
- Use ruler tool to ensure square footage
- Are there nearby roads, sidewalks, bus stops, metros



Our Selected Sites



Potential Park Sites Based on Metro Accessibility



Potential Community Garden Sites Based on Metro Accessibility



Shady Grove

Rockville

Twinbrook

White Flint

Grosvenor-Strathmore

Glenmont

Wheaton

Forest Glen

Medical Center

Bethesda

Silver Spring

Legend

Religious Institutions

Metro stations

One mile buffer of metro

Parks within 1 mile of metro

0 1.25 2.5 5 Miles

By: Justin Shapiro and Thalia Eigen

Potential Sites Near Shady Grove Metro



Potential Sites Near Forest Glen Metro (Silver Spring)



Wheaton

Carroll Knolls Evans Parkway NP

Sligo Dennis LP

General Getty Neighborhood Park

Forest Glen

Legend

 Religious Institutions

● Metro stations

 One mile buffer of metro

 Parks within 1 mile of metro

0 0.2 0.4 0.8 Miles

By: Justin Shapiro and Thalia Eigen

Site Selection

+ 8 potential Montgomery County Parks

- Evans Neighborhood Park
- King Farm Park
- Carroll Knolls local Park
- Mattie JT Stepanek Park
- Civic Center Park
- Blueberry Hill Local Park
- General Getty Neighborhood Park
- Sligo Dennis Local Park

+ 3 religious institutions worth contacting

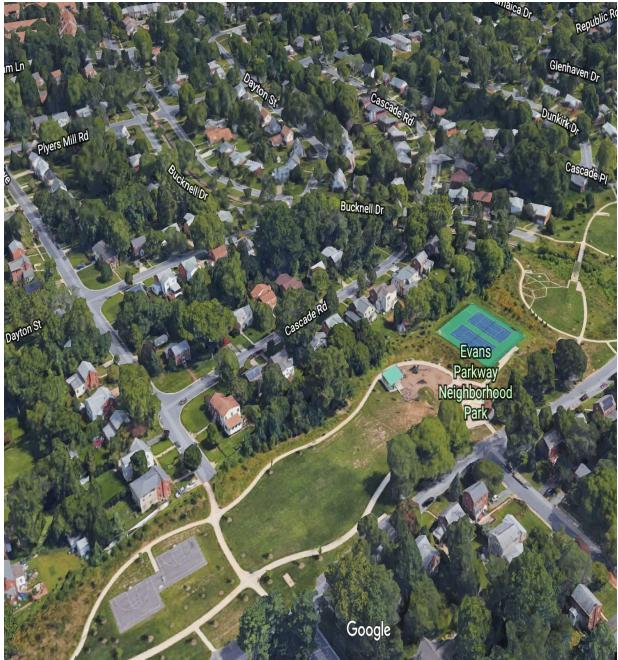
- First Korean Presbyterian Church
- Christian Science Church
- Silver Spring Assembly



Analysis of Sites



Evans Neighborhood Park

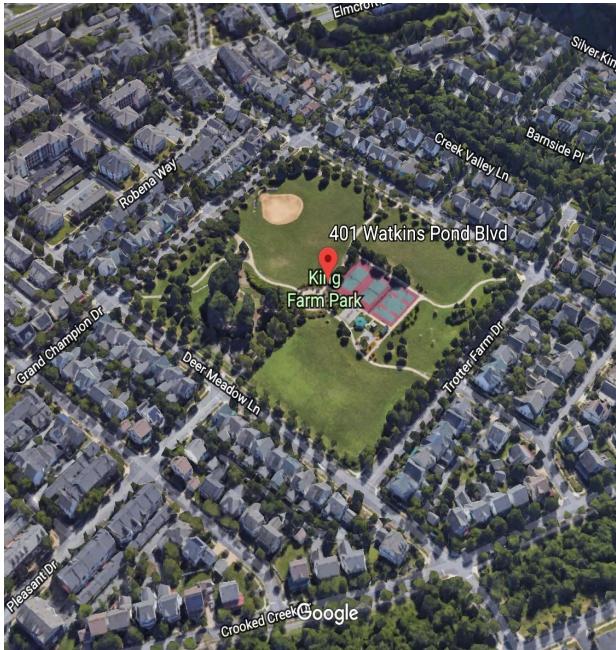


(Google Earth)

- Silver Spring, MD
- Up to 8,000 square feet
- $\frac{3}{4}$ mile from Forest Glen Metro Station
- Within $\frac{1}{2}$ mile of about 30 bus stops
- Street parking in surrounding neighborhoods
- No tree coverage



King Farm Park

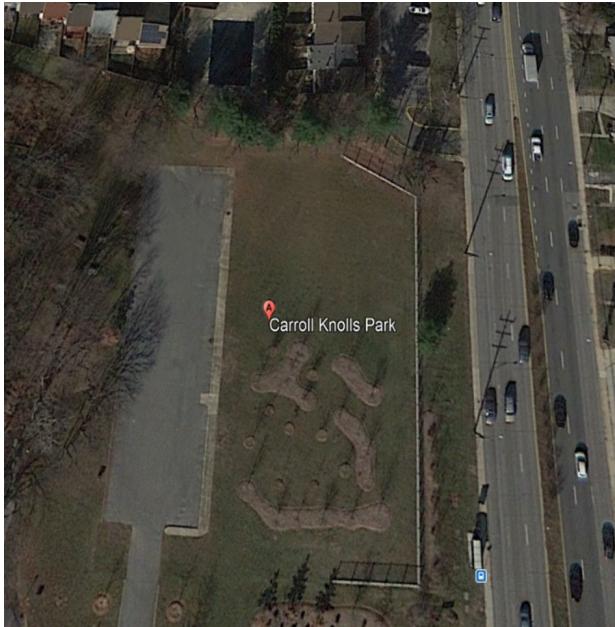


(Google Earth)

- Rockville, MD
- More than 30,000 square feet to work with
- $\frac{1}{2}$ mile away from Shady Grove Metro
- Within $\frac{1}{2}$ mile of approximately 30 bus stops
- Street parking in surrounding neighborhoods
- No tree coverage



Carroll Knolls Local Park

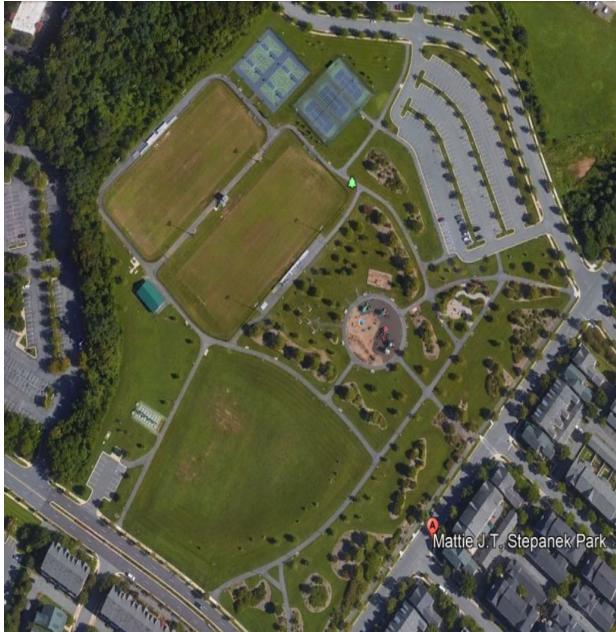


(Google Earth)

- Silver Spring, MD
- Approximately 8,500 square feet of space
- $\frac{3}{4}$ mile from Forest Glen metro station
- Within $\frac{1}{2}$ mile of approximately 30 bus stops
- Adjacent parking lot
- No tree coverage



Mattie JT Stepanek Park

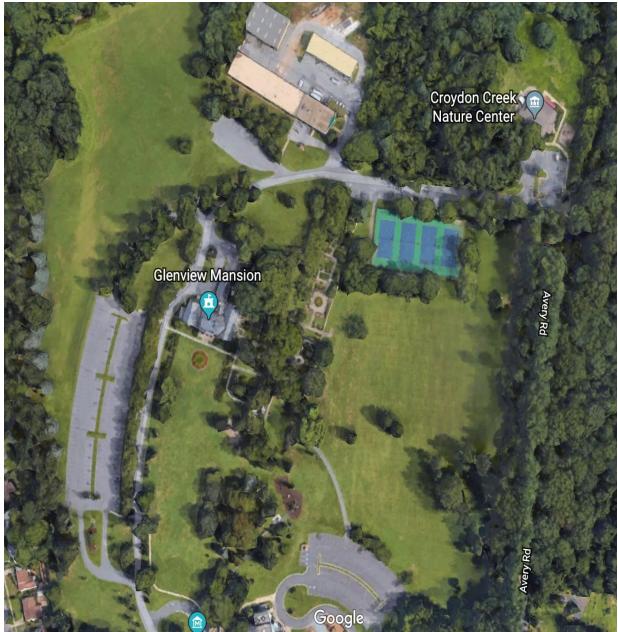


(Google Earth)

- Rockville, MD
- $\frac{3}{4}$ miles away from Shady Grove metro
- Within $\frac{1}{2}$ mile of at least 30 bus stops
- No tree coverage
- Adjacent parking lot



Civic Center Park

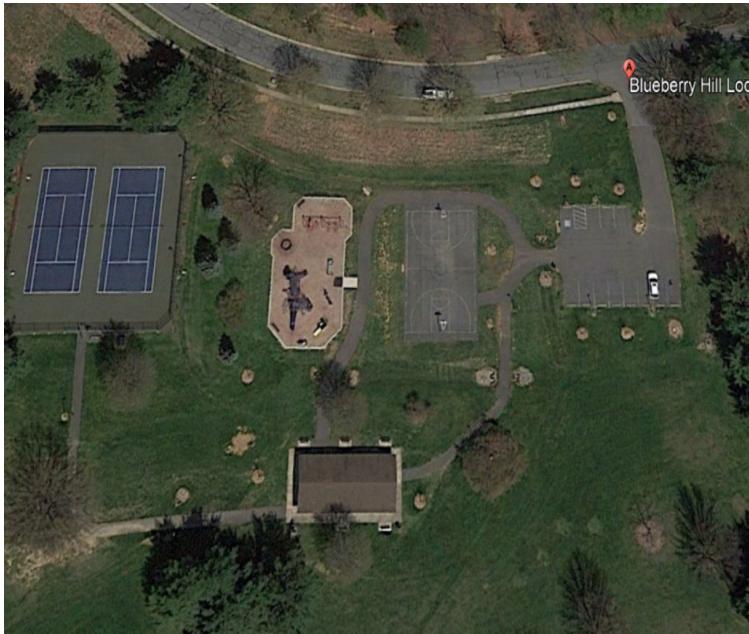


(Google Earth)

- Rockville, MD
- Over 75,000 square feet
- Trees, but also plenty of open fields
- Walkways
- At least 5 bus stops within .3 miles of site
- Closest metro: Rockville (about 1 mile)



Blueberry Hill Local Park



(Google Earth)

- Derwood, MD
- 6,000 Square feet
- Full sun, no tree cover
- Walkways
- Not as many bus stops because not on main road
- Closest metro: Shady Grove (Almost 1 mile)



General Getty Neighborhood Park

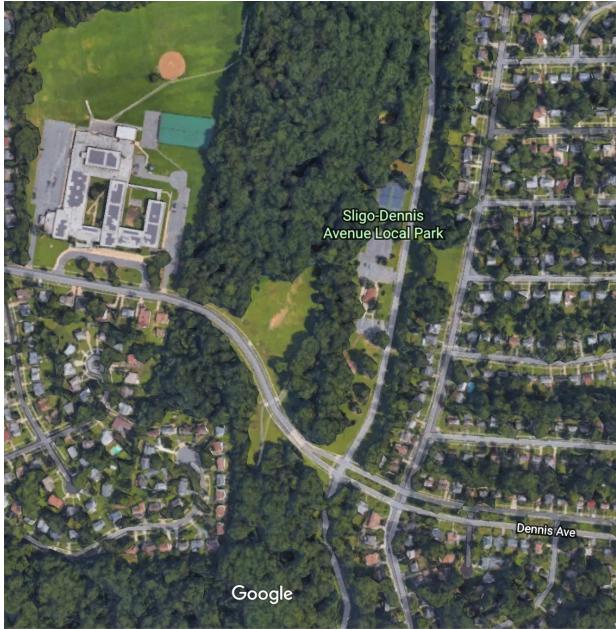


(Google Earth)

- Silver Spring, MD
- 8,000 square feet
- Residential neighborhood
- Walkways
- Full sun
- Within .3 miles of at least 10 bus stops
- Closest metro: Forest Glen



Sligo-Dennis Local Park

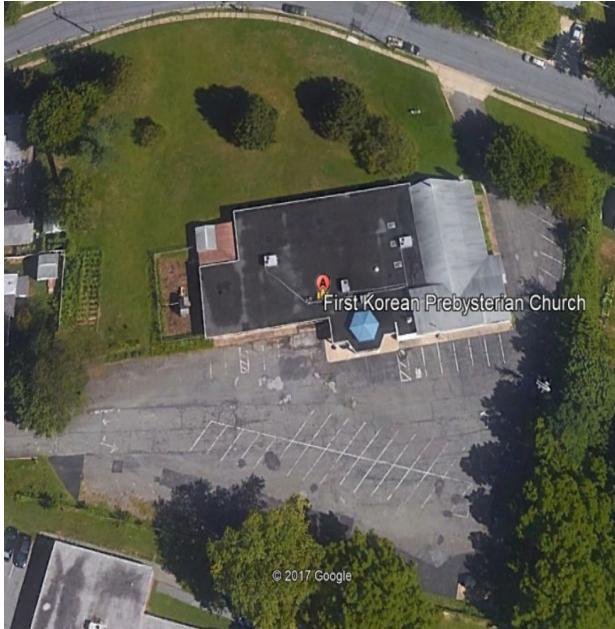


(Google Earth)

- Silver Spring, MD
- More than 20,000 square feet
- Part shade
- Near main road
- Within .5 miles of at least 10 bus stops
- Closest metro: Forest Glen



First Korean Presbyterian Church



(Google Earth)

- Rockville, MD
- More than 5,200 square feet
- Part shade
- Adequate parking
- Within .9 miles of metro and at least 3 bus stops
- Closest metro: Rockville



First Church of Christ, Scientist



(Google Earth)

- Chevy Chase, MD
- 5,200 square feet
- Part shade
- Near main road
- Within close proximity to at least 7 bus stops
- Closest metro: Bethesda



Silver Spring Assembly



(Google Earth)

- Silver Spring, MD
- More than 10,000 square feet
- Full Sun
- Near main road
- Within .3 miles of metro and at least 11 bus stops
- Closest metro: Glenmont



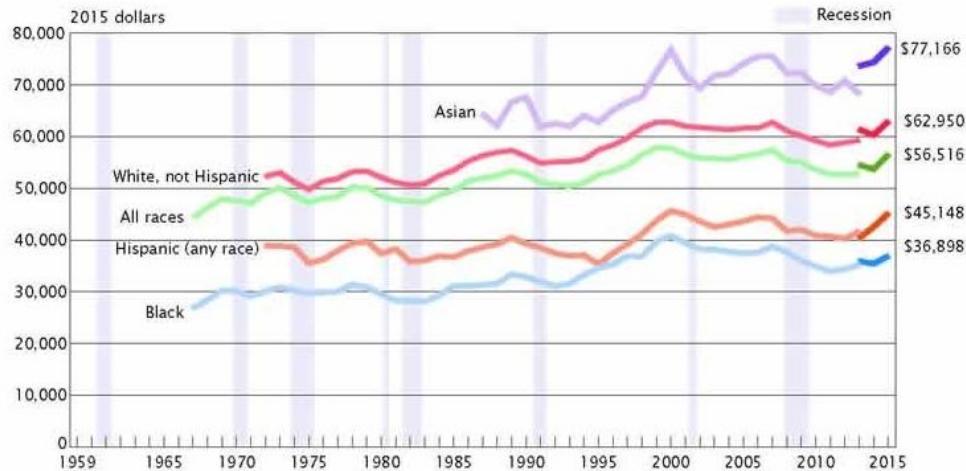
Demographics



How can demographic analysis help make a community garden successful?

- Disadvantaged populations are the most likely to utilize and benefit from community gardens.
- This includes low-income and minority populations

Figure 1.
Real Median Household Income by Race and Hispanic Origin: 1967 to 2015



Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. Median household income data are not available prior to 1967. For more information on recessions, see Appendix A. For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 1968 to 2016 Annual Social and Economic Supplements.



Parks

Name	Location	Average Income/Year	Race and Ethnicity
<i>Evans Neighborhood Park</i>	Silver Spring, 20902 Tract: 703902	76.6k	Hispanic: 33.8% Black: 17.9%
<i>General Getty Neighborhood Park</i>	Silver Spring, 20902 Tract: 703901	76.6k	Hispanic: 33.8% Black: 17.9%
<i>Carroll Knolls Local Park</i>	Silver Spring, 20902 Tract: 704000	76.6k	Hispanic: 33.8% Black: 17.9%
<i>Civic Center Park</i>	Rockville, 20851 Tract: 700903	82.2k	Hispanic: 28% Black: 9.5%
<i>Sligo Dennis Local Park</i>	Silver Spring, 20902 Tract: 703901	93k	Hispanic: 24.4% Black: 22.3%
<i>King Farm Park</i>	Rockville, 20850 Tract: 701211	101.5k	Hispanic: 9.2% Black: 11%
<i>Mattie JT Stepanek Park</i>	Rockville, 20850 Tract: 700718	101.5k	Hispanic: 9.2% Black: 11%
<i>Blueberry Hill Local Park</i>	Derwood, 20855 Tract: 700711	120.6k	Hispanic: 9.8% Black: 12.5%



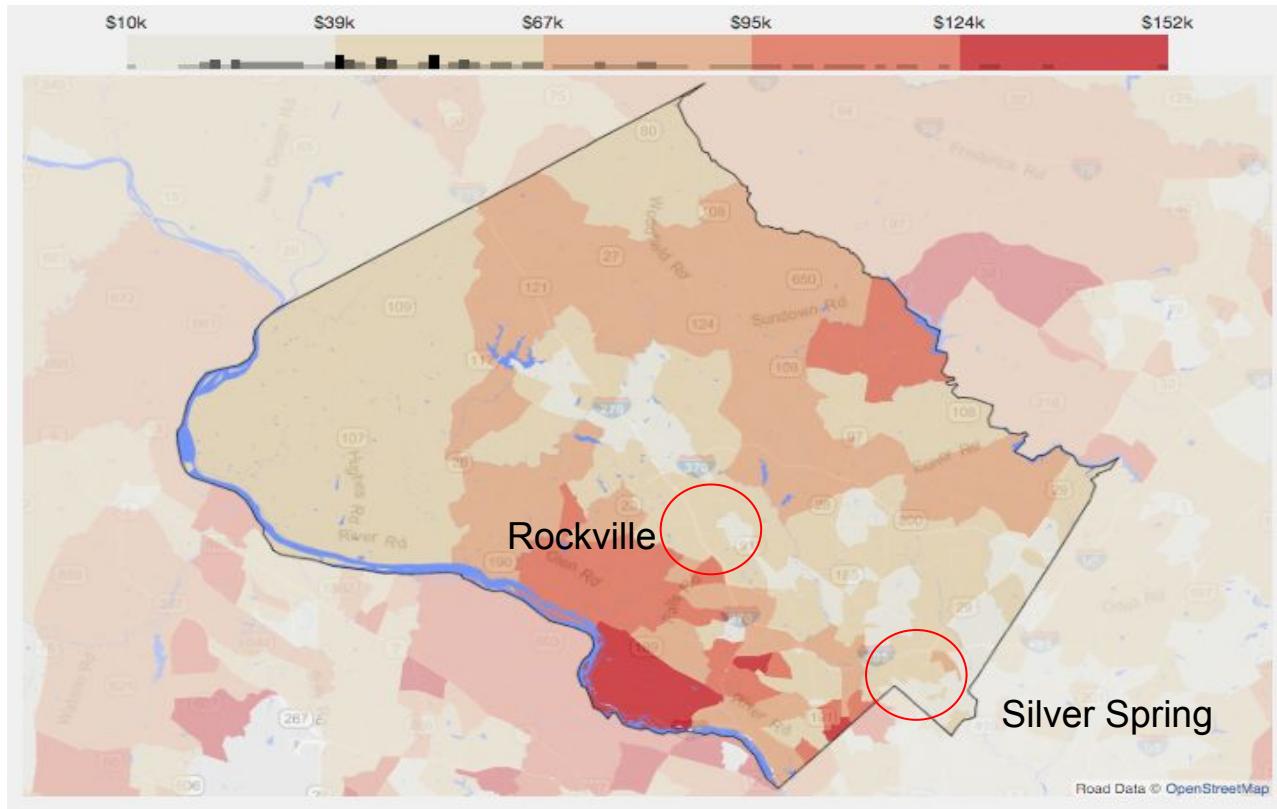


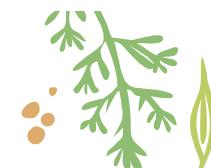
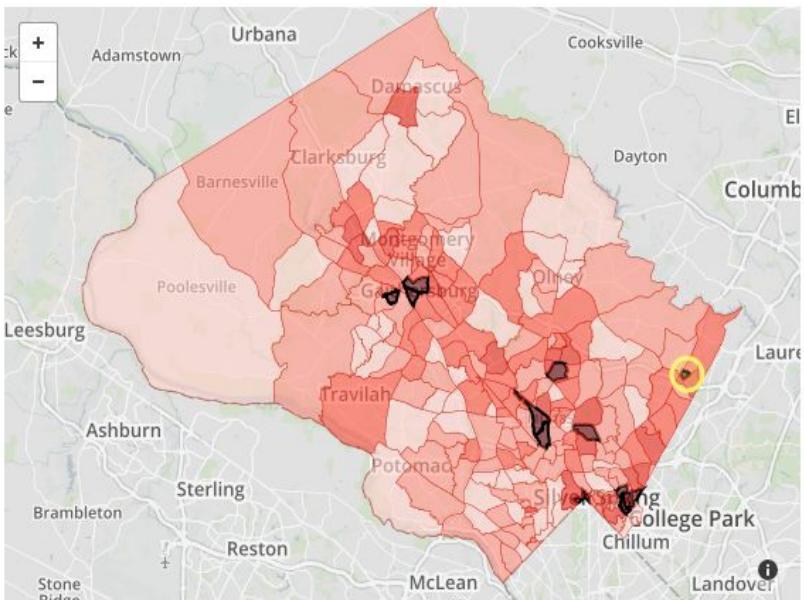
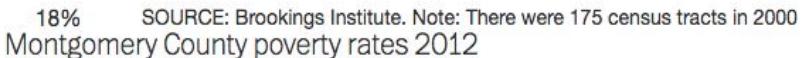
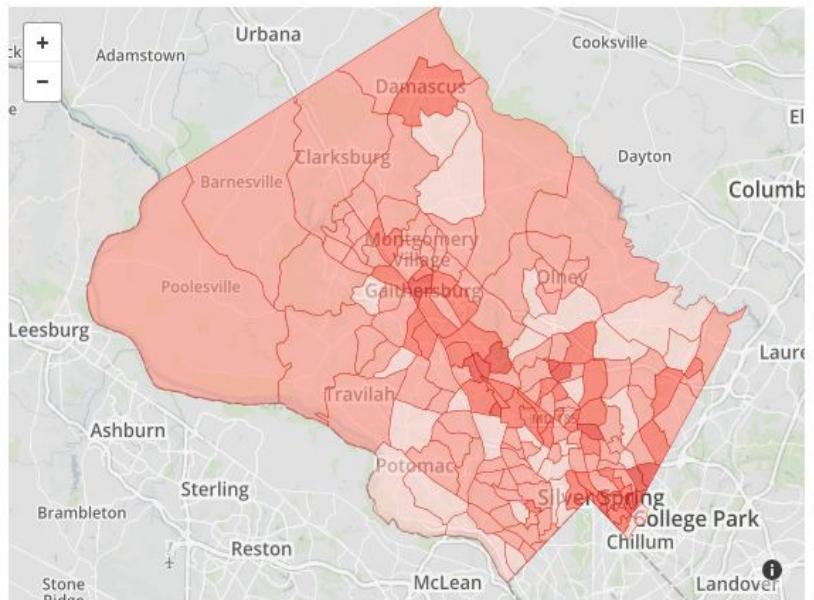
Churches

Name	Location	Average Income/Year	Race and Ethnicity
Silver Spring Assembly	Silver Spring, 20906 Tract: 703403	72.4k	Hispanic: 29.5% Black: 27.6%
First Korean Presbyterian Church	Rockville, 20851 Tract: 701101	82.2k	Hispanic: 28% Black: 9.5%
Christian Science Church	Chevy Chase, 20815 Tract: 705100	132.2k	Hispanic: 8.9% Black: 2.9%



Income Across the County





ADA compliance



Universal Design

- + Size and Space for Approach and Use
- + Equitable Use
 - Equal opportunity to grow and access the community garden



Design Characteristics

- + Work with Existing places (likely already in ADA compliance to begin with)
- + No “leftover” land (flat)
- + A ratio of Raised beds to standard plots
- + Open space
 - Maximize surface area adjacent to aisles
- + Add structures within the garden



Examples



Raised Beds and Garden Tables





- ⊕ “Needs less than 5 pounds of force to open”
- ⊕ Flared lock
- ⊕ Key guide
- ⊕ Blanks are also cheap and can be cut at any locksmith

<http://www.masterlocks.com/product/3488/no-2650-ada-locks-pushkey->



Pressure-Treated Wood Ramps



(Lean Farming)

- ⊕ Weatherproof
- ⊕ Pressure-treated wood is cheaper than concrete
- ⊕ Can be made slip resistant using grip tape and paints



Trellises

- ⊕ Maximize use of vertical space
- ⊕ Cheap to build/buy
- ⊕ Easier to install than a raised bed



Fundraising



Fundraising Strategy

General Findings:

- + Strong relationship with the Montgomery Parks Foundation
- + Funding is site-specific
- + Public - private partnerships
 - o open up opportunities for fundraising, grants, information sharing, etc.
- + A land trust to conserve areas for future gardens



Grants

- ⊕ Project Orange Thumb
 - Application: January 1st
 - Yearly, \$3,500
- ⊕ USDA's Community Food Projects Competitive Grants Program
 - Federal Grant, Complex
 - Maximum of \$125,000 per Community Food Project
- ⊕ GRO1000 Grassroots Grants
 - Application: January 2nd
 - Up to \$1,500 per greenspace/ garden



Private- Public Partnerships

- + Montgomery County Public Schools
 - Edible Gardens
 - Adventure Club

- + University of Maryland Extension
 - 4-H and Youth
 - Nation-wide hands-on youth development program



Private- Public Partnerships

Nonprofits

- A Wider Circle
 - Provides resources to help people out of poverty
- Everybody Grows
 - Supports local garden creation, including on church property

Faith-based

- Presbyterian Self Development of People Grant furthered through Church Partnership
- First Korean Presbyterian Church



Land Trust

Why a land trust?

- Faster action, legal rights, access to GIS specialists and other information, management of land for future

Urban Ecosystems Restoration

- Already in Montgomery County
- Conservatory purposes in regards to species/habitats
- Eco-Functioning Spaces

Creation of a Montgomery Parks/Gardens Land Trust



Recommendations for Further Research

- ⊕ Collect data on productivity
- ⊕ Talk to experienced gardeners
- ⊕ Collect information on challenges from gardeners
 - Soil problems
 - Cover crop problems
 - Climate change



(Washington Post)

Recommendations for Further Research

- ⊕ Further information on faith-based partnerships
- ⊕ Other private entities for land
 - Assisted living and nursing homes
 - Community centers
- ⊕ Land trust for gardens & more
 - Creation of a trust specifically for Montgomery Parks Service as a whole





Thank you!



References

Turque, B. (2014, September 06). Affluent Montgomery County has pockets of poverty, mostly in the east. Retrieved October 17, 2017, from https://www.washingtonpost.com/local/affluent-montgomery-county-has-pockets-of-poverty-mostly-in-the-east/2014/09/06/e09dbb6a-1cea-11e4-82f9-2cd6fa8da5c4_story.html

Armstrong, Donna. 2000. A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health & Place* 6 (2000) 319-327

Race and Ethnicity in Montgomery County, Maryland (County). (n.d.). Retrieved from <https://statisticalatlas.com/county/Maryland/Montgomery-County/Race-and-Ethnicity>

Household Income in Montgomery County, Maryland (County). (n.d.). Retrieved from <https://statisticalatlas.com/county/Maryland/Montgomery-County/Household-Income>

Figure 1 Wooden Ramp. From "Ramp Calculator and 2012 IRC Building Codes," by David King, 2014
<http://learnframing.com/wp-content/uploads/2014/10/wheelchair-ramp-calculator.jpg>.

Copyright [2014] by David King. Reprinted with Permission

Project Orange Thumb. (n.d.). Retrieved November 1, 2017, from <http://www2.fiskars.com/Community/Project-Orange-Thumb>

National Institute of Food and Agriculture. (n.d.). Retrieved November 1, 2017, from <https://nifa.usda.gov/funding-opportunity/community-food-projects-cfp-competitive-grants-program>
GRO1000. (n.d.). Retrieved November 1, 2017, from <https://scottsmiraclegro.com/responsibility/gro1000/>

Invest in the Future of A Wider Circle. (n.d.). Retrieved November 1, 2017, from <http://awidercircle.org/invest/>
Everybody Grows | About Us Home Gardens Washington DC (n.d.). Retrieved November 1, 2017, from <http://everybodygrows.org/about/>
Presbyterian Church. Apply for a grant | Presbyterian Committee on the Self-Development of People. (n.d.). Retrieved November 4, 2017, from <https://www.presbyterianmission.org/ministries/sdop/apply-grant/>

Urban Ecosystems Restoration . (n.d.). Retrieved November 1, 2017, from <http://www.urbanecosystemrestorations.org/>