1. Ideas

1 Race/Vacant Lot

% Library   C. Center

2 Rent/own Vacant

Library C. Center

3 Income/Vacant

100,000+ Library C. Center

4 Feel included in neighborhood decisions?

Yes
Some
Little
No
1 2 3 4 5 6 ....
Length in D.C

5 Included in neighborhood Decisions?

Yes
Some
Little
No
Rent   Own

6 Vacant top choice
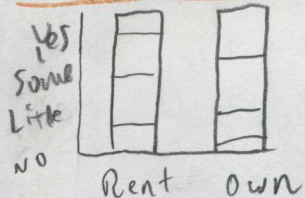
7 Afford to pay rent in my neighborhood?

Yes   No

8.

Agree
Disagree
1 2 3 4 5 6 ....
length in DC
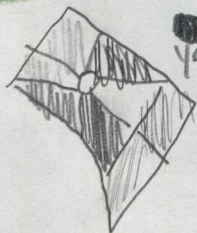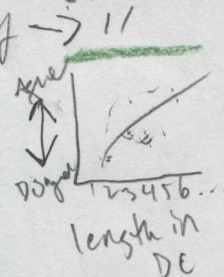
9. Median income among single employed men/women w/o roomies
> 194.0.

income
ed HS BACH M.A
level
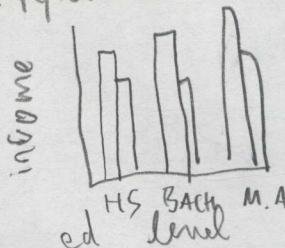
2. Filter

9 is pretty niche and stands alone

4 + 8 could show correlation but may have clusters near axes intersection

1, 2, 3, 5 Bar charts w/ range of content. Could combine

3 Categorized by color
- 🟦 Vacant lot preferences
- 🟩 Affordability and neighborhood
- 🟨 Income gap by gender
- 🟧 neighborhood actions

4. Combine + Refine

Affordability map + trendline
7 + 8

Neighborhood decision inclusion sex, race, and homeownership status

4 + 5 + demographic details

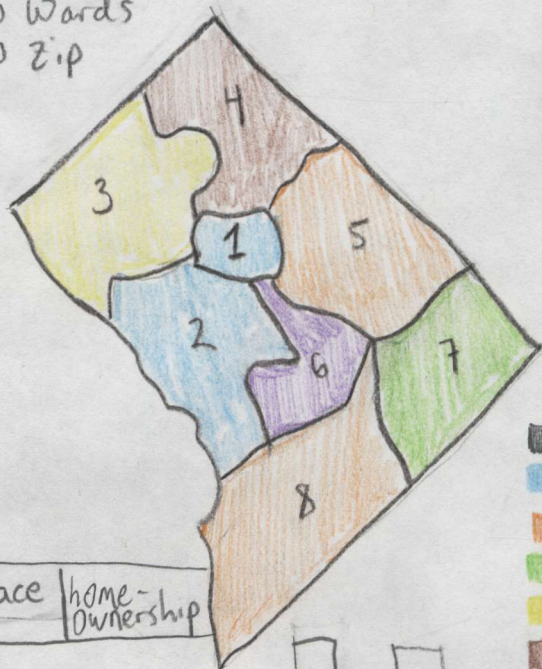Vacant lot preferences
1 + 2 + 3 + 6
Best map + bar chart combination?

Layout

Vacant lot preference	median income	race	homeownership rate

☒ Show Wards
☐ Show Zip

income	race	home-ownership

# of votes (y-axis: 0, 40, 80, 120, 160, 200, 240)

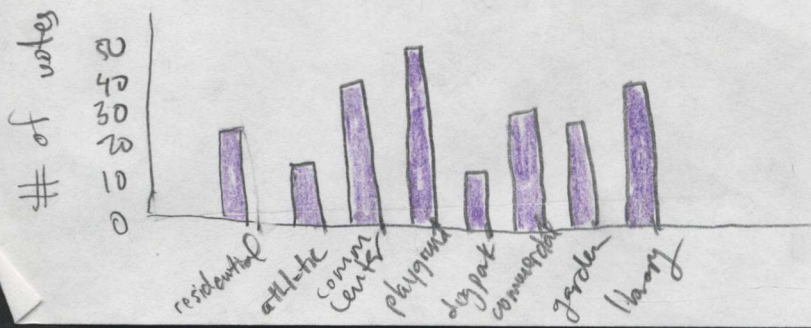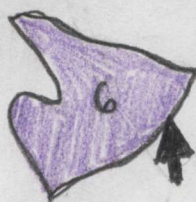x-axis: residential, athletic, community center, playground, dog park, commercial, garden, library

Legend:
- athletic fields
- residential
- community center
- playground
- dog park
- commercial use
- community garden
- library
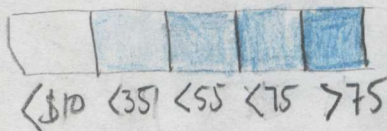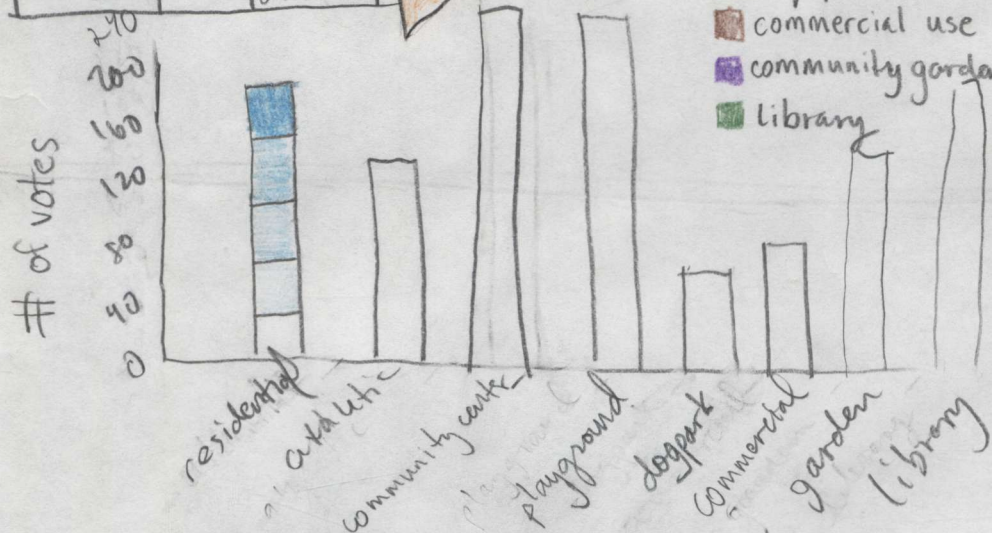
Color scale: <$10, <35, <55, <75, >75

Zoom/focus

# of votes (y-axis: 0, 10, 20, 30, 40, 50)

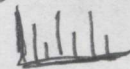x-axis: residential, athletic, comm center, playground, dogpark, commercial, garden, library

OPERATIONS

Vacant	income	race	own-rent

- Change the map to see wards broken down by 4 attributes

  - explore the details of respondents w/in a particular ward

- Scroll down to see 3 more bar charts that show data from all survey respondents broken down by race, income and homeownership rate

DISCUSSION

+ Shneiderman's mantra applied

— Can't see ward bar charts side by side

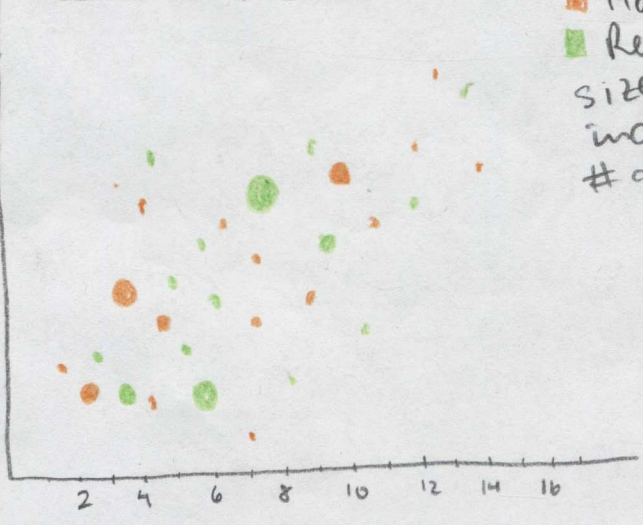— Survey may not be as representative as census

LAYOUT

Extent you feel included/want to be included in neighborhood decisions

| sex | race | own/rent |

🟧 Homeowner
🟩 Renter
size of circle indicates # of respondents

To a great Extent

Somewhat

Very Little

Not at All

2 4 6 8 10 12 14 16

Years Living in D.C.

ZOOM/FOCUS
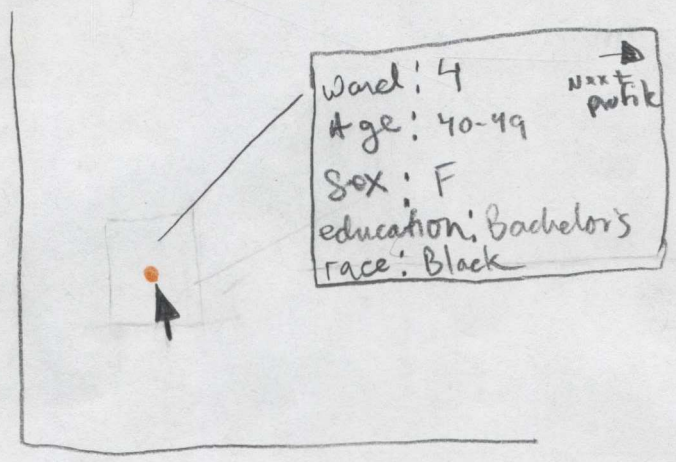
Ward: 4
Age: 40-49
Sex: F
education: Bachelor's
race: Black

Next Profile

OPERATIONS

| SEX | RACE | own/rent |

• Click buttons to change colors of dots to indicate the race, sex, homeownership of a survey respondent

• Hover over a dot to see a respondent's profile

| WANT | FEEL |

• dropdown menu changes question from want to be included to ~~feels included~~

DISCUSSION

+ can determine which factors contribute to neighborhood inclusion/exclusion

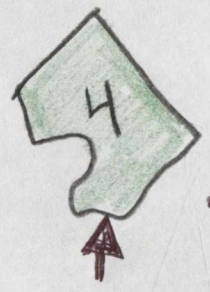− can't filter by ward or neighborhood

Can D.C. residents afford to continue living in their neighborhoods?

James Marshall | March 4/19

Sheet 4

Look up values
Explore distribution

OPERATIONS

- Hover over a ward to explore its distribution of answers

  ▽ wouldn't go to Neighborhood school

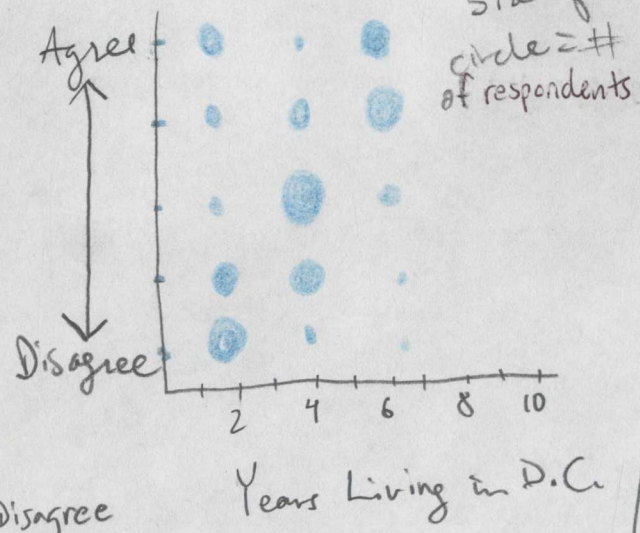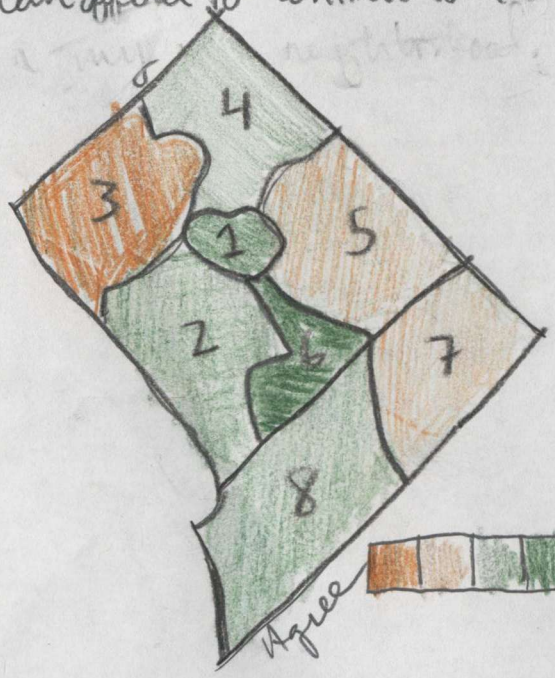- Drop-down menu to change map to other Agree/disagree survey questions

DISCUSSION

+ All of the Agree/disagree questions on same vis.

− Length in D.C. chart may be surplus to requirements

LAYOUT

▽ Affordability

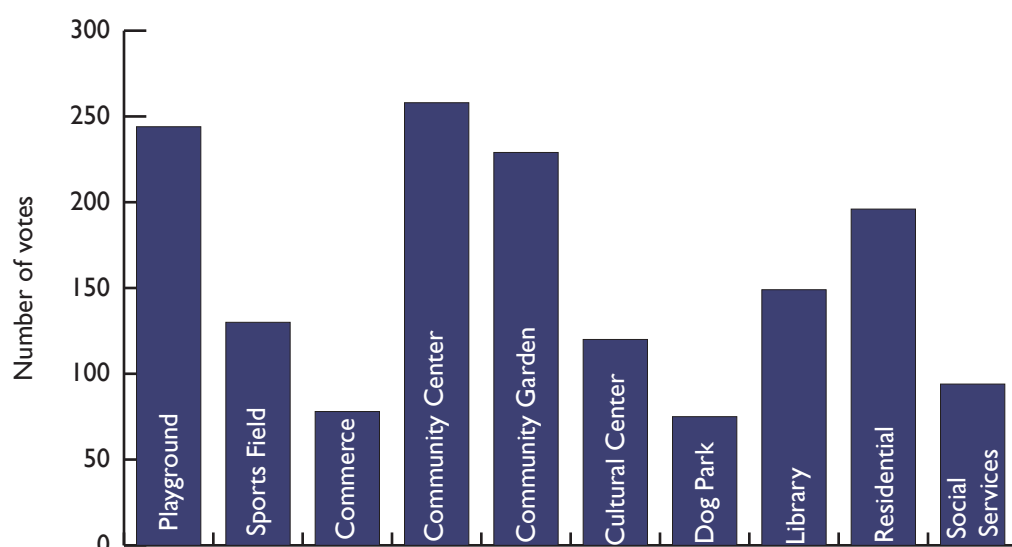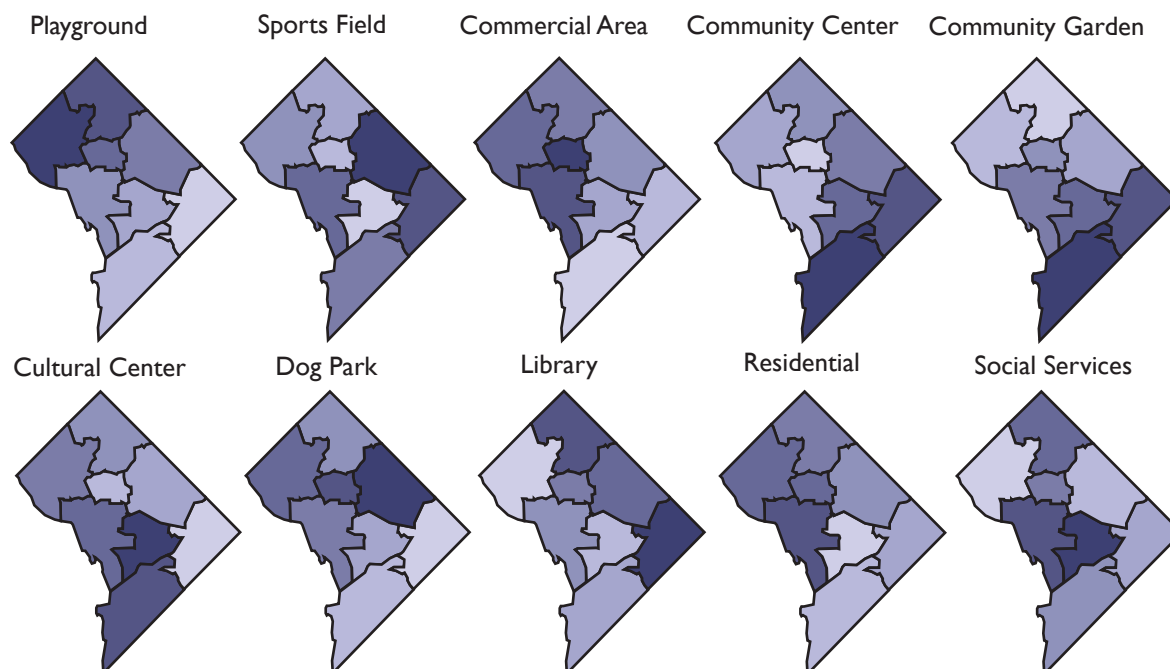I can afford to continue to live in my neighborhood.

Size of circle = # of respondents

Agree ↑
Disagree ↓

Years Living in D.C.

Disagree ← → Agree

ZOOM/FOCUS

Ward 4 DISTRIBUTION

Agree : 11
Somewhat : 25
undecided : 10
Somewhat : 15
Disagree : 7

How D.C. residents want to develop vacant lots

Playground   Sports Field   Commercial Area   Community Center   Community Garden

Cultural Center   Dog Park   Library   Residential   Social Services

Number of votes — bar chart categories: Playground, Sports Field, Commerce, Community Center, Community Garden, Cultural Center, Dog Park, Library, Residential, Social Services

Zoom-Focus

• The chart just below the small-scale maps will show the distribution of all survey respondents' views on how to use vacant lots.

• Scrolling down, there will be charts showing residents' preferences broken down by race, income, and whether the residents rents or owns their home.

• Commentary and analysis by sociology and urban planning experts will accompany the visualizations and guide the reader.

Land use preference: homeowners v. renters

Rent Own
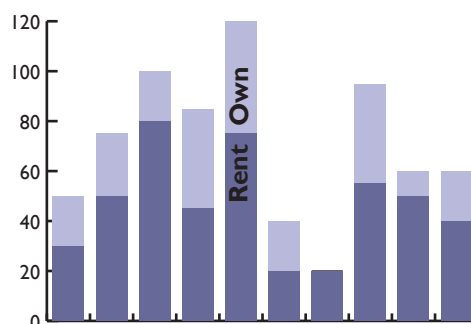
Land use preference by income
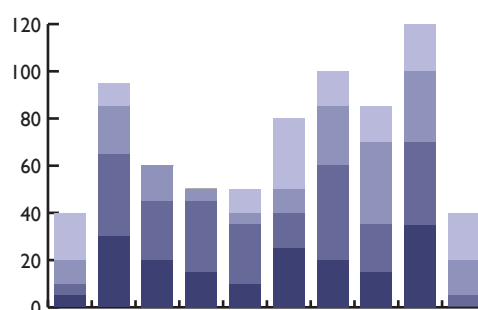
Operations

• When hovering over a ward in any of the maps, that ward will be highlighted in each map. The number of votes each land-use preference got in that ward will populate below the each map as seen below.

Community Garden
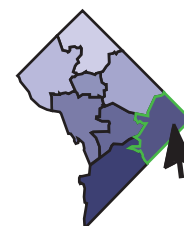
Ward 7: 26

Discussion

+ Allows the user to spot trends based on geography, income and homeownership.

+ Text accompanying charts will help contextualize the data for casual readers.

− Sample size is uneven across wards. 40 percent of respondents are Ward 8 residents.

− Interactivity is limited, but effective.

Sources:
(1) http://opendata.dc.gov/data-sets/ward-from-2012
(2) https://blog.webkid.io/multi-ple-maps-d3/
(3) https://bl.ocks.org/mbos-tock/1134768