Johnson County
Household Hazardous
Waste Site

TAYLOR SHULSE
Materials & Methods

- American Community Survey (ACS)
  - Most up to date data
- U.S. Census Bureau
  - Reliable data not estimates
- Arc Map GIS
- Excel
Arc Map GIS

- Used to create, view, edit, and analyze geospatial data.
- Use of symbols, and chlorophyll areas to represent data.
- Create layers that are able to be overlaid.

http://gis.townofchapelhill.org/_img/ClipArt-GIS.gif
Restrictions

- Used 2010 Census data
  - Correlates with our map data for the population and population density
- American Community Survey is Estimated based on the population surveyed
  - Pulled in information that was relevant to research, and not found in Census data
- Had to extrapolate data for Olathe HHW for the missing month
Introduction

- Household Hazardous Waste (HHW) represents waste is produced as a result of normal household activities.
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Among the most common of these are:

- Pesticides, paints, and varnishes
- Paint thinners and solvents
- Motor oil, antifreeze
- Household cleaners
- Swimming pool chemicals
- Fluorescent bulbs, electronics
Introduction

- Agency for Toxic Substances and Disease Registry (ATSDR)
Introduction

- Agency for Toxic Substances and Disease Registry (ATSDR) (2)
  - Mitigate or prevent adverse human health effects
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- Priority Health Conditions (PHCs) (4)
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  - Mitigate or prevent adverse human health effects
- Priority Health Conditions (PHCs) (4)
  - Cancers
  - Reproductive Disorders
  - Kidney Dysfunctions
  - Immune disorders
  - Lung and respiratory disease
  - Liver dysfunctions
  - Neurotoxic disorders
Johnson County is located south west of Kansas City, and boarders the state line of KS, MO.
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2010 census, report the county population as 544,179.
Johnson County Location

- Johnson County is located south west of Kansas City, and boarders the state line of KS, MO
- 2010 census, report the county population as 544,179
- 19 Cities in the County, County seat is in Olathe, the most populous City being Overland Park
210,278 Households in the County
- 143,509 families
  - 56% married couple
  - 35% with children under 18 living in household
Demographics

- 210,278 Households in the County
  - 143,509 families
    - 56% married couple
    - 35% with children under 18 living in household
      (U.S. Census)
- Highest median household income in Kansas
- Highest per-capita income in Kansas
- Represents 28% of Kansas’s Income

Community Commons

![Population Pyramid](image)
Healthy People 2020 defines health equity as the "attainment of the highest level of health for all people.

- Everyone deserves a fair chance to lead a health life.
- No one should be denied this chance because of who they are or their socio-economic opportunities.
Overview

- HHW site information:
  - Johnson County Population Served
  - City of Olathe Population Served
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- Race & Ethnicity Factors:
  - Racial makeup of Population
    - How Race & Ethnicity might affect who we serve
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- Mobile Pickup Service:
  - Disabilities
  - Households with No Motor Vehicle
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- Poverty Factors on the Population:
  - Ethnicity in Poverty
    - How they may benefit from the Services Provided
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- Poverty Factors on the Population:
  - Ethnicity in Poverty
    - How they may benefit from the Services Provided

- Household Density:
  - New home owners
  - People migrating into the County
Johnson County HHW

- 10 complete years worth of data 2005-2015
- 91,976 people served in 10 years
  - Serve ~8,000 a year

Number of Appointments:
- 1,000,000 - 50,000,000
- 50,000,001 - 150,000,000
- 150,000,001 - 250,000,000
- 250,000,001 - 550,000,000
- 350,000,001 - 450,000,000
- 450,000,001 - 2,264,000,000
City of Olathe HHW

- Olathe Serves ~6000 people per Year
  - Almost 70% from two zip codes
    - 66061 = 30%
    - 66062 = 37%
Combined Data For Both HHW Sites

- Allows us to get a more complete view of the areas we are serving
- Average ~14,000 per year
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Population Density

- Population density map:
  - We are serving the general population
  - Areas that are not served due to less population in those areas
Racial Makeup
- 87.0% White
Racial Makeup

- 87.0% White
- 4.2% Asian
- 4.3% Black
- 0.4% Native American
- 0.01% Pacific Islander
- 1.55% Other Races
- 2.5% from Two or More Races
Racial Makeup

- 87.0% White
  - 7,678
- 4.2% Asian
  - 353
- 4.3% Black
  - 441
- 0.4% Native American
- 0.01% Pacific Islander
- 1.55% Other Races
- 2.5% from Two or More Races
Ethnicity

- 93% Non-Hispanic
- 7% Hispanic/Latino
Ethnicity

- 93% Non-Hispanic
  - 7440
- 7% Hispanic/Latino
  - 643

Pie chart showing proportions of Non-Hispanic and Hispanic/Latino.
Government Definition of Limited English

- Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- https://www.lep.gov/faqs/faqs.html
Limited English poses a problem to our program. Website is written in English, and brochures are written in English.
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- Brochures are written in English

How do We Reach This Population
- Is it a certain Ethnicity or Race?

Community Commons
- Johnson County, KS (3.8%)
- Kansas (4.46%)
- United States (8.6%)
Race:
- White 60.23%
- Asian 27.36%
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Ethnicity:
- Spanish 55.86%
- Asian 23.96%
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Limited English

- Ethnicity:
  - Spanish 55.86%
    - 12,189
  - Asian 23.96%
    - 5,224
Mobile Pickup

- Two Factors We Looked at
Mobile Pickup

- Two Factors We Looked at
  - People With Disabilities
  - Households With No Motor Vehicle
Mobile Pickup

Two Factors We Looked at

- People With Disabilities

Population with Any Disability by Age Group, Percent

- Johnson County, KS (8.61%)
- Kansas (12.26%)
- United States (12.25%)

Community Commons
Mobile Pickup

Two Factors We Looked at

- Households With No Motor Vehicle
- 7,700
  - 1.2% Home Owners
Mobile Pickup

- Two Factors We Looked at
  - Households With No Motor Vehicle

Households with No Motor Vehicle

1 Dot = 5
Mobile Pickup

- **Two Factors We Looked at**
  - Households With No Motor Vehicle
  - Disabled Older Population
  - Currently average ~50 pickups a year
  - Need to increase our outreach and information about our mobile pickup service.
  - Place information about service in retirement homes
PRELIMINARY ESTIMATE OF WEIGHTED AVERAGE POVERTY THRESHOLDS FOR 2015

<table>
<thead>
<tr>
<th>Size of Family Unit</th>
<th>Estimated Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person (unrelated individual)</td>
<td>$12,085</td>
</tr>
<tr>
<td>Under 65 years</td>
<td>12,331</td>
</tr>
<tr>
<td>65 years and over</td>
<td>11,367</td>
</tr>
<tr>
<td>2 people</td>
<td>$15,397</td>
</tr>
<tr>
<td>Householder under 65 years</td>
<td>15,953</td>
</tr>
<tr>
<td>Householder 65 years and over</td>
<td>14,343</td>
</tr>
<tr>
<td>3 people</td>
<td>$18,872</td>
</tr>
<tr>
<td>4 people</td>
<td>24,259</td>
</tr>
<tr>
<td>5 people</td>
<td>28,729</td>
</tr>
<tr>
<td>6 people</td>
<td>32,512</td>
</tr>
<tr>
<td>7 people</td>
<td>36,971</td>
</tr>
<tr>
<td>8 people</td>
<td>41,017</td>
</tr>
<tr>
<td>9 people or more</td>
<td>49,079</td>
</tr>
</tbody>
</table>
6.5% or 36,000 individuals are living in poverty in the County.
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Ethnicity

- Hispanic Population: 19%
  - 6840 people
6.5% or 36,000 individual are living in poverty in the County
Poverty

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- Ethnicity:
  - Hispanic Population 19%

- Suggestion:
  - Promote the Free Store.
Reaching Households

- Where are households most dense in Johnson County
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  - Occupied Household Density map
Reaching Households

- Where are households most dense in Johnson County
  - Occupied Household Density map
- Who is migrating into the County
  - How can we reach new home owners
Household Density

- Target areas with higher density of occupied homes
- Less waste in unneeded flyers
Population Migrating into the County

- From 2014-2015 35,706 new residents enters the county
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- Mainly
  - White 28,677
    - Black/African American 2,994
    - Multiple Race 1,159
Population Migrating into the County

- Out Reach
Population Migrating into the County

- Out Reach
  - Work with the cities within Johnson county to provide our flier:
    - In their new home owners packet
    - Account change in utilities
Current Outreach

- Payed Media
  - 5-10 thousand dollars on current outreach (radio, Internet)
  - Limited Hispanic outreach on Spanish radio stations
- Free Media
  - Social media, work with city websites & news letters
- Mobile Pickup
  - ~50 per year
Suggestions

- Collects real time data from customers visiting the site or through the online appointments
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- Make flyers & website easy to read and understand when making an appointment
- Consider translating information into Spanish on both the website and flyers
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- Make flyers & website easy to read and understand when making an appointment
- Consider translating information into Spanish on both the website and flyers
- Set up an outreach program to the disabled, homebound communities, and households with no motor vehicle for mobile collection services


Questions?
Poverty

Other Race

1 Dot = 5
Olathe HHW