City of St. Louis Obesity Report

Department of Health
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City of St. Louis Obesity Report

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Executive Summary

Mayor Francis Slay identified reducing obesity by five percent by 2018 as a key goal in his Sustainability Action Agenda for the City of St. Louis. To meet this goal, the Department of Health (DOH) developed and released the City's Obesity Plan in May, 2014. This report is a supplement to that initial plan and serves to set the benchmark of obesity rates in the City.

The City of St. Louis Department of Health (DOH) obtained and analyzed almost 172,000 driver's license records from the Missouri Department of Motor Vehicles (DMV) and calculated adult body mass indexes for each record to determine rates of adult overweight and obesity for various demographics and geographies. Rates of overweight and obesity varied widely among several variables, including age, gender, and geography.

Rates of overweight and obesity vary by age and gender and there are significant geographic disparities in rates of overweight and obesity. Racial disparities in rates of overweight and obesity were not directly available from DMV records but attempts were made to use neighborhood racial composition as proxy.

Of all City residents included in the analysis (n = 171,894), 60.9 percent are overweight or obese according to their driver's license data. Over a quarter (26.9%) of residents are obese, and fewer than two in five (38.3%) are normal weight.

The ZIP Codes with the highest rates of overweight and obesity (> 70%) are all located in the northern half of the City: 63136, 63147, 63115, 63120, 63120, 63107, 63113, 63106, and 63137. Northern corridor ZIP codes are more frequently majority-Black and have higher poverty rates than central and southern corridor ZIP codes, suggesting a link between weight status and socioeconomic status (e.g., race and income).

Rates of overweight and obesity are also significantly correlated with age ($X^2 = 10{,}390.3$, $p < 0.001$). Younger people in the sample had lower rates of overweight and obesity, with 47.9% of people under age 40 being categorized as overweight or obese, while 70.4% of people over the age of 40 were categorized as overweight or obese.

More men (63.0%) than women (58.8%) are categorized as overweight or obese ($X^2 = 315.2$, $p < 0.001$). While women are more likely than men to be categorized as obese (28.6% versus 25.2%; $X^2 = 252.0$, $p < 0.001$), men are more likely to be categorized as overweight (37.7% versus 30.2%; $X^2 = 1{,}100.5$, $p < 0.001$).

Race/ethnicity data is not available through driver's license records. However, many neighborhoods in St. Louis City are either predominately black or predominately white. Neighborhoods that are majority black have a cumulative rate of overweight and obesity of 69.9%. Neighborhoods that are majority white have a cumulative rate of overweight and obesity of 55.5% ($X^2 = 3493.6$, $p < 0.001$).

This first City-wide surveillance of obesity has two major implications for practice. Firstly, that place is important in terms of health status both because of the demographic composition of

residents and due to the differing physical characteristics of neighborhoods. Second, intergovernmental data sharing (in this case, between the Missouri DMV and the City of St. Louis' DOH) is a practical and low-cost method to conduct surveillance. As resources become increasingly scarce for local governments, it is particularly important that those interventions are deployed in areas and to populations most in need. Additionally, robust community data surveillance will allow for effective evaluations to demonstrate effectiveness of interventions.

Introduction

The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) estimates that 64.8% of adult Americans and 65.5% of Missouri adults are overweight or obese, indicated by a Body Mass Index (BMI) of over 25. The most recent BRFSS data for St. Louis City (2011) estimates that the overweight/obesity rate for St. Louis City adults is 58.2%.

Obesity is associated with higher rates of heart disease, stroke, type 2 diabetes, and certain kinds of cancer. The estimated annual medical cost of obesity in the U.S. was $147 billion in 2008 U.S. dollars.[1]

Overweight and obesity are typically measured using body mass index (BMI), which is calculated as the product of weight in pounds and a constant divided by height in inches squared. Health problems associated with excess weight become more common in individuals with BMIs greater than 25.

Despite its public health and economic significance, overweight and obesity is difficult to monitor at the local level. While national and state surveillance systems exist, a lack of more recent and local data makes it difficult for city and county health departments to target obesity-related initiatives in timely and appropriate settings. The aim of this study is to analyze the most current data available at a local level and highlight areas and populations in the greatest need. This study will also support the City of St. Louis' Department of Health (DOH) in measuring its progress in meeting the Mayor's goal of reducing obesity by five percent by 2018.

Methods

There are 18 ZIP codes wholly contained within the City of St. Louis. Additionally, there are 12 contiguous ZIP codes on the western edge of the city that are largely in St. Louis County but contain small portions of St. Louis City. All driver's license records for these 30 ZIP codes were requested from the DMV.

Fields Included in DMV Record

Street Address
City
State
ZIP Code
Height
Weight
Date of Birth
Gender
Date Record Last Updated

The original file from the DMV contained nine fields that described the individual address as well as heights and weights for individuals. There was also a field for gender and date of birth. Records also included a date indicating the last time the data was updated.

The address information allowed for the data to be geocoded and analyzed according to geographic boundaries (City Wards, Neighborhoods, ZIP Codes, or Census demarcation). The "Date Record Last Updated" field allowed the DOH to determine how current the information on the license was. The overwhelming majority (93%) of the records had been updated since 2009, likely due to the fact that the state of Missouri requires drivers to renew their licenses every six years. At each renewal, drivers have the opportunity to update their height and weight information.

Sample Snapshot

Number of records: 171,894
Height range: 4' to 7'
Weight range: 72lbs to 450lbs
Age range: 16.0 to 89.9

The original file from the DMV contained 391,432 driver's license records. Of these, 2,556 records were eliminated due to incomplete or corrupted data. The data were then geocoded using ArcGIS version 9.3 and limited to those identified as City of St. Louis residents (n = 173,360). An additional 1,466 records were excluded as outliers based on several criteria (age greater than 90 years; height less than four feet or greater than seven feet; weight less than 50 pounds or greater than 600 pounds; BMI less than 14.5 kg/m^2 or greater than 65 kg/m^2). The final analytic sample contained 171,894 records with an age range of 16.0-89.9 years. Heights ranged from four to seven feet. Weights ranged from 72 pounds to 450 pounds, and 85 percent of the reported weights were a multiple of five.

BMIs were calculated from the reported heights and weights and then assigned categories based on CDC guidelines. Then the original BMIs were adjusted to address unreliability of self-reported data. A 2013 study by the Oregon Health Authority found that when compared to data from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), BMI estimates from driver's license records averaged 1.9 percent lower for men and 5.2 percent lower for women.[2] Consequently, original BMI values for St. Louis City residents were adjusted upward to account for this variation found in the Oregon study. Adjusted BMIs were then assigned to the appropriate categories, again based on CDC guidelines.

CDC Body Mass Index Categories

BMI	Category
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese

Adjusted BMI was then analyzed in Microsoft Excel and SPSS by age and gender to establish demographic trends in weight status. Finally, the geocoded addresses were analyzed by ZIP Code, aldermanic ward, neighborhood, census tract, and census block group to identify geographic trends across the City. For ZIP codes the number of records ranged from 2 in one contiguous fringe ZIP code to 27,060 in the City's most populous ZIP code. Among the 18 ZIP codes wholly contained within the City, records ranged from 962 in the downtown ZIP code of 63102 to 27,060. In aldermanic wards, the number of records ranged from 4,076 to 8,996. Among the City's 79 official neighborhoods, total records ranged from 47 to 9,116. The range for the city's 106 census tracts was 268 to 4,449 records while the 360 census block groups ranged from 12 records to 1,889.

Results

75.3 percent of the total records (n = 171,894) are within the age range 20-59 years old (see Figure 1). There are slightly more females (50.3%) in the sample than males (see Figure 2) and over 93 percent of the records have been updated since 2009 or later (see Figure 3)

Figure 1
Age Distribution of Driver's License Records, City of St. Louis

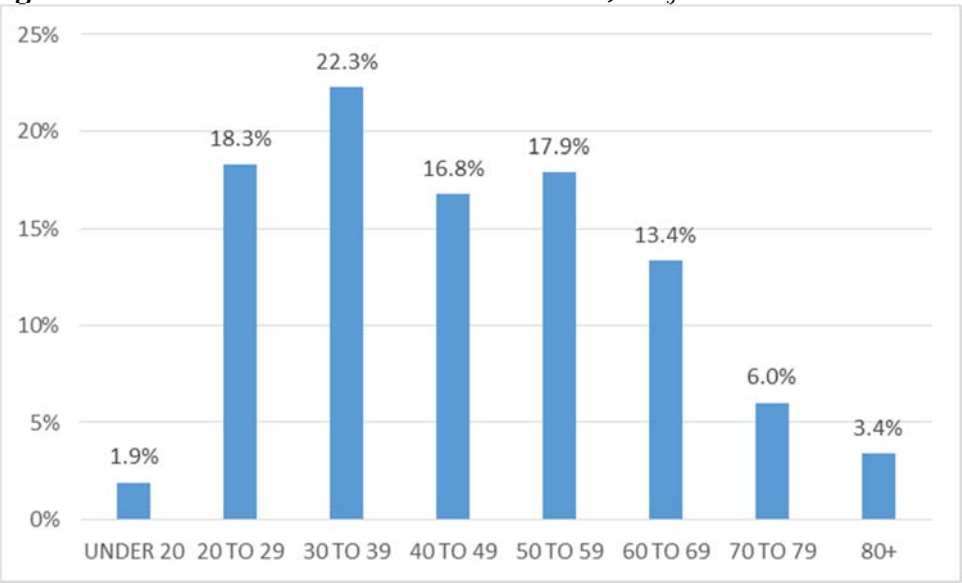


Figure 2
Gender Distribution of Driver's License Records, City of St. Louis

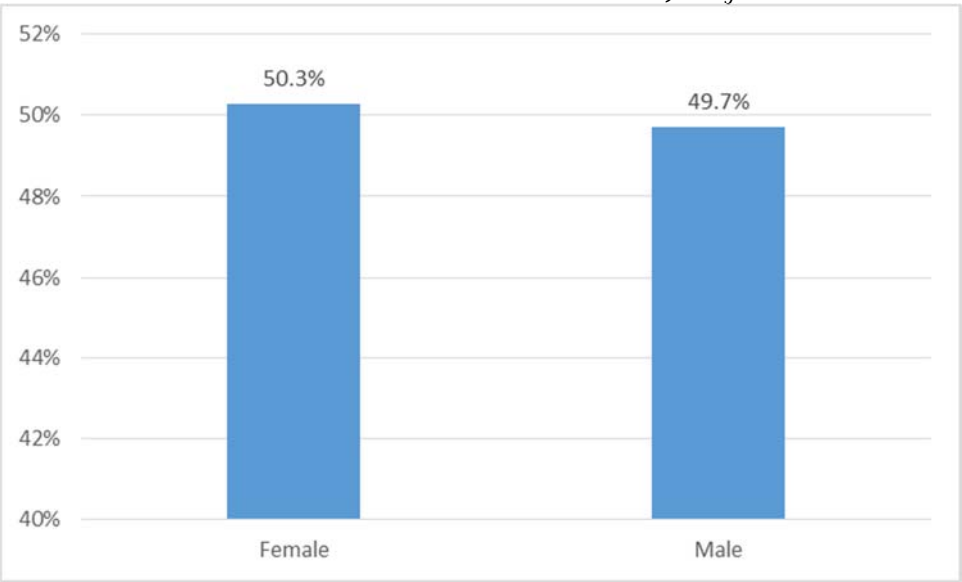
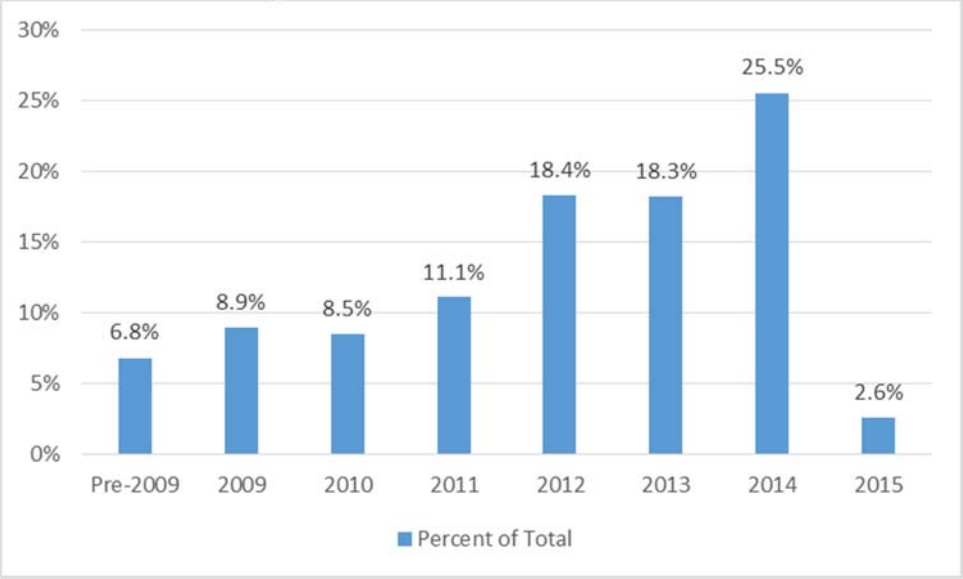
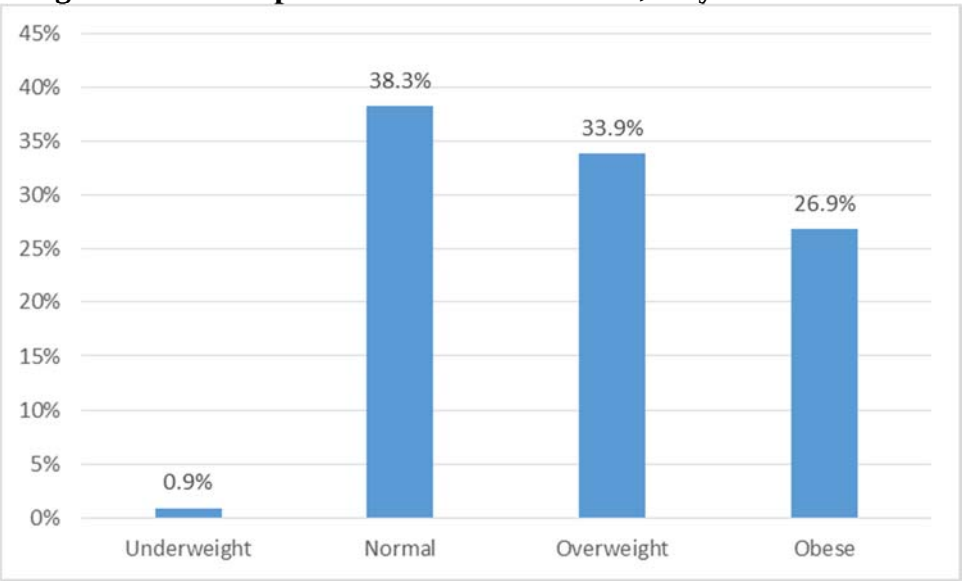


Figure 3
Date Record Last Updated Distribution of Driver's License Records, City of St. Louis



Findings described that overweight and obesity are highly prevalent throughout the City of St. Louis. Of all City residents included in the analysis (n = 171,894), 60.9 percent are overweight or obese according to their driver's license data (see Figure 4). Over a quarter of residents are obese, and fewer than two in five (38.3%) are normal weight.

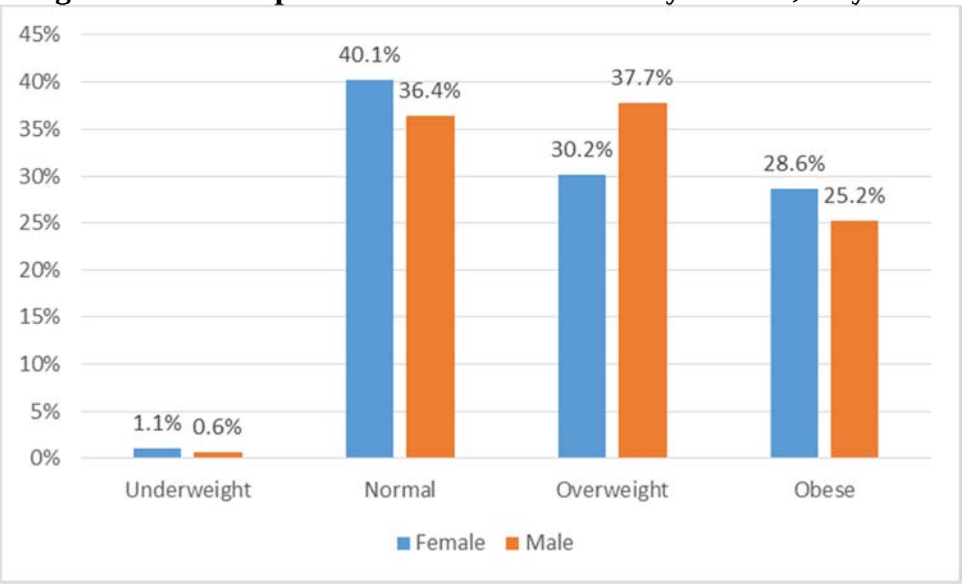
Figure 4
Weight Status as Reported on Driver's License, City of St. Louis



There are significant differences in weight status across a number of demographic and geographic variables (Figure 5). More men than women are categorized as overweight or obese (63.0% versus 58.8%; $X^2 = 315.2$, $p < 0.001$). Women, however, are more likely than men to be

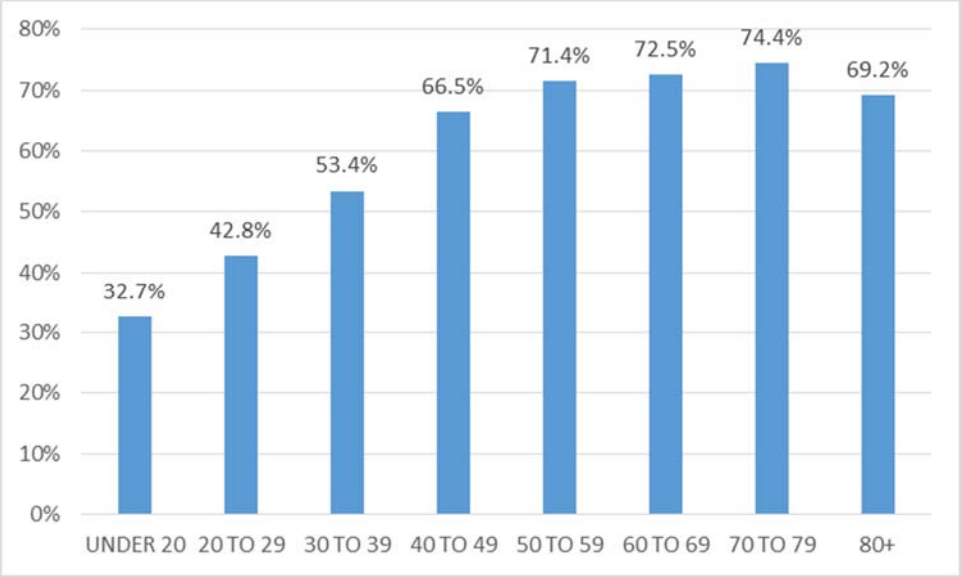
categorized as obese (28.6% versus 25.2%; $X^2 = 252.0$, $p < 0.001$). Men are more likely to be categorized as overweight (37.7% versus 30.2%; $X^2 = 1{,}100.5$, $p < 0.001$).

Figure 5
Weight Status as Reported on Driver's License by Gender, City of St. Louis



Age is significantly correlated with weight status as well ($X^2 = 10{,}390.3$, $p < 0.001$). As age increases, so does the percent of the population that is overweight or obese (see Figure 6). The rate of overweight and obesity remains below 50 percent through age 29; only one-third (32.6%) of residents less than 20 years old are overweight or obese. Among those aged 50 to 79, however, the rate of overweight and obesity is over two-thirds (72.3% overweight or obese).

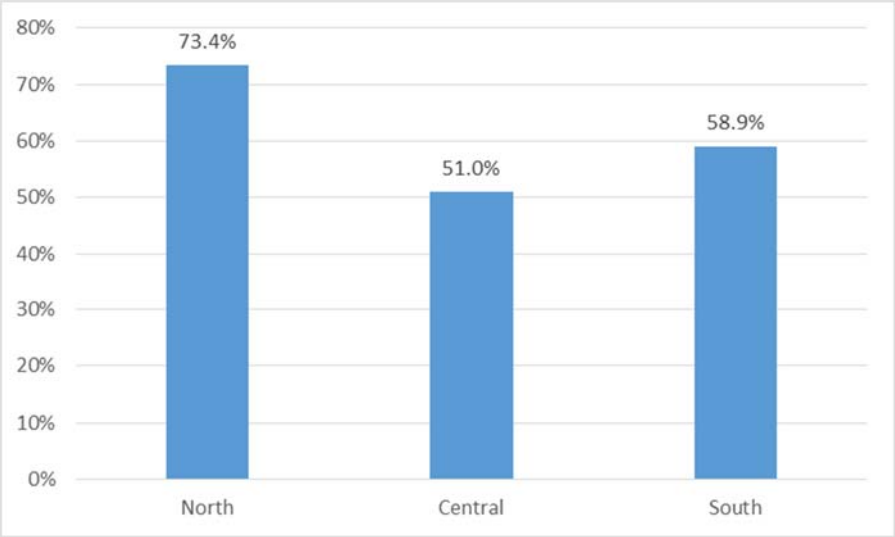
Figure 6
Percent Overweight or Obese as Reported on Driver's License by Age Group, City of St. Louis



ArcGIS was used to create five maps of weight status for the City of St. Louis at increasing levels of acuity. Maps were made at the ZIP code, City aldermanic ward, City neighborhood, census tract, and census block group levels (see Appendix for full set of maps). Each geographic measure (e.g., ward, neighborhood) was assigned a quintile based on the percent of residents overweight or obese.

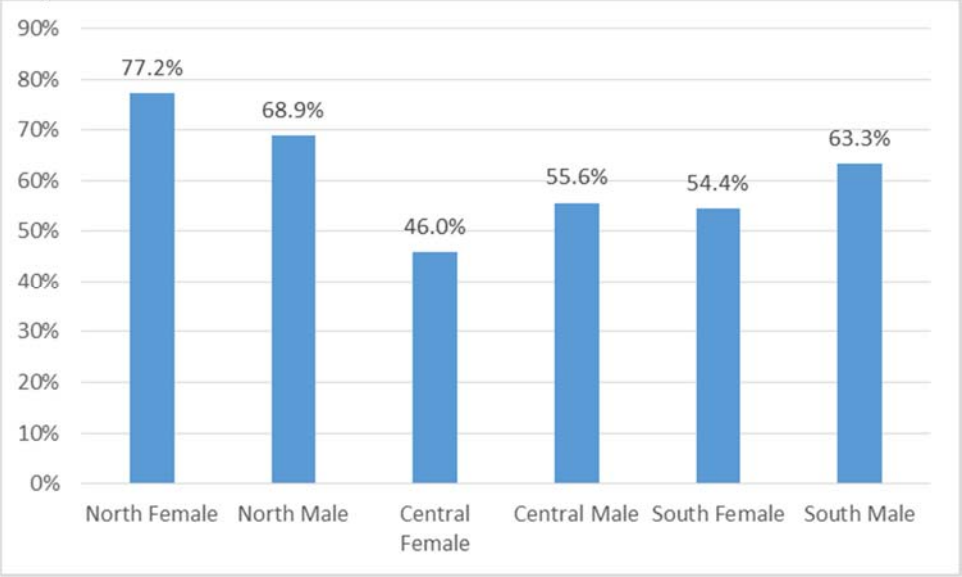
There are significant differences in weight status by geography. The City has 79 official neighborhoods. Each neighborhood is designated as belonging to either the north, central, or south corridors of the city. The northern corridor has significantly higher rates of overweight and obesity (see Figure 7; $X^2 = 4{,}272.2$, $p < 0.001$)

Figure 7
Percent Overweight or Obese as Reported on Driver's License by Corridor, City of St. Louis



When analyzing both gender and geography together, the picture is clearer regarding what groups are at the highest risk for overweight or obesity. There are significant differences in rates of overweight and obesity by gender and corridor ($X^2 = 5{,}704.1$, $p < 0.001$). Females in northern corridor neighborhoods have the highest rates of overweight or obesity, while central corridor females have the lowest rates (see Figure 8).

Figure 8
Percent Overweight or Obese as Reported on Driver's License by Corridor and Gender, City of St. Louis



Limitations

This analysis has a number of limitations. First, it relies on self-reported height and weight data, which may be unreliable. The study in Oregon helped to account for this by adjusting BMI upward, but only corrects it to the BRFSS standard of data collection, another survey that collects self-reported data.

Furthermore, 85% of the reported weight records were multiples of five (e.g., 75 pounds, 110 pounds, 375 pounds), suggesting a considerable number of people likely rounded up or down to the nearest multiple of five when reporting their weights to the DMV. This indicates the majority of weights were estimates rather than exact values.

Another limitation is the variance in when the record was last updated. Some records were updated only a few days before DOH received the data, while others had not been updated in over 10 years, suggesting that the data in the record could be inaccurate. Although 93 percent of the records had been updated within the last 6 years in accordance with Missouri state law, people are not required to update personal information (height, weight, address, etc.) at each renewal but merely have the opportunity to do so. An updated record therefore does not necessarily indicate updated height and weight information.

A final limitation is the lack of unique identifiers for each record. It is not possible to follow a given record or group of records over time to establish trends at the individual level.

Future reports should include more robust cluster, hot-spot, and regression analyses to determine the strength of relationships between BMI and geographic location while controlling for potential socio-economic confounders such as income and education. More specifically, analysis should focus on proximity to parks and green space, as well as the quality and usability of that green space to determine relationships between access and weight status.

Conclusions

This report details the prevalence of overweight and obesity in the City of St. Louis and gives the DOH a baseline measure for meeting the Mayor's goal of a five percent reduction in obesity by 2018. Missouri DMV driver's license records provide address-level information on a number of individual characteristics that can be leveraged to assess weight status in the community.

Findings reveal important weight status trends in the City of St. Louis. Higher rates of obesity are seen among women, though men have higher rates of overweight. Significant disparities in weight status exist by various geographic measures, suggesting a link between socioeconomic status and overweight and obesity. Low-income and majority Black geographic areas in particular have the highest rates of overweight and obesity, a finding consistent with abundant previous studies. As Hu et al point out: "Both individual-level and neighborhood socioeconomic position (SEP) independently (and perhaps differentially) affect health status, with neighborhood SEP serving as a strong predictor of socioeconomic determinants of obesity. For example, neighborhood deprivation may influence obesity risk by restricting access to healthy food and opportunities for physical activity."[3]

DMV records serve as an inexpensive surveillance system and are capable of providing large sample sizes, even in very local levels (e.g., census block groups). Further analyses will focus on more spatial analysis to identify what assets exist in the City of St. Louis that may be leveraged to create a healthier and more equitable community.

References

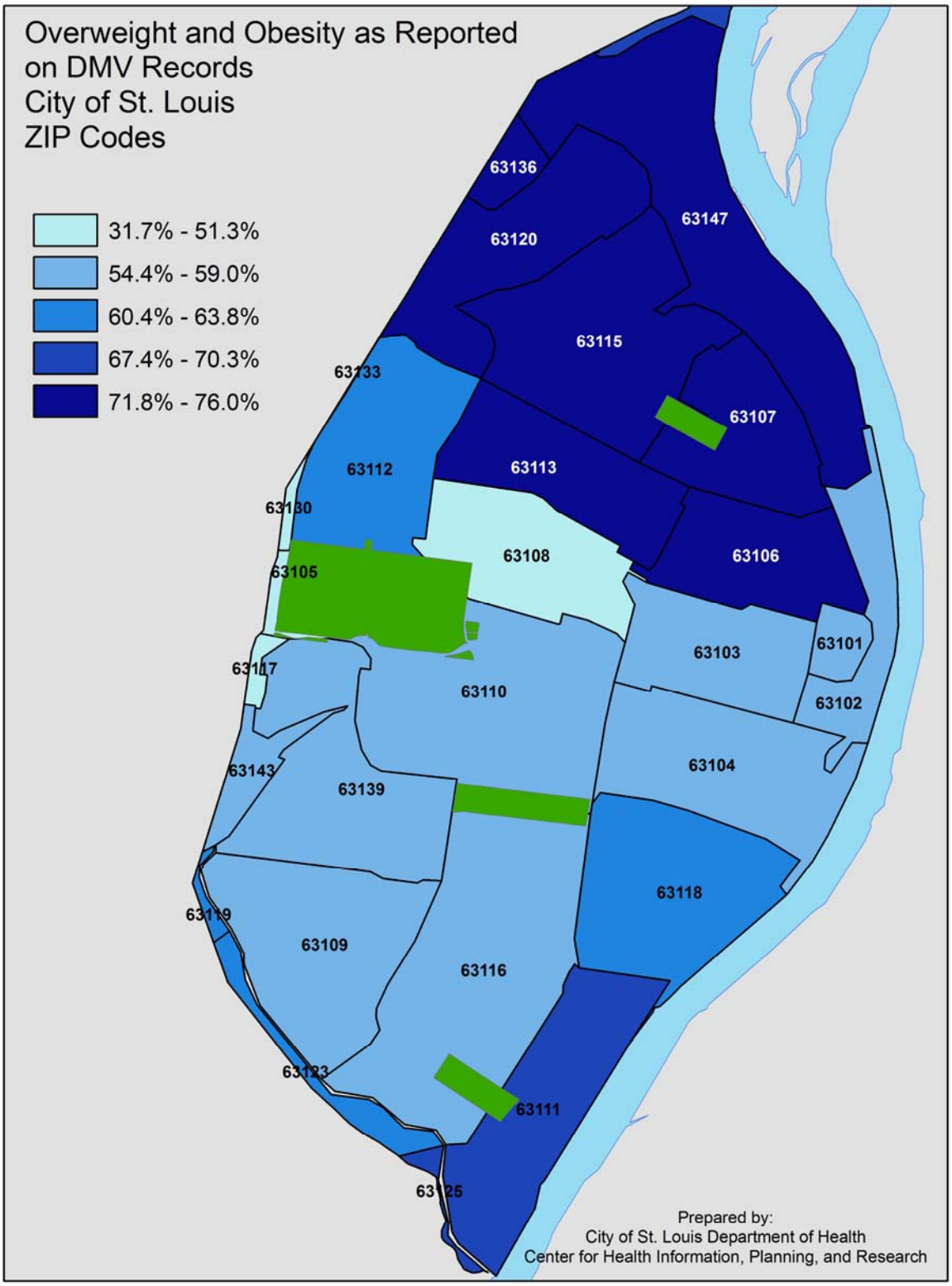
1. Centers for Disease Control and Prevention. "Adult Obesity Facts." Accessed 2/24/15. http://www.cdc.gov/obesity/data/adult.html

2. Morris, D.S., Schubert, S.S., Ngo, D.L., Rubado, D., Main, E., Douglas, J.P. (2013). DMV Records are Valuable for Monitoring Obesity in Oregon. Accessed 2/24/15. https://public.health.oregon.gov/HealthyEnvironments/TrackingAssessment/EnvironmentalPublicHealthTracking/Documents/Reports/EPHT_DMV_obesity_tracking.pdf

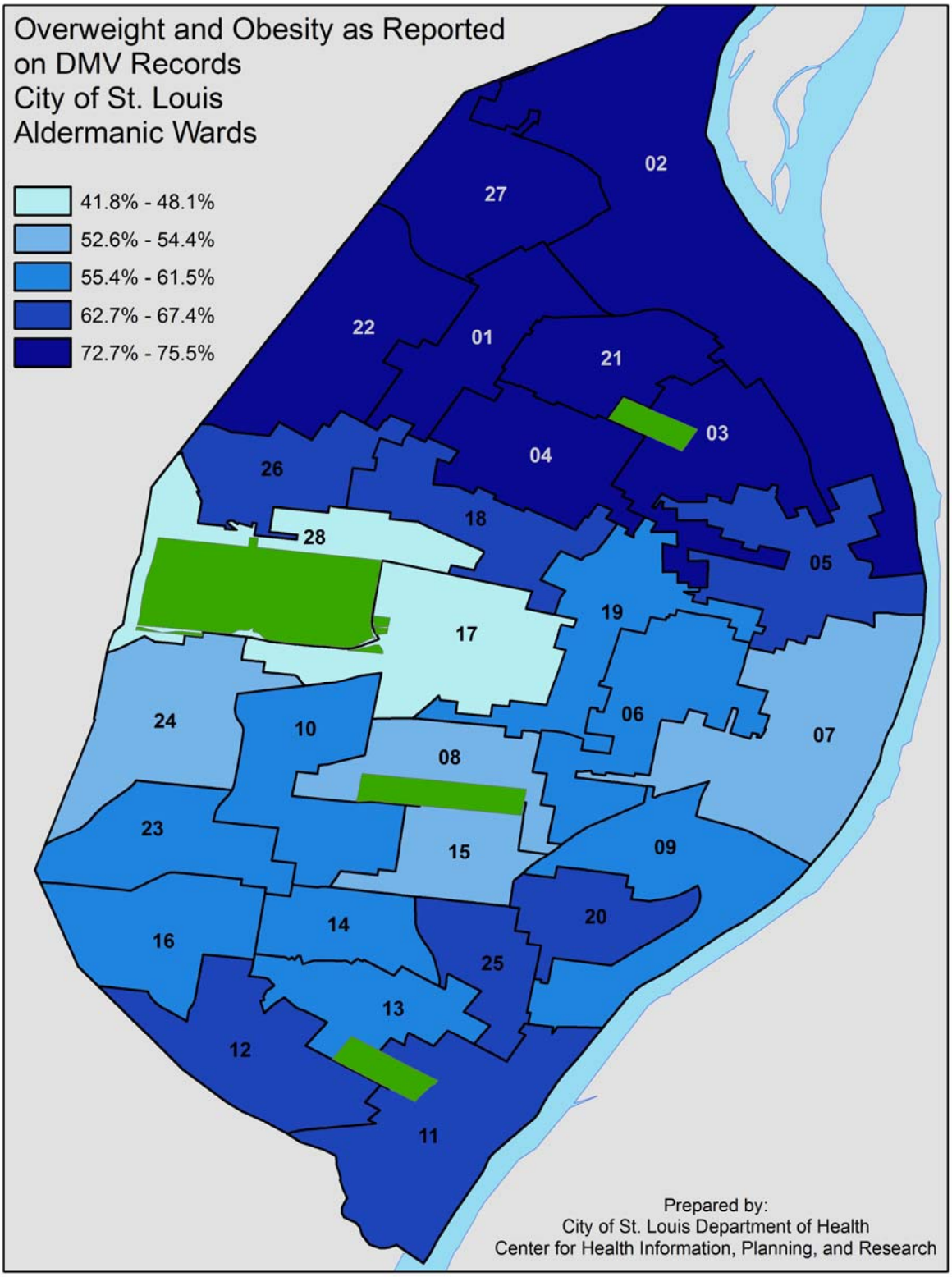
3. Hu, F. (2008). *Obesity Epidemiology.* Accessed 4/3/15 https://books.google.com/books?hl=en&lr=&id=rv42OY9QLkMC&oi=fnd&pg=PA342&dq=social+determinants+of+obesity&ots=LTx5YrBEeF&sig=kdNkIm8AbgHVbp_sRMYzXwS2qjc#v=onepage&q=social%20determinants%20of%20obesity&f=false

APPENDIX

Map 1


Overweight and Obesity as Reported
on DMV Records
City of St. Louis
ZIP Codes
31.7% - 51.3%
54.4% - 59.0%
60.4% - 63.8%
67.4% - 70.3%
71.8% - 76.0%
63136
63147
63120
63115
63133
63107
63112
63113
63130
63108
63106
63105
63103
63101
63117
63110
63102
63143
63104
63139
63118
63119
63109
63116
63123
63111
63125
Prepared by:
City of St. Louis Department of Health
Center for Health Information, Planning, and Research

Map 2


Overweight and Obesity as Reported
on DMV Records
City of St. Louis
Aldermanic Wards
41.8% - 48.1%
52.6% - 54.4%
55.4% - 61.5%
62.7% - 67.4%
72.7% - 75.5%
02
27
22
01
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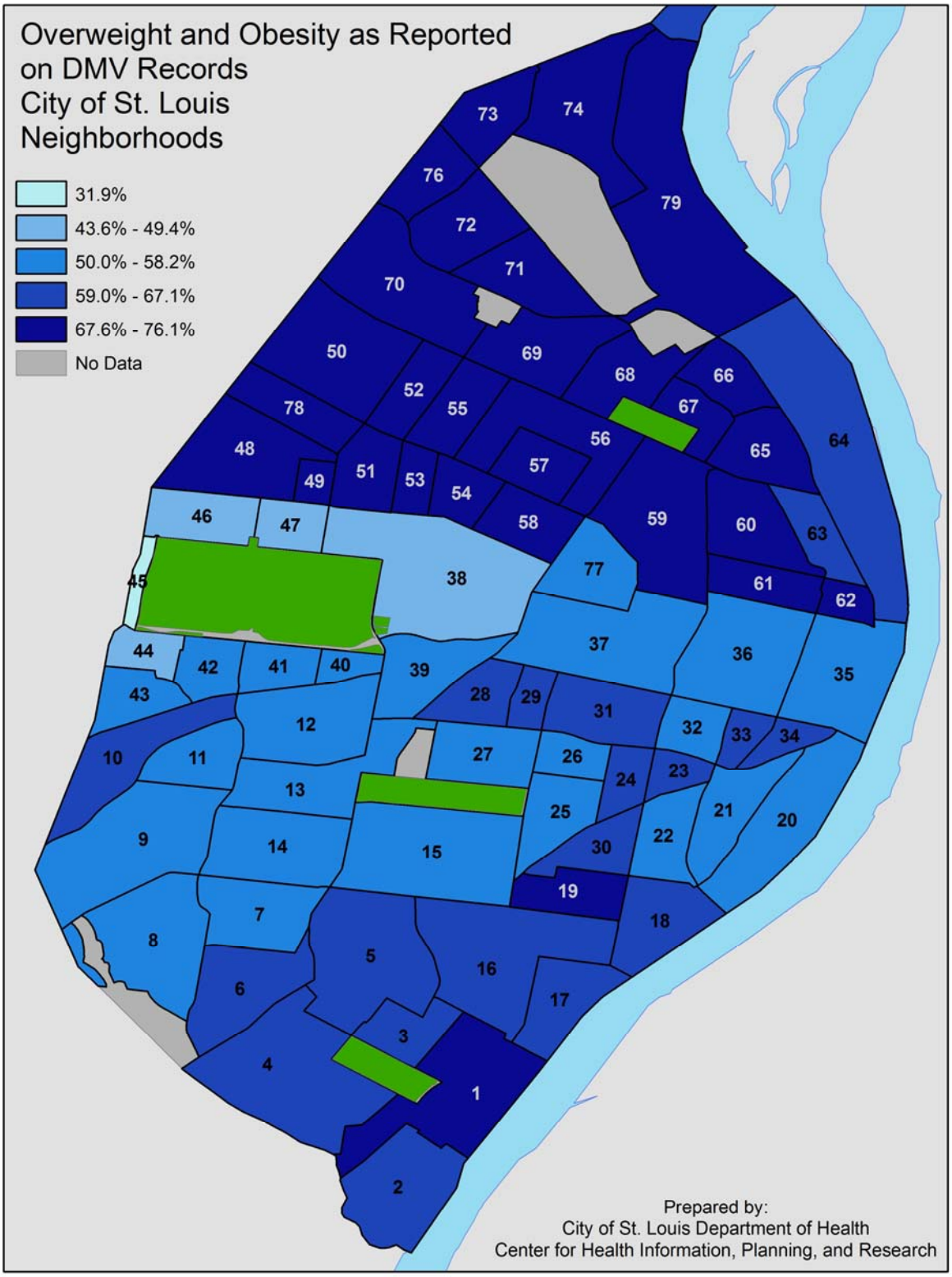
Prepared by:
City of St. Louis Department of Health
Center for Health Information, Planning, and Research

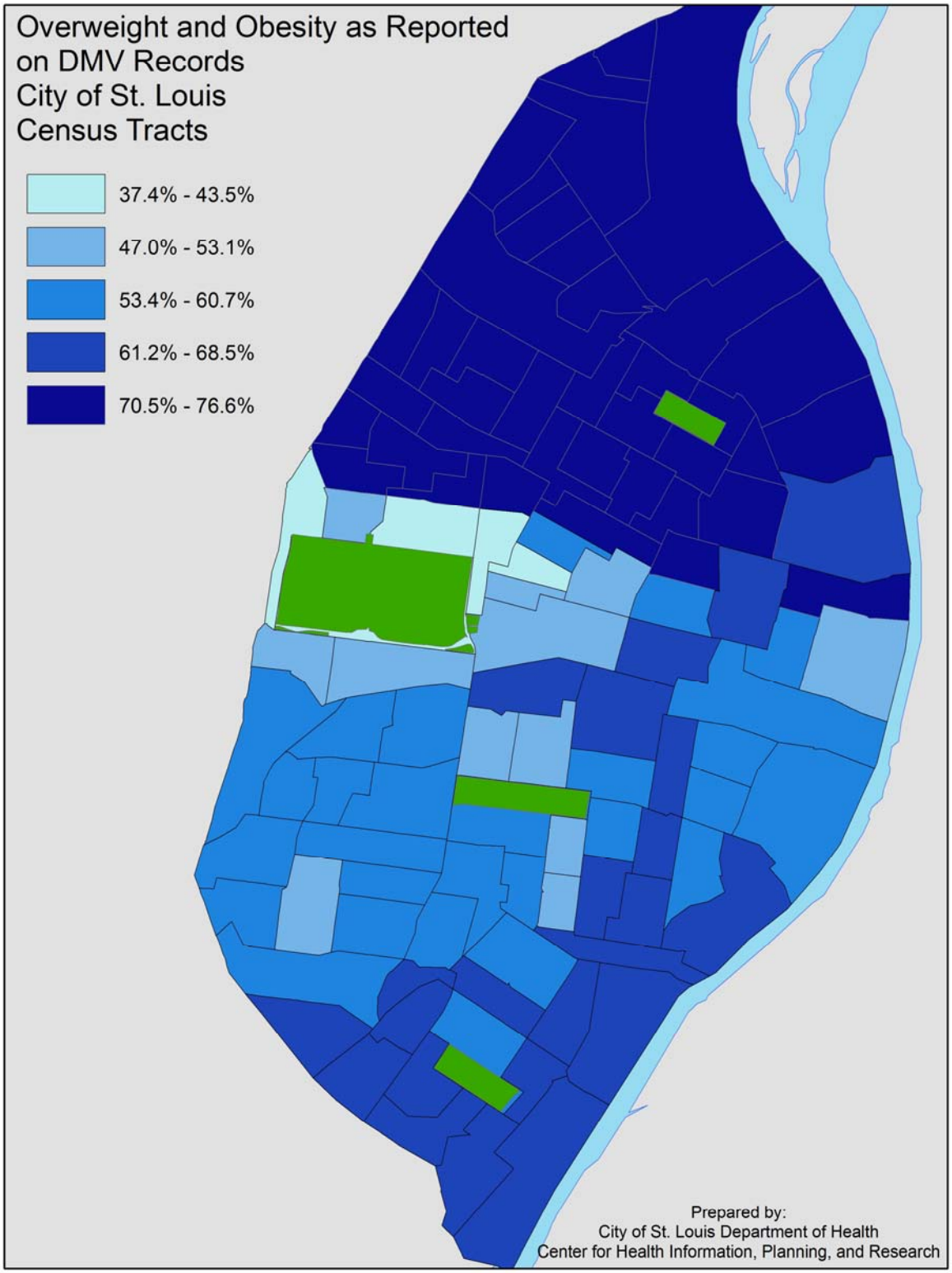
Map 3



*Neighborhood names and numbers provided on next page

Neighborhood Number	Neighborhood Name	Neighborhood Number	Neighborhood Name
1	Carondelet	41	Cheltenham
2	Patch	42	Clayton-Tamm
3	Holly Hills	43	Franz Park
4	Boulevard Heights	44	Hi-Pointe
5	Bevo Mill	45	Wydown Skinker
6	Princeton Heights	46	Skinker DeBaliviere
7	South Hampton	47	DeBaliviere Place
8	St. Louis Hills	48	West End
9	Lindenwood Park	49	Visitation Park
10	Ellendale	50	Wells Goodfellow
11	Clifton Heights	51	Academy
12	The Hill	52	Kingsway West
13	Southwest Garden	53	Fountain Park
14	North Hampton	54	Lewis Place
15	Tower Grove South	55	Kingsway East
16	Dutchtown	56	Greater Ville
17	Mount Pleasant	57	The Ville
18	Marine Villa	58	Vandeventer
19	Gravois Park	59	Jeff Vanderlou
20	Kosciusko	60	St. Louis Place
21	Soulard	61	Carr Square
22	Benton Park	62	Columbus Square
23	McKinley Heights	63	Old North St. Louis
24	Fox Park	64	Near North Riverfront
25	Tower Grove East	65	Hyde Park
26	Compton Heights	66	College Hill
27	Shaw	67	Fairground Neighborhood
28	Botanical Heights	68	O'Fallon
29	Tiffany	69	Penrose
30	Benton Park West	70	Mark Twain I-70 Industrial
31	The Gate District	71	Mark Twain
32	Lafayette Square	72	Walnut Park East
33	Peabody Darst Webbe	73	North Pointe
34	LaSalle Park	74	Baden
35	Downtown	75	Riverview
36	Downtown West	76	Walnut Park West
37	Midtown	77	Covenant Blu-Grand Center
38	Central West End	78	Hamilton Heights
39	Forest Park South East	79	North Riverfront
40	Kings Oak		

Map 4


Overweight and Obesity as Reported
on DMV Records
City of St. Louis
Census Tracts
37.4% - 43.5%
47.0% - 53.1%
53.4% - 60.7%
61.2% - 68.5%
70.5% - 76.6%
Prepared by:
City of St. Louis Department of Health
Center for Health Information, Planning, and Research

Map 5

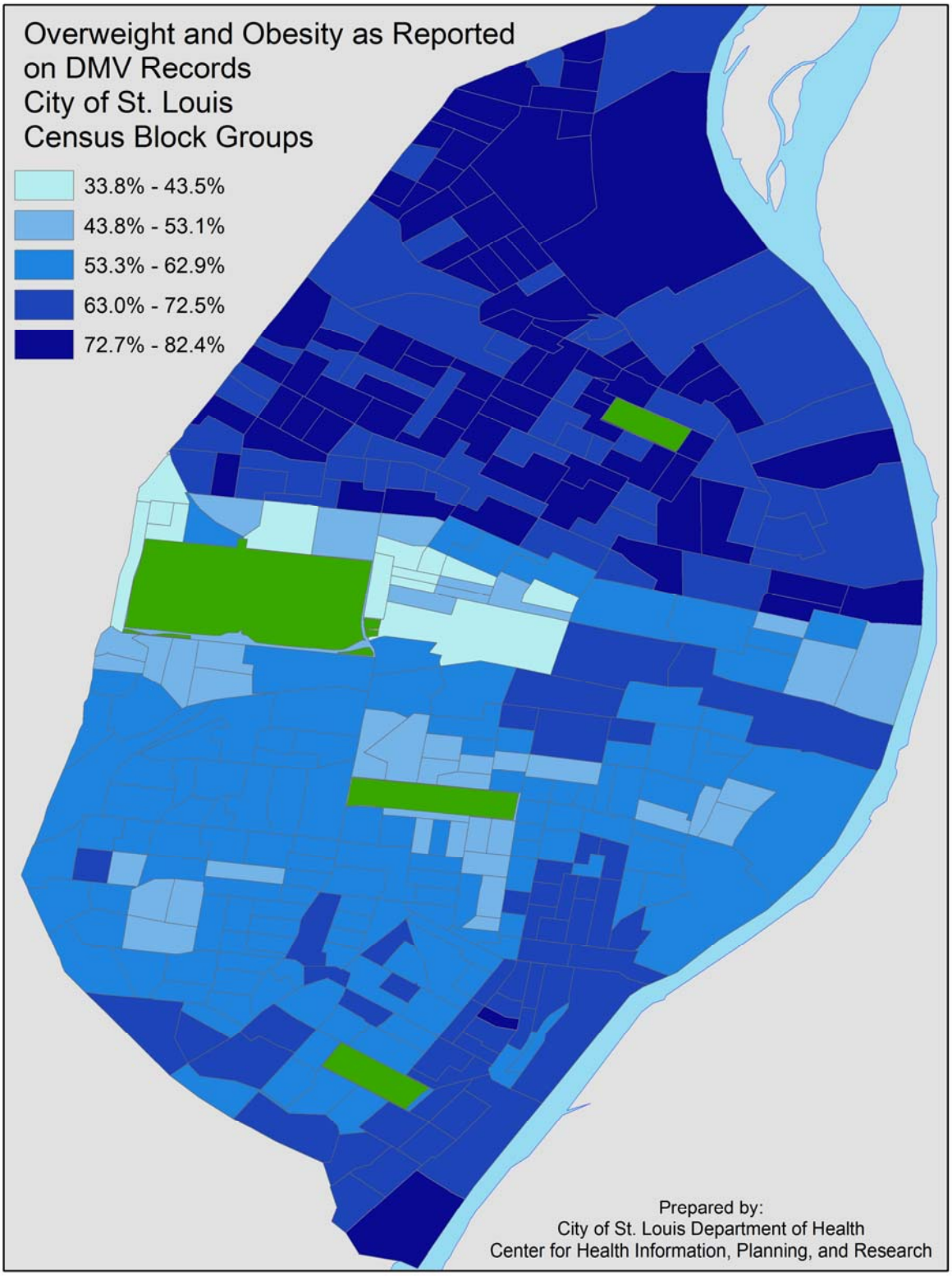

Overweight and Obesity as Reported
on DMV Records
City of St. Louis
Census Block Groups
33.8% - 43.5%
43.8% - 53.1%
53.3% - 62.9%
63.0% - 72.5%
72.7% - 82.4%
Prepared by:
City of St. Louis Department of Health
Center for Health Information, Planning, and Research

Table 1
Rates of Overweight and Obesity by ZIP Code, City of St. Louis

ZIP Code	% Obese	% Overweight	% Overweight or Obese
63136	40.5%	35.4%	76.0%
63147	39.6%	35.7%	75.3%
63115	38.9%	35.1%	74.0%
63120	39.5%	34.2%	73.6%
63107	38.3%	34.4%	72.7%
63113	38.5%	34.1%	72.6%
63106	38.9%	32.8%	71.8%
63137	37.4%	32.9%	70.3%
63125	32.5%	36.5%	69.0%
63111	33.3%	34.0%	67.4%
63123	28.6%	35.2%	63.8%
63118	27.8%	33.9%	61.7%
63112	27.8%	33.6%	61.4%
63119	31.3%	29.2%	60.4%
63116	25.2%	33.9%	59.0%
63143	22.9%	35.8%	58.7%
63104	22.2%	35.2%	57.4%
63109	21.7%	34.9%	56.6%
63139	22.4%	33.6%	56.0%
63103	20.9%	34.8%	55.7%
63101	20.3%	35.2%	55.6%
63110	22.4%	32.4%	54.8%
63102	21.3%	33.1%	54.4%
63117	17.7%	33.7%	51.3%
63133	0.0%	50.0%	50.0%
63108	16.9%	31.2%	48.1%
63130	12.3%	29.1%	41.4%
63105	6.7%	24.9%	31.7%

Table 2
Rates of Overweight and Obesity by Aldermanic Ward, City of St. Louis

Ward	% Obese	% Overweight	% Overweight or Obese
27	39.9%	35.6%	75.5%
1	39.3%	35.2%	74.5%
2	39.0%	35.2%	74.2%
21	39.1%	34.9%	74.1%
4	39.7%	34.0%	73.7%
22	37.7%	35.2%	72.9%
3	38.4%	34.3%	72.7%
20	33.4%	34.0%	67.4%
11	31.2%	35.3%	66.5%
5	30.0%	34.9%	64.8%
26	29.8%	33.8%	63.5%
18	28.9%	34.6%	63.5%
12	26.8%	35.9%	62.7%
25	30.5%	32.2%	62.7%
19	27.9%	33.6%	61.5%
13	26.7%	34.7%	61.4%
9	26.1%	34.3%	60.4%
6	24.7%	35.0%	59.7%
14	25.6%	33.8%	59.4%
10	23.0%	34.0%	57.0%
23	21.8%	34.8%	56.6%
16	20.5%	34.8%	55.4%
24	21.1%	33.3%	54.4%
15	21.3%	32.4%	53.7%
7	19.6%	34.0%	53.6%
8	20.9%	31.8%	52.6%
17	17.3%	30.8%	48.1%
28	12.6%	29.2%	41.8%

Table 3
Rates of Overweight and Obesity by Neighborhood, City of St. Louis

Nhd Number	Neighborhood Name	% Obese	% Overweight	% Overweight or Obese	Nhd Number	Neighborhood Name	% Obese	% Overweight	% Overweight or Obese
76	Walnut Park West	40.7%	35.4%	76.1%	4	Boulevard Heights	26.9%	36.6%	63.5%
71	Mark Twain	42.3%	33.8%	76.1%	64	Near North Riverfront	23.8%	39.0%	62.8%
73	North Pointe	38.7%	37.3%	76.0%	34	LaSalle Park	28.2%	34.5%	62.7%
79	North Riverfront	36.0%	39.1%	75.1%	5	Bevo Mill	27.4%	33.9%	61.3%
52	Kingsway West	38.8%	36.3%	75.1%	18	Marine Villa	27.6%	33.5%	61.1%
72	Walnut Park East	39.4%	35.5%	74.9%	6	Princeton Heights	25.3%	34.9%	60.2%
74	Baden	41.1%	33.4%	74.5%	10	Ellendale	25.9%	34.1%	60.0%
56	Greater Ville	40.0%	34.3%	74.2%	24	Fox Park	26.5%	33.4%	59.9%
68	O'Fallon	40.6%	33.5%	74.1%	3	Holly Hills	24.3%	35.6%	59.8%
59	Jeff Vanderlou	39.2%	34.9%	74.1%	23	McKinley Heights	24.4%	34.6%	59.0%
69	Penrose	37.6%	36.2%	73.8%	39	Forest Park South East	25.4%	32.8%	58.2%
50	Wells Goodfellow	38.2%	35.6%	73.7%	40	Kings Oak	30.3%	27.3%	57.6%
57	The Ville	41.5%	32.1%	73.7%	12	The Hill	21.9%	35.4%	57.3%
67	Fairground Neighborhood	39.6%	34.0%	73.5%	9	Lindenwood Park	22.2%	34.7%	57.0%
66	College Hill	39.2%	34.2%	73.4%	25	Tower Grove East	23.2%	33.5%	56.7%
78	Hamilton Heights	36.3%	36.8%	73.0%	14	North Hampton	22.8%	33.7%	56.5%
55	Kingsway East	37.2%	35.6%	72.9%	11	Clifton Heights	21.2%	35.1%	56.4%
62	Columbus Square	38.7%	34.1%	72.8%	7	South Hampton	21.5%	34.4%	55.9%
58	Vandeventer	35.4%	37.4%	72.8%	13	Southwest Garden	22.3%	33.3%	55.6%
60	St. Louis Place	37.6%	34.6%	72.2%	8	St. Louis Hills	20.0%	35.5%	55.5%
61	Carr Square	38.8%	33.1%	71.8%	77	Covenant Blu-Grand Center	24.2%	31.2%	55.4%
65	Hyde Park	37.5%	33.8%	71.2%	20	Kosciusko	27.7%	27.7%	55.3%
53	Fountain Park	36.8%	34.3%	71.0%	41	Cheltenham	20.9%	34.1%	54.9%
51	Academy	38.6%	32.4%	71.0%	37	Midtown	22.7%	32.1%	54.9%
48	West End	35.3%	35.7%	71.0%	36	Downtown West	18.4%	36.3%	54.7%
70	Mark Twain I-70 Industrial	37.4%	33.1%	70.5%	43	Franz Park	20.9%	33.3%	54.3%
54	Lewis Place	35.8%	33.7%	69.6%	15	Tower Grove South	21.6%	32.5%	54.1%
19	Gravois Park	34.0%	34.4%	68.5%	22	Benton Park	18.5%	35.5%	54.0%
49	Visitation Park	36.1%	32.0%	68.2%	26	Compton Heights	18.2%	35.7%	53.9%
1	Carondelet	33.2%	34.4%	67.6%	21	Soulard	17.7%	35.1%	52.8%
63	Old North St. Louis	33.8%	33.3%	67.1%	27	Shaw	20.3%	31.3%	51.6%
2	Patch	31.6%	34.9%	66.5%	42	Clayton-Tamm	19.2%	32.2%	51.4%
75	Riverview	27.8%	38.6%	66.5%	35	Downtown	16.9%	33.2%	50.1%
17	Mount Pleasant	34.0%	32.4%	66.5%	32	Lafayette Square	14.5%	35.5%	50.0%
33	Peabody Darst Webbe	33.2%	32.8%	66.0%	44	Hi-Pointe	19.3%	30.1%	49.4%
31	The Gate District	28.2%	37.5%	65.6%	46	Skinker DeBaliviere	16.6%	30.8%	47.3%
29	Tiffany	33.4%	31.3%	64.7%	38	Central West End	14.1%	30.7%	44.8%
30	Benton Park West	31.5%	33.2%	64.7%	47	DeBaliviere Place	14.5%	29.0%	43.6%
28	Botanical Heights	29.9%	34.1%	64.0%	45	Wydown Skinker	6.7%	25.2%	31.9%
16	Dutchtown	31.0%	32.6%	63.6%					