

Improving Regional Transportation Planning in Miami-Dade County Via Enhanced Local Access to Healthy Living

Prepared for the
Miami-Dade Metropolitan Planning Organization
by the South Florida Regional Planning Council



Assessing Community Needs to Identify Strategies which Increase Transportation Access to:

Health Services



Healthy Food



Exercise



Improving Regional Transportation Planning in Miami-Dade County

Via Enhanced Local Access to Healthy Living

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Problem Statement

Transportation barriers have been linked to reduced health care access via missed appointments, delayed care, lack of medication, absence of preventative care and exacerbated emergencies (Samina et al., 2013). In addition to travel burden, other factors such as crime and poverty intensify adverse health situations. Whether an illness is acute or chronic, infectious or environmental, it is essential for patients to have access to treatment and resources within proximity. In addition to healthcare services, healthy eating habits and exercise habits support healthy communities. These habits can be promoted via recreational facilities and public outreach, and also by increased public safety and access to supermarkets. Low-income neighborhoods have been found to be correlated with lower incidences of family restaurants and markets, yet higher incidences of fast food chains. 10% of residents in Miami-Dade (250,000) live in clusters of low-income areas which have reduced supermarket availability and increased rates of diet related deaths (Food Trust, 2012).

Purpose

This study provides information to the Miami-Dade County Metropolitan Planning Organization (MPO) about planning for enhanced access to healthy living. The report presented here aims to identify gaps in transit and mobility infrastructure which make it difficult or impossible for transportation system users to access health care services and healthy foods.

The scope of the MPO's diverse activities include the development of the 2040 Long Range Transportation Plan (LRTP), Transportation Improvement Program, and the Unified Planning Work Program (UPWP) as well as other studies related to transportation planning. Certain studies from the UPWP, such as the Health District Bicycle/Pedestrian Mobility Plan¹ connect transportation directly to some aspect of health.

Study Areas

With a focus on recent peer reviewed literature at the intersection of transportation, health, and community dynamics, the underlying concepts are broadly relevant yet specifically and intentionally focused on seven cities/neighborhoods in Miami-Dade County: 79th Street, Opa-locka, Liberty City, Grapeland Heights, Little Havana, Overtown and Downtown (figure 1). These study areas were chosen based on information indicating disadvantaged communities and food deserts, and most of the sites are at least partially within a community redevelopment area. Five of the seven areas (excluding the City of Opa-locka and unincorporated 79th Street, are neighborhoods in the City of Miami (figure 2).

¹ <http://miamidademp.org/library/studies/health-district-bicycle-pedestrian-mobility-plan-final-2012-01.pdf>

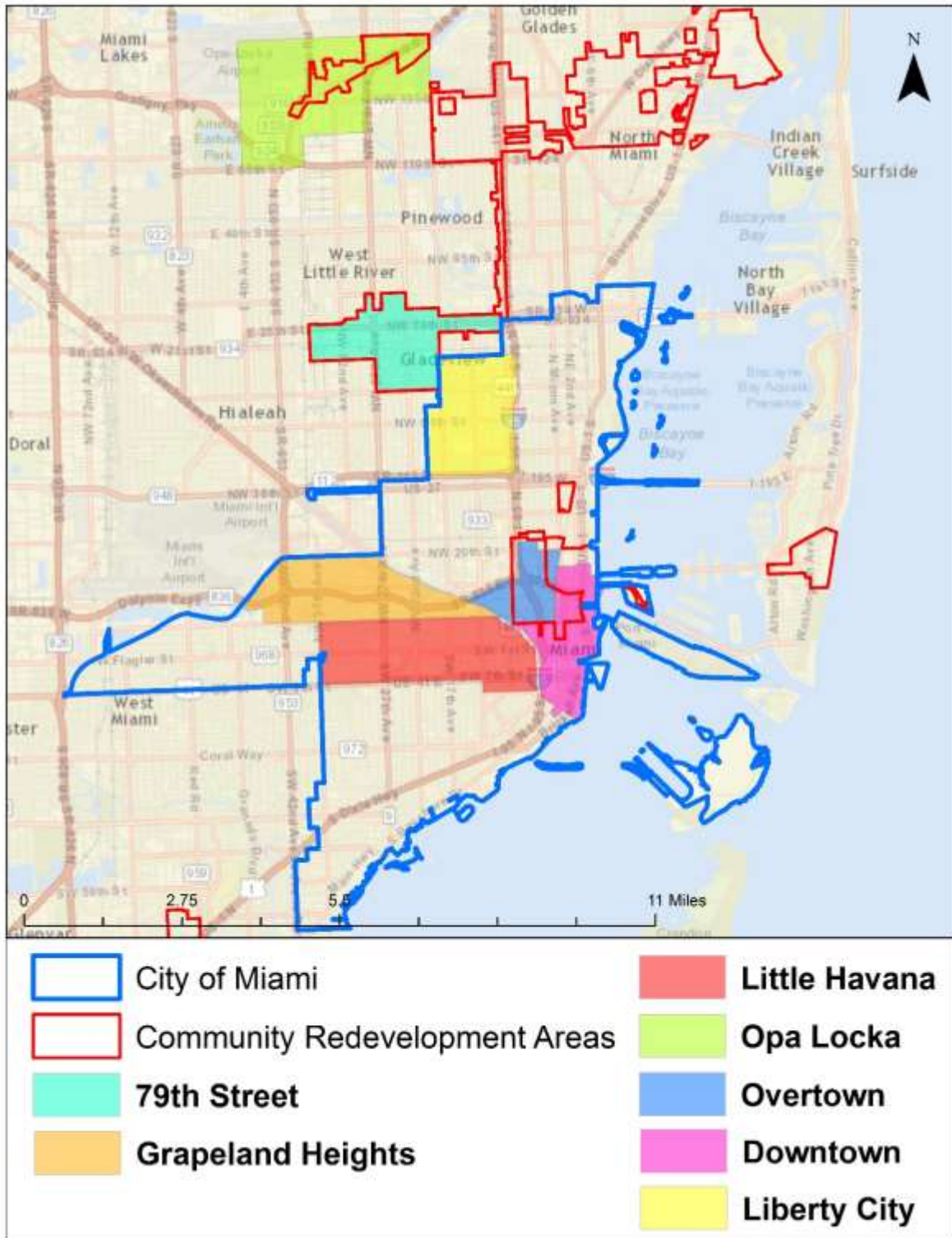


Figure 1: Study Area with respect to City boundary and Community Redevelopment Areas

To place the methodology and results into context, the study area, the existing resources and the underlying concepts in the literature are explored here.

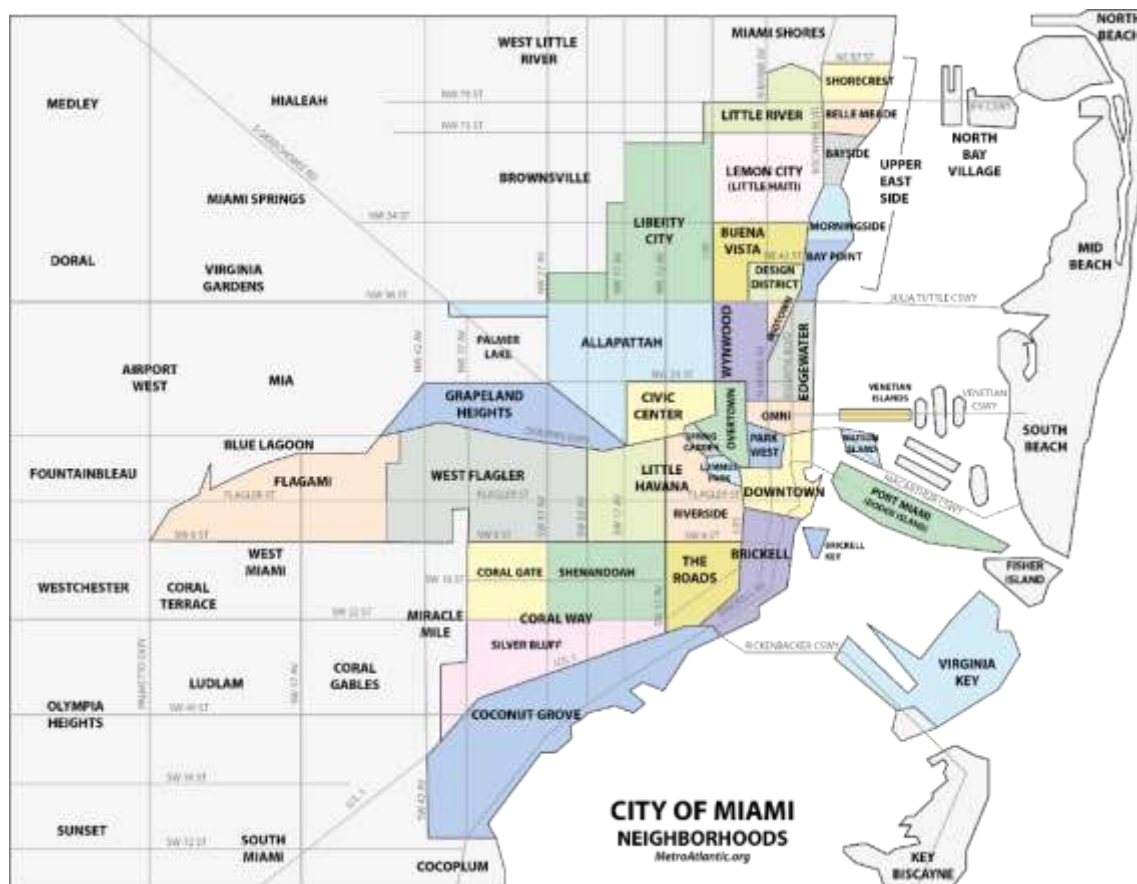


Figure 2: Neighborhoods in the City of Miami (source: Metro Atlantic)

Miami-Dade County Geography

The broad study area, Miami-Dade County (MDC) has a unique geography, located as it is at a crossroads with Central and South America and the Caribbean. It is the most populous county in the State, with over 13% of the residents in Florida. According to the 2014 population estimates from the US Census², 65.6% of the residents are Hispanic, compared to the state proportion of 23.6%. According to 2009-2013 American Community Survey data, 19.9% of MDC residents live below the poverty level, above the state average of 16.3%. 11.4% of households in Miami-Dade County do not own a car compared to 6.2% in Florida. (This suggests that far more residents here may be transit dependent, yet only 5.3% of the population use public transit.) The mean travel time to work for residents over age 16 is 29 minutes, which is higher than the state average at 25.9 minutes. While commuting to work, 76.8% of residents drive alone, 9.9% of residents carpool, only 5.3% use public transportation, 2.1% walk, and 2.0% used other modes, such as bicycle. Less than 1% of all trips are made by bicycle. Appendix A contains further

² <http://quickfacts.census.gov/qfd/states/12/12086.html>

information on Miami Dade County data profiles including income, employment, occupation, and commuting to work, as well as demographic and housing characteristics.

Community Snapshots

Figure 3 illustrates zip code boundaries relative to the study area cities and neighborhoods.

79th Street, contains the NW 79 St Corridor Community Redevelopment Area^{3,4}. The CRA is generally bounded on the north by NW 87th Street, on the south by NW 62nd Street, on the east by NW 7th Avenue, and on the West by NW 37th Avenue. It is an unincorporated area of Miami Dade County which is part of an initiative to use a Transit Oriented Development (TOD) approach, along with existing community assets, to transform 79th street corridor neighborhoods into a community of choice for people to live, work and visit. Goals include enhancement of access to jobs, transportation, and parks. At the intersection of three rail lines, Tri-rail, MetroRail, and Amtrak, there are many opportunities for revitalization in terms of connecting 79th Street's people, parks, and businesses through affordability and mobility.



Figure 3: Zip codes for study areas (source: U.S. Census, 2014)

The city of **Opa-locka**, has a population of 115,883 and a mean household income of \$24,086. At an SFRPC workshop for Opa-locka, city officials expressed concern about food deserts and the need for adequate public transportation in order to have access to healthy food. Issues mentioned include comments about public safety in NW Miami Dade. These and other conditions limit investment preferences for certain businesses. For example, the area has relatively more fast food establishments and fewer family restaurants. One workshop attendee brought up inequitable access to fairly priced financial services, as the city has 39 pawn shops/predatory lenders at a ratio per 1 bank⁵.

Liberty City, also sometimes called Model City, is a NRSA (Neighborhood Revitalization Strategy Area)⁶. The neighborhood has challenges related to crime, education, and employment, yet there are ample opportunities for improvements in terms of transit, community development, and housing opportunities. The income per capita in Liberty City, \$11,686, is 44% less than the Miami average, and

³ www.79thstreet.org

⁴ www.miamidade.gov/redevelopment/nw-79th-street-corridor.asp

⁵ www.southeastfloridadatacommon.org

⁶ <http://www.miamidade.gov/housing/area-model-city.asp>

the unemployment rate is 12.0%. The median home price is \$133,865, nearly half of Miami's median home price of \$235,800, and median rent in Liberty City is \$795. The ratio of renter to owner occupation is 3:2.

Grapeland Heights, bordering east of Miami International Airport boasts recreational areas including Grapeland Water Park⁷ and Grapeland Heights Park, but some areas of the neighborhood suffer setbacks such as lack of access to supermarkets. These areas see weekly supermarket sales of \$118,250, compared to the \$323,200 weekly average in nearby Brickell, a much more affluent area⁸.

Little Havana, also known as the Latin Quarter, lies just south of Grapeland Heights. The neighborhood is known for its rich culture, with colorful fruit stands, art galleries and Cuban shops. Cultural landmarks include Calle Ocho, Maximo Gomez Park (Domino Park), and the Walkway of the Stars. Challenges in the community are centered around high crime, low-income (\$13,496 per capita), and low school performance. The estimated Little Havana crime index is 12% higher than the Miami average and the Miami crime index is 72% higher than the Florida average⁹.

Overtown, originally called "Colored Town," has a rich cultural history as a thriving African American community. In the 1960s, the interstate highway was built essentially disregarding the vital neighborhood connections and the area suffered a deep decline and never recovered. The per capita income is \$13,355. Very gradually, parts of Overtown have seen redevelopment. There are several large new complexes and more are expected.

Downtown Miami boasts skyscrapers, the port of Miami (Dodge Island), and Virginia Key with its recreation areas and wastewater treatment plant. The business, recreation, and culture are plentiful, but there are pockets of urban residential areas which struggle with crime and lack of economic opportunity.

Comparing Communities

The map in figure 4 illustrates spatial extent of simplified¹⁰ land-use categories for the study areas. It is clear that different communities have distinct characteristics. For example, Liberty City and Little Havana are dominantly residential, while others, particularly 79th Street and Opa-locka have a greater mix of land uses, possibly suggesting more economic opportunities. Appendix C contains a table which quantifies this land use in terms of acreage and percent.

⁷ www.miamigov.com/grapeland

⁸ <http://awesome.good.is.s3.amazonaws.com/transparency/web/1309/america-s-food-deserts/index1.html>

⁹ <http://www.areavibes.com/miami-fl/little+havana/crime/>

¹⁰ Generalized Land Use for FDOT District 6 derived from 2014 parcels (see metadata in Appendix B - Data summary)

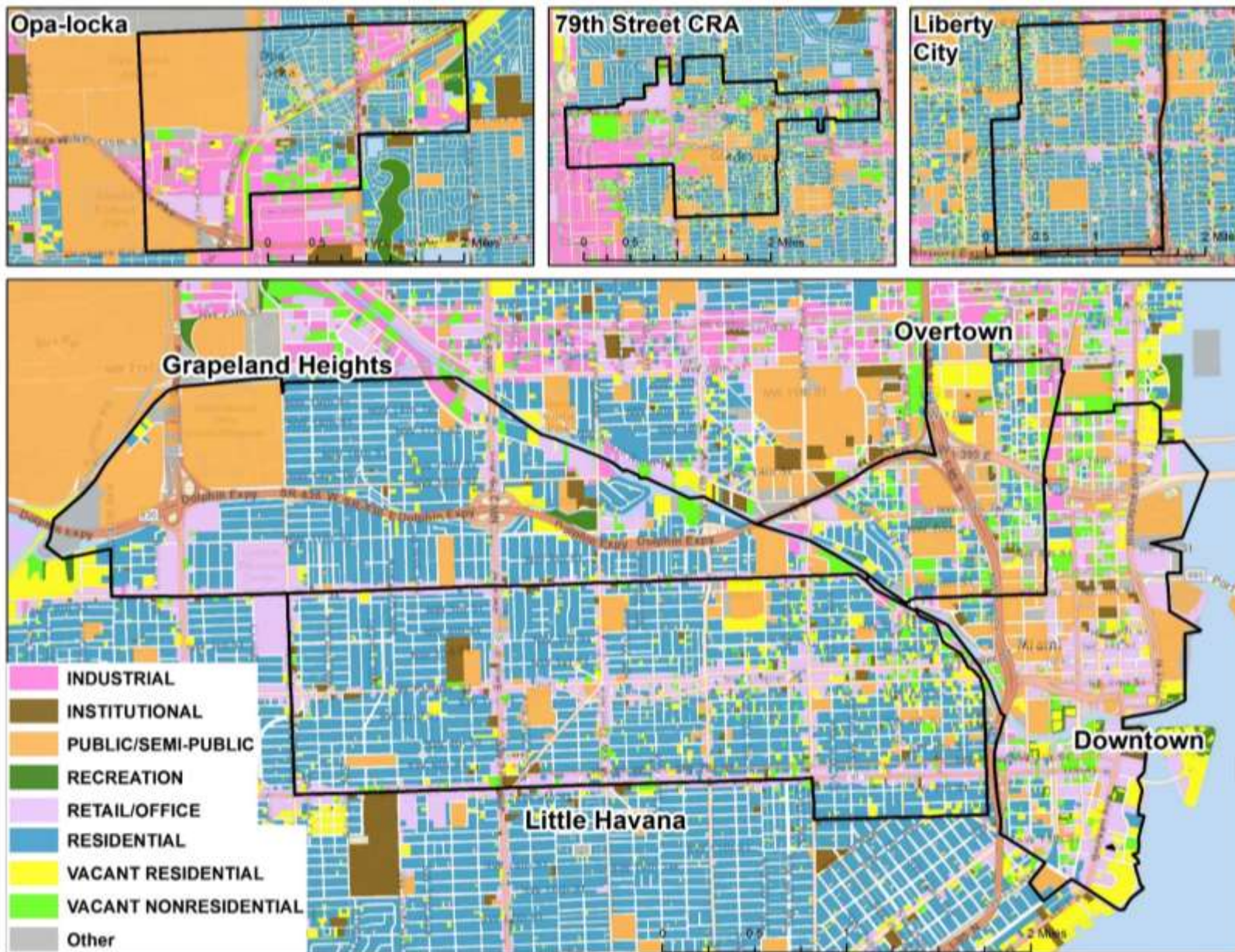


Figure 4: Land-use by parcel, 2014 (The 99 original Florida Department of Revenue land use classes have been collapsed into 15 generalized classes.)

Components of Access to Healthy Living

A crucial component of health and built environment planning and implementation has been identified regarding adequate types of bicycle, pedestrian and transit-supportive infrastructure that would facilitate healthier living and whether this infrastructure is available in communities with the greatest need. This report builds upon previous work done at the South Florida Regional Planning Council and other local agencies, utilizing important advances which have already been made.

Several data indicator projects exist which provide data on health, opportunities, and/or transportation for Miami-Dade County. These include Miami City DNA Social Compact, Miami Dade Matters, the Children's Trust, and the Partners in Information Access for the Public Health Workforce. The Data Collection Section will explore existing datasets and analyses further to identify baseline risks in terms of access to public transportation, healthy food, and health services. For example, a baseline risk may lie in the socioeconomic conditions within a neighborhood. Low-income is a key baseline risk which is an underlying hinderance to all three components of access to healthy living. Populations living below the poverty levels may struggle be able to afford transit costs to get to work, to healthcare services, and to supermarkets. These vulnerable populations also may have limited access to other health resources and recreation activities. Another baseline risk is age; elderly populations tend to have reduced mobility and higher likelihood of accidents, injuries, and illnesses.

Transportation: Safety and Mobility

Miami-Dade Metropolitan Planning Organization (MPO) has a wide range of plans, including the Transportation Improvement Program (TIP)¹¹ which includes 5 years' worth of funded transportation projects in Miami-Dade County, excluding municipalities, and the 2040 Long Range Transportation Plan (LRTP)¹² which specifies short and long-term goals. The prioritization of goals allows for the most efficient allocation of resources based upon anticipated funding and implementation opportunities. Other key regional transportation partners include Miami-Dade Transit (MDT), the South Florida Regional Transportation Authority (SFRTA) which operates TriRail, the Miami-Dade Expressway Authority (MDX), the Florida Department of Transportation (FDOT) Districts 6 and 4, the Miami-Dade Department of Public Works and Waste Management (MDPWWM), the MPOs of Broward and Palm Beach Counties, as well as the U.S. Department of Transportation. Public transportation agencies strive to increase transportation system connectivity and related opportunities. This requires consideration of a range of technical concerns, but also sociodemographic characteristics. Transit oriented development must incorporate a variety of transportation data but also overlay it with relevant data on needs such as health services and community assets in order to effectively meet needs and advance economic development and equity.

The Citizens' Independent Transportation Trust (CITT) oversees the funding derived from the 1/2 penny sales tax approved by the voters in 2002 and as laid out in the People's Transportation 5-year Plan¹³ in Miami Dade County. Published in 2011, the plan contains completed, ongoing, and planned projects which specifically aim to improve services such as 24-hour bus service, street improvements, and reversible flow lanes. These projects are prioritized and adjusted as limited funding is adapted and

¹¹ <http://miamidademopo.org/transportation-improvement-program.asp>

¹² <http://miamidademopo.org/library/plans/2040-long-range-transportation-plan-final-2014-10.pdf>

¹³ <http://www.miamidade.gov/citt/library/5-year-plan/2012/5-year-plan-presentation.pdf>

needs are continuously assessed. A significant change took place when the county administration approved the use of these funds for operations and maintenance, in addition to capital projects.

Healthcare

There are a variety of hospitals, care centers, and emergency clinics in Miami Dade County. Florida Department of Health in Miami-Dade County offers services related to public health, environmental health, disease prevention, and wellness¹⁴. The Consortium for a Healthier Miami-Dade aims to address increasing rates of chronic disease in the county in their 2014-2017 strategic plan by being a major catalyst for healthy living in Miami-Dade through the support and strengthening of sustainable policies, systems and environments^{15,16}. The U.S. Department of Health and Human Services established Healthy People 2020 with 10-year goals and objectives for health promotion and disease prevention¹⁷. Healthy People is designed to improve the quality of the nation's health and provide a framework for public health prevention priorities and actions. Other key players at the regional, state and national level include the Health Council of South Florida¹⁸, Florida Kidcare¹⁹, Florida Agency for Health Care Administration²⁰ and Centers for Disease Control and Prevention²¹.

Healthy Foods and Fitness

Many healthcare organizations focus on healthy eating and exercise as part of their initiatives. Other local groups include Healthier Miami-Dade²², YOUTH L.E.A.D.²³ and the South Florida Food Policy Council²⁴. The Florida Department of Agriculture and Consumer Services (FDACS), led by Commissioner Adam Putnam, has created "Florida's Roadmap to Living Healthy", an interactive mapping tool which displays state health and nutrition information at the community level, including data on Florida's food deserts (areas without ready access to quality retail grocery stores), Floridians eligible for SNAP (food stamp) benefits, and death rates from diet-related illnesses, including diabetes, cardiovascular disease and certain cancers²⁵. The interactive maps in "Florida's Roadmap to Living Healthy" show that there are relatively higher rates of diet-related illnesses and accident related deaths in the seven neighborhoods highlighted in this study. There are 84-149 diet related deaths per tract in areas of Little Havana and Liberty City.

¹⁴ <http://miamidade.floridahealth.gov/>

¹⁵ <http://www.healthymiamidade.org/>

¹⁶ <http://www.healthymiamidade.org/system/js/back/ckfinder/userfiles/files/Consortium%20Strategic%20Plan%202014-2017%20Final%20docx.pdf>

¹⁷ <http://www.healthypeople.gov>

¹⁸ <http://www.healthcouncil.org/>

¹⁹ <http://www.floridakidcare.org/>

²⁰ ahca.myflorida.com

²¹ <http://www.cdc.gov/>

²² www.healthymiamidade.org/

²³ www.crala.org

²⁴ www.youthleadmiami.org

²⁵ <http://app2.freshfromflorida.com/gis/roadmaptohealth/>

Literature and Data Review

To identify areas with the most significant need to increase access to healthy activities, current health conditions as well as other indicators must be considered. A literature review of indicators will justify selection of indicators for this project, classified by the components of access to healthy living as outlined above as well as by socioeconomic and other aggregated indicators.

Transportation: Safety and Mobility Indicators

“Transportation in Miami is central to functioning and accessibility for its residents and strongly influences the availability and convenience of health services.”

Source: Transportation Access throughout the Life Course (2012) by Urban Health Partnerships Land-use

Transportation is a crucial component for creating fair and just communities, with equal access to opportunities. An analysis of social cohesion includes research on access to jobs, resources, and health services (Banister & Hickman, 2013). Spatial connectivity may be assessed by mapping bus stops, highways, bike lanes, major roads, as well as public transportation stations and routes for buses, Metrorail, Metromover, and Tri-rail. These layers may be compared to other component criteria to make recommendations. Miami-Dade GIS²⁶ and the Florida Geographic Data Library (FGDL)²⁷ house much of this data.

As the focus on transportation systems is explored, there is a consideration of the interconnectedness at the boundaries with health, economics, and development. The transportation layers must be spatially evaluated with respect to locations of health care centers, recreation, libraries, neighborhood revitalization areas, community redevelopment areas, police stations, fire stations, and brownfields. It is important to explicitly ask transportation, health, and equity questions in a parallel manner throughout planning process.

Public Health and Healthcare Indicators

There are a wide range of indicator websites which measure public health and access to healthcare in South Florida. Key resources such as health data and statistics are available at the county and zip code level for Miami-Dade County.

- The *National Environmental Public Health Tracking Network (Tracking Network)*²⁸ provides maps and table views of data related to health, exposure, and hazards from a variety of national, state, and city sources²⁹.
- *Charts*³⁰ is a community resource assessment resource tool set from the Florida Department of Health. For example, the most recent County Health Profile done by Charts (2013)³¹ shows that

²⁶ <http://gisweb.miamidade.gov/GISSelfServices>

²⁷ www.fgdl.org

²⁸ <http://ephtracking.cdc.gov/InfoByLocation/>

²⁹ <http://ephtracking.cdc.gov/showHome.action>

the two major causes of death in Miami-Dade County are heart disease and cancer. The report also shows disparities by race for select health statistics.

- The *Health Rankings by County*³² ranks Miami-Dade County as fifth highest in the state in terms of health outcomes.
- *Miami Dade Matters*³³ has a community dashboard which maps a variety of health factors.
- *Health Care Agency Performance Measures and Gauge for Health Care Quality*³⁴ provide data sourced from the Florida Agency for Health Care Administration.

Healthy Foods and Fitness Indicators

In addition to indicator websites, there are also studies which focus on overlaying health data with socioeconomic data and the availability of healthy food and opportunities to exercise. Figure 5 illustrates the results of a 2012 study, *A Healthier Future for Miami-Dade County: Expanding Supermarket Access in Areas of Need*, which overlaid the incidence of low-income with diet-related deaths (Food Trust, 2012). The map on the left indicates a cluster in Miami-Dade County, indicated in red which is a hotspot for low income and high incidence of diet related deaths. When overlaid with supermarket sales and population, further need is identified which overlaps within the diet-related mortality data by income cluster. The map on the right narrows the vulnerable hotspot further by pinpointing areas within the cluster with limited access to healthy food. The results show that supermarkets are especially sparse in Opa-locka and the 79th Street CRA area. The report also describes the obesity epidemic as preventable, stating that two out of three adults in Miami-Dade County is either overweight or obese.

Figure 6 shows that for 2015, Miami ranks 22nd out of 50 U.S. metropolitan areas in terms of personal health indicators based on the American College of Sports Medicine's (ACSM) American Fitness Index®. This ranking reflects a composite of preventive health behaviors, levels of chronic disease conditions, health care access, and community resources and policies that support physical activity. Included in the report are benchmarks for each data indicator to highlight areas that need improvement. In 2009, Miami was ranked 31st, so there has been significant improvement³⁵. Health behavior statistics indicate that over one-third of the county consumes two or more fruits per day, but only 16.5% consume three or more vegetables per day.

The percent of the population smoking cigarettes is 12.2%, which is already below the target goal. While 11% of the population has diabetes, which is well above the target goal of 6.4%, the death rate for diabetes is also below target. While these county level statistics give a good overall idea of the current state of the health for the population, the distribution in the range of the variables is wide, and certain areas with lower income have less healthy behaviors and more chronic health problems. This disparity is difficult to distinguish because most health data is only available at the county level. While some health data is available at the zip code level, there are still issues with error and statistical significance.

³⁰ <http://www.floridacharts.com/charts/default.aspx>

³¹ <http://www.floridacharts.com/charts/SpecReport.aspx?RepID=1341&tn=24>

³² <http://www.countyhealthrankings.org/app/florida/2015/rankings/miami-dade/county/outcomes/overall/snapshot>

³³ <http://www.miamidadematters.org/>

³⁴ <http://apps.ahca.myflorida.com/dashboard/>

³⁵ <http://www.examiner.com/article/miami-is-only-31st-fittest-city>

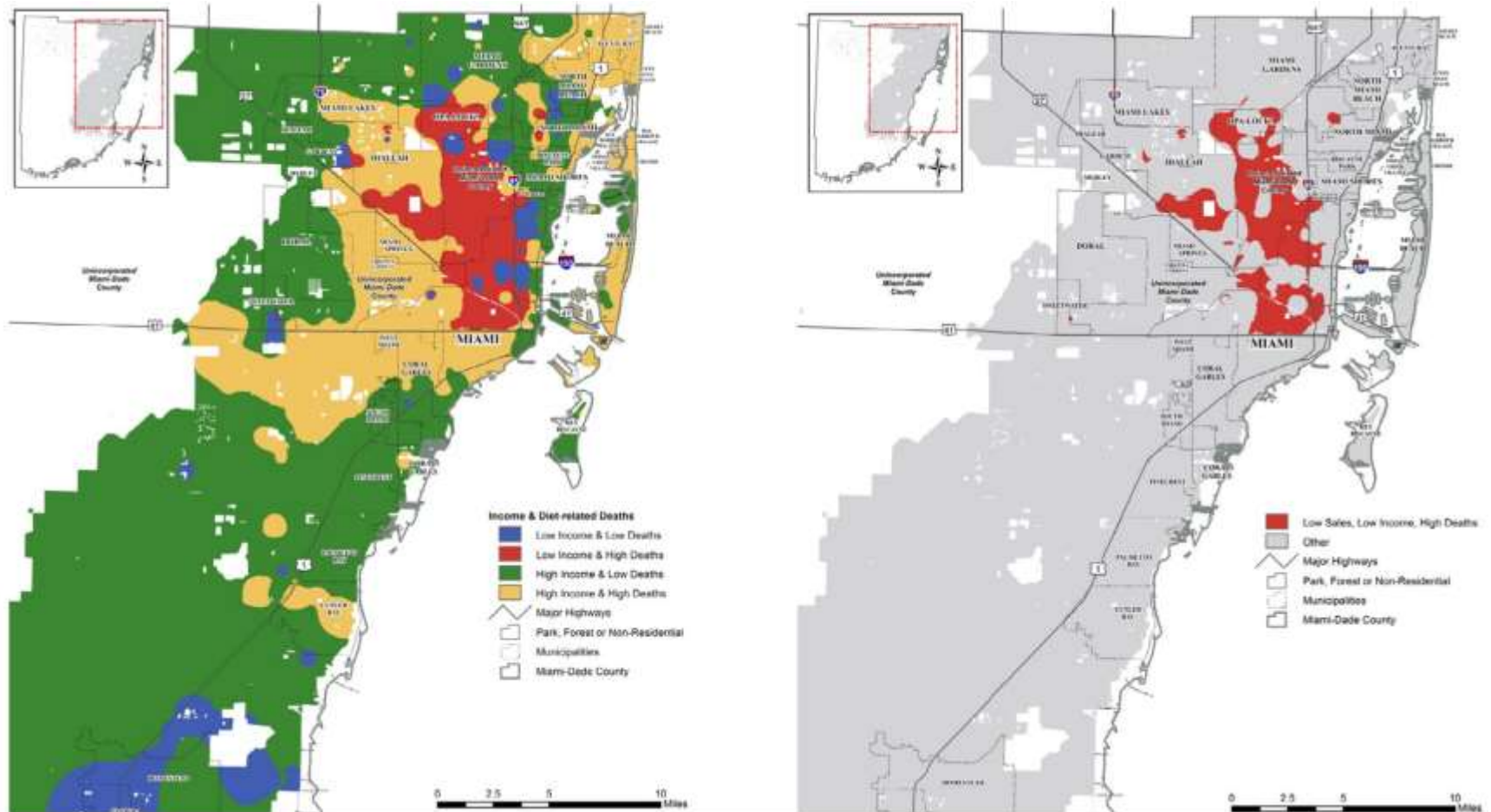


Figure 5: Diet-related mortality data by income: Source: Food Trust. (2012). *A Healthier Future for Miami-Dade County: Expanding Supermarket Access in Areas of Need*. Available at http://thefoodtrust.org/uploads/media_items/miami-dade-supermarket-report.original.pdf

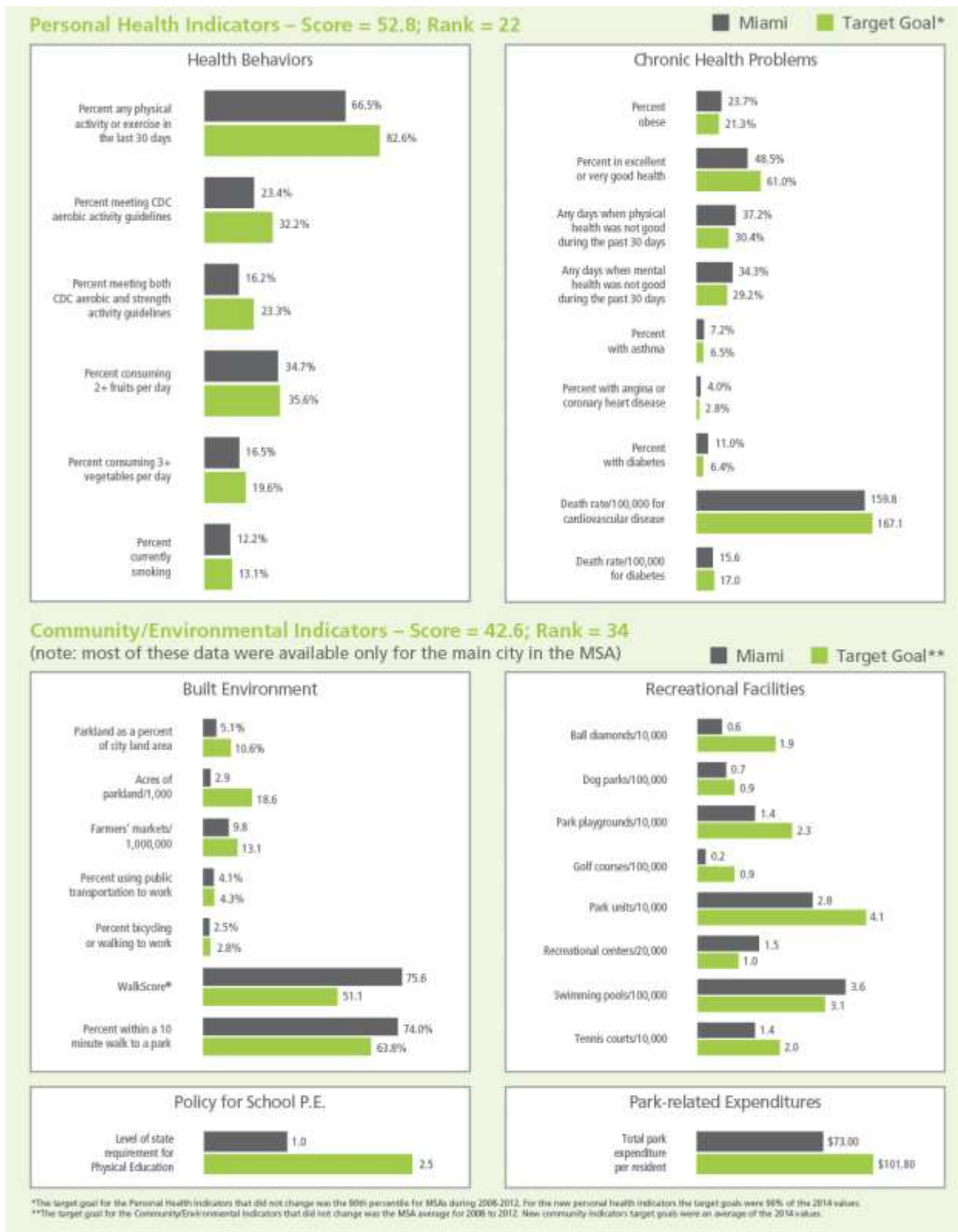


Figure 6 Personal Health and Community Indicators for Miami-Dade County
 Source: <http://americanfitnessindex.org/?city=miami-fl>

Food Deserts

Food deserts are defined as urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food³⁶. These areas tend to have fast food and convenience stores instead of supermarkets, and the food available is not as fresh, healthy, or affordable. Census tracts qualify as food deserts if they meet low-income and low-access thresholds. Low-income communities either have a poverty rate of 20 percent or greater or a median family income at or below 80 percent of the area median family income. Low-access communities depend on the ratio of people to supermarket access. The threshold is at least 500 persons and/or at least 33% of the census tract's population live more than one mile from a supermarket or large grocery store⁴⁵.

“Accessing healthy food is a challenge for some Americans - particularly those living in low-income neighborhoods and communities of color. Research has shown that, if a person is Black, Hispanic or living in a low-income block group they are more likely to live in an area with limited access to a full service supermarket.”

-Policy Link’s Equitable Development Toolkit: Access to Healthy Food⁴⁶
46(2001)46

The *Healthy Food Access Portal* is a Food Access Research Atlas that contains detailed maps by census tract³⁷. It is possible to explore the range in food access in terms of food deserts as well as the locations accepting food benefits such as the Women, Infants, and Children (WIC)³⁸ nutrition program and Supplemental Nutrition Assistance Program (SNAP)³⁹. According to the USDA ERS Food Access assessment of Miami-Dade retailers, the county has 33 farmer’s markets, 268 supermarkets, 417 convenience stores, and 1,639 fast food/takeout restaurants. Figure 7 shows the County’s Limited Supermarket Access Areas (LSAs), containing a population of 149,677. Parts of the 79th Street, Liberty City, and Grapeland Heights neighborhoods appear to contain areas of Limited Supermarket Access but almost all of Overtown appears to fall into this category. However, comparing this information with that in figures 17-20, access to supermarkets in Overtown appears to be better than indicated in figure 7 while almost all of OpaLocka seems to be disadvantaged in this regard.

³⁶ <http://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx>

³⁷ <http://www.ers.usda.gov/data/fooddesert>; <http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx>; <http://healthyfoodaccess.org/get-started/research-your-community>;

http://www.policylink.org/sites/default/files/Research%20Your%20Community%20Data%20Indicators%20and%20Sources_0.pdf;

http://www.ers.usda.gov/datafiles/Food_Access_Research_Atlas/Download_the_Data/Current_Version/documentation.pdf

³⁸ <http://www.fns.usda.gov/wic/women-infants-and-children-wic>

³⁹ <http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap>

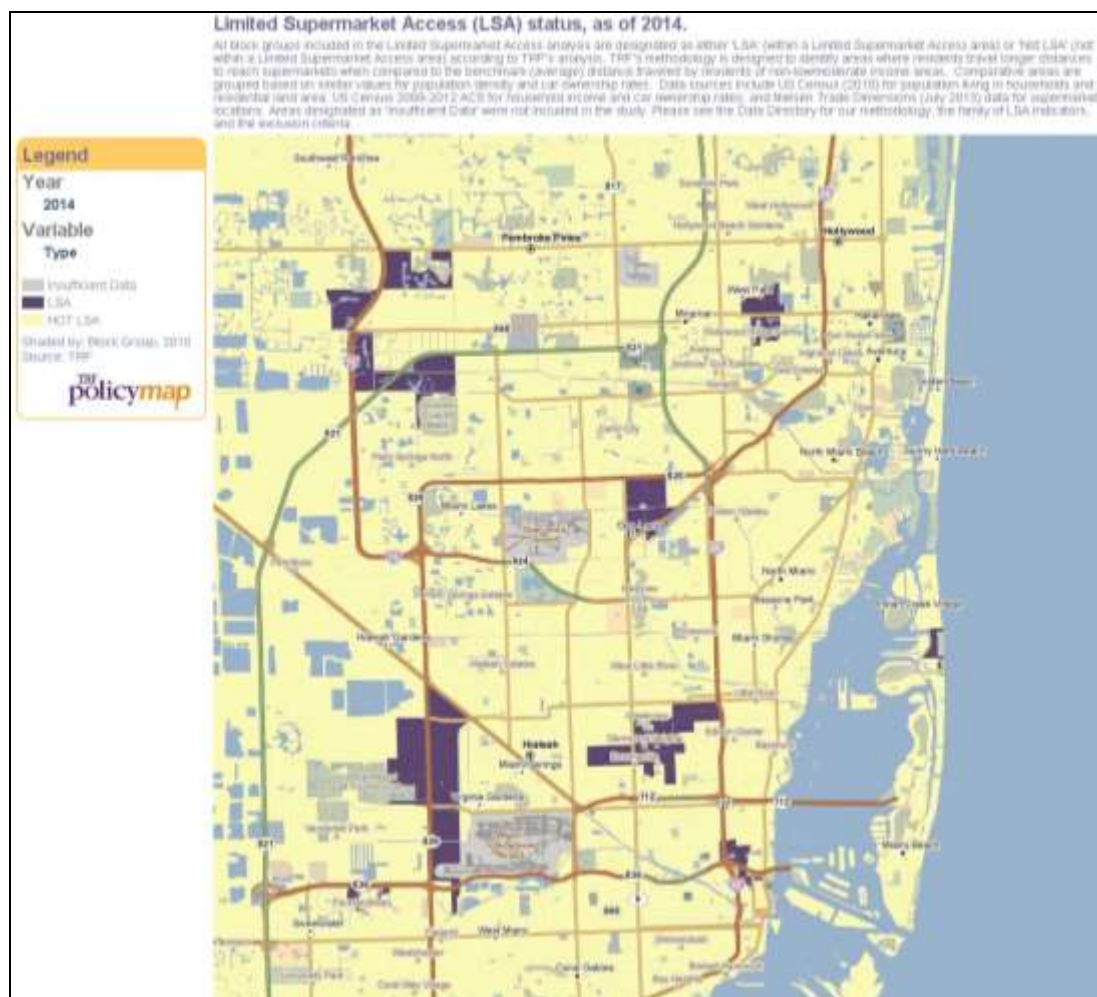


Figure 7 Limited Supermarket Access (LSA) status, as of 2014. (source: <http://www.trfund.com/limited-supermarket-access-lsa-analysis-mapping-tool/>)

Socioeconomic Indicators

Hickey et al., 2012 found that the cost burden of housing and transportation in Miami is the highest in the country, with 32% of income going to transportation costs⁴⁰. These areas may require a tailored approach for decision-making which promotes equity and positive change. Socioeconomic data, generally retrieved from the U.S. Census and American Community Survey (ACS) is important to consider for any health related needs assessment. The Fair Housing Equity Assessment (FHEA) was prepared by Carras Community Investment for the Southeast Florida Regional Partnership's Seven50 project, which created a framework of useful indicators to be used for this effort. The partnership was a group of seven counties and many agencies and organizations which came together to propose a sustainable Prosperity plan for the region led by two Regional Planning Councils. The Southeast Florida Plan for Regional Prosperity and Seven50 created 31 Fair Housing and Equity Assessment (FHEA) indicators, as calculated based upon ACS data. Table 1 presents 15 of these selected indicators which serve as a basis for reflecting social equity, with examples of calculated data from the city of Opa-locka. These indicators will be further discussed in the methodology and Appendix F.

⁴⁰ http://www.nhc.org/media/files/LosingGround_10_2012.pdf

Table 1: City of Opa-locka's 12 block groups (BG), one of which has no residents.

Variable Name	Description	Opa-locka		
		City Total	BG* Low	BG* High
FHEA06	Median Household Income (\$)	\$20,379	\$6,268	\$32,895
FHEA08	% of All Persons in Poverty	31.85%	6.41%	69.40%
FHEA09	Of Families with Children, % in Poverty	39.48%	0.00%	85.71%
FHEA10alt	% Unemployed (Labor Force)	13.51%	2.34%	59.09%
FHEA12	% Without a High School Diploma	38.51%	27.95%	56.76%
FHEA14	% With at least a Bachelor's Degree	8.16%	0.00%	18.35%
FHEA18	% Owner-Occupied Housing Units	30.86%	3.04%	82.06%
FHEA19	% Vacant Housing Units	13.65%	0.00%	22.82%
FHEA20	% Single Parent Households with Own Children	22.76%	0.00%	41.22%
FHEA21	% Households with Children Under 18	35.56%	13.55%	51.85%
FHEA22	% Households with Persons 65+	25.64%	0.00%	67.56%
FHEA23	Owner Affordability Gap / Median Value	-\$102,863	-\$236,933	\$0
FHEA24	Renter Affordability Gap / Median Gross Rent	-\$245	-\$834	\$52
FHEA25	% Owner Households Spending 30%+ (Owner Costs)	70.06%	42.68%	100.00%
FHEA33	% Households without a Vehicle	21.99%	7.44%	45.79%

* BG = (Census) Block Group

Education and Youth Indicators

The Children's Trust has a *KidStats and Maps* data analysis and mapping tool which provides data and community assets related to Miami-Dade children and their families⁴¹. This is a comprehensive resource for assessing community and family characteristics, from low birth weight to accidental death. Youth behavior and development indicators describe concerns such as various kinds of youth crime and education indicator risk factors including suspension.

The *Child Opportunity Index* is another youth measure that has been applied to South Florida. It measures relative opportunity across a metropolitan area based on indicators of educational opportunity, health and environmental opportunity, and social and economic opportunity. Figure 8 illustrates the results of the index, with the darker colors representing higher opportunities and the lighter colors in areas which are hotspots for need.

Figure 8: Health, Environmental, and Socioeconomic Child Opportunity Index (see Appendix D for details)



⁴¹ <http://maps.thechildrenstrust.org/Miami/index.jsp>

Methodology and Data Collection



Identifying baseline conditions and risks

In order to measure progress and target social investment channels, it is crucial to understand baseline conditions and to identify unique risks in terms of lack of access. Much of the literature review has described the current status of Miami Dade County with respect to transportation, healthy food, exercise, and health services. By documenting existing projects, a foundation has been set to build upon for data collection and community indicator selection. To assess the access to these resources and the needs of the community, the connections will be assessed at the neighborhood level. As the neighborhoods are clustered as a collection of block groups, block group data is the ideal variable for census data. However, this data can be overlaid with health data, which is generally available at the county and zip code level. Data collection occurred using the resources identified in the literature review.

Identify health needs and availability of healthy food

Health needs were also explored in the literature review and further inquiry took place to identify current health risks. Developing maps for health data, including current health conditions and healthcare facilities, requires an understanding of the accuracy and source of the data. For example, the State of Florida has a Behavioral Risk Factor Surveillance System (BRFSS) which uses 5-year moving averages of survey data⁴². The Public Health Surveillance of Fruit and Vegetable Intake Using the Behavioral Risk Factor Surveillance System has a document describing the reliability and validity of the results, which were calculated using Statistical Analysis Software (SAS) Callable SUDAAN Code to

⁴² http://www.cdc.gov/brfss/data_tools.htm

estimate median number of times fruits and vegetables that were reported as consumed per day and percentage of people consuming fruits and vegetables less than once per day in 2011⁴³.

Identify trends in availability of opportunities for exercise

Opportunities for exercise depend on recreational areas and exercise facilities, but also on factors such as crime and shade. It is important to assess locations of municipal parks, walkability, and other variables found in correlation to access to a range of exercise options.

Identify gaps in transportation

Data for public transportation routes and stops was collected. Bicycle and pedestrian related infrastructure, and any other remotely available traffic data was obtained. There was limited available data for sidewalks, crosswalks, street lighting, shade, street furniture and other, engineering, and general operations.

Spatial Visualization of Fair Housing Equity Assessment (FHEA) Indicators

The FHEA indicators were integrated into Web-based Analysis and Visualization Environment (WEAVE) visualizations. The FHEA defined a total of 33 indicators (27 based on the ACS), which were collected at the census tract level from the 2006-10 ACS through to 2007-2013. The smallest level of geography for tabulated socio-economic data is whole census block groups, from the 5-year period estimates. Most tables are available at that level, but not all. For example, FHEA11 – the % of Households Receiving Supplemental Nutrition Assistance Program (SNAP) Benefits – is not available for block groups. Margins of error for block groups are often very large, making it difficult to develop reliable policy analysis. The data reflects the characteristics of the housing units and the population from a cumulative sample of households taken over 60 months. The next tier up is census tracts, also from the 5-year period estimates. The areas are larger and the Margins of Error (MoEs) tend to be smaller, but it is harder to tailor the data to specific neighborhoods within the municipal jurisdiction. On the positive side, data is published for the portions of census tracts that fall within municipal boundaries, making it possible to analyze sub-areas within municipal jurisdictions with more precision.

A series of data compilation maps for all of the indicators were created using ArcGIS and Web-based Analysis and Visualization Environment (WEAVE). WEAVE (BETA 1.0) is a new, web-based visualization platform designed to enable visualization of any available data by anyone for any purpose. Weave is an application development platform supporting multiple levels of user proficiency – novice to advanced – as well as the ability to integrate, disseminate and visualize data at “nested” levels of geography (SFRPC, 2013).

WEAVE allows for an inquiry-based, interactive, and engaging experience. The WEAVE template permits the simultaneous viewing of four windows composed of maps, scatterplots and bar charts. The data in each window is connected spatially by geography (in this case census block group), which allows associated indicator relationships to be observed in all four windows by highlighting the block group data point in any one of the windows. For example, hovering over a block group on the map will cause the block group shape, along with all associated data points in other windows, to be highlighted. For this report, static screenshots have been taken, but the live link to the dynamic interface are provided for further exploration in Appendix E.

⁴³ http://www.cdc.gov/brfss/data_documentation/pdf/fruits_vegetables.pdf,
http://www.cdc.gov/brfss/gis/gis_maps.htm

The data was compiled into a range of visualizations for each of the seven study areas. These include two different data stories, assessed over the four time ranges, as described below.

Education, Employment, and Income for Families and Labor Force

These visualization stories focus on equity and using data to consider a fair distribution of opportunities. While each FHEA indicator has its own value in telling a piece of the story based on economic, employment, and educational conditions, exploring the connections between these can stimulate a new understanding which can drive change and decision-making.

For example, figure 9 is a static example of Census tract level data for Median Household Income (MHI) in the study areas. The dark blue indicates the lowest incomes, which are below \$20,000 per year. It is clear that Overtown has the most dramatic prevalence of this extremely low MHI. Overlaying information for education and employment may allow for an inquiry that adds more depth to this analysis, and change over time can open opportunities with activities such as performance measures.

Housing Affordability for Owners and Renters

A common benchmark for housing cost is whether a household is paying more than 30% of their income towards housing. This is referred to as the cost burden. Examining the affordability to homeowners and renters is a necessary first step to reducing the cost burden in our communities.

Reducing housing costs requires multiple policy strategies: boosting incomes, increasing housing production, and creating additional subsidized housing. These are related to transportation planning decisions when the linkages to gaps in public transportation routes and stops are overlaid with hotspots of housing and affordability needs. Decisions to implement these strategies can be informed through data analysis.

Analysis of aggregated spatial trends

Data was collected and overlaid with supermarket data. The data was input into an ArcGIS Network Analyst extension which input supermarket locations and assessed them in relation to streets and ratio of population in poverty. An ArcGIS Spatial Analyst extension was used to create a heat map of the walkable access and drivable access to supermarkets.

The estimation and overlay with public transportation in Arc GIS allowed the identification of transportation connectivity gaps in access to healthy living activities and services. This enabled hotspots with the most severe limitations to be pinpointed.



Figure 9: FHEA06 Median Household Income (\$)

Results

The results presented here are organized to allow for the study areas to be divided into sets of four maps for each data set: Liberty City, Opa-Locka, the 79th Street CRA, and a cluster with the remaining four. As Grapeland Heights, Overtown, Little Havana, and Downtown are located in close proximity to each other, they are grouped and labeled as the “study area cluster” as shown in Figure 10. Figures 11, 12 and 13 show the standard layout for most of the correlating results for Liberty City, Opa-Locka, and the 79th Street CRA. These maps also show an overview of the key public transportation routes and stops, including Metro Mover, Metrorail, and Bus. As these are overlaid with hospitals, police stations, and other layers related to safety and health, gaps in transportation can be identified. For example, in Grapeland Heights and the 79th Street CRA, there is relatively low access to hospitals. There is one area of Grapeland Heights, around NW 32nd Ave., which has no North-South routes within a quarter mile. Figure 10 also shows that all of the hospitals in the area are clustered between Grapeland Heights and Overtown, yet there are sufficient bus routes and other modes of transportation to provide access to these hospitals. Detention centers are also clustered on the eastern portion of the study area. The fire stations and police stations are quite evenly distributed. There is a distinct trend of increased availability for transportation moving east. With the addition of the Metromover and the Metrorail, there are many more options. The walkability also increases towards downtown, which is expected. However, as subsequent maps show, the availability of access to healthy foods and health services, these specific walking distances will be assessed.

Figure 11 shows the same variables plotted for Liberty City. While the neighborhood is quite far east, there is only accessibility to Metrorail at the south end. The police station has more public transportation options than the fire station. The nearest hospital is accessible through public transportation, but would require at least one change on the bus. Figure 12 shows that the city of Opa Locka contains the airport along which the main bus routes run. Public transportation to hospitals likely requires numerous stops, and the hospitals that lie outside the city are already at a distance of over 5 miles. Figure 13 shows that the 79th St. CRA has a transportation gap with the east-west bus routes along NW. 71st St. However, Metrorail goes through the heart of the area and provides access, as do buses, to the hospital further west.

Figure 14 shows the results when the percent of commuters biking to work was input to a WEAVE visualization, which can be accessed and interacted with at the link provided in the caption. Indicated in white overlay, it is clear that the majority of the areas have less than 1% of commuters biking to work. Opa-locka, the 79th St. CRA, and Liberty City all have between 0% to 1% of commuters biking to work. However in the study area cluster, there are some parts of each of the four areas which have up to 25% of commuters biking to work. The highest percentage is in Overtown. This is an example of commuter and transportation data which can be relevant when assessing access to health services and healthy foods.

Figure 15 is also an overview of the entire study area, and it combines food desert statistics with vehicle access to pinpoint areas in which limited access to healthy foods is exacerbated by transportation constraints. Opa-locka, Overtown, and Grapeland Heights stand out in this map as having the most need. There is a clear divide along the I-95 expressway, west of which there is an increasing predominance food deserts. This dataset must be scrutinized, however, as some areas north of Miami Beach have also been selected based on the data, as food deserts. These areas are more affluent, and

likely have been given this designation due to the demographic situation which is unique to this coastal, tourism-driven area.

Public Transportation, Public Safety, and Emergency Services

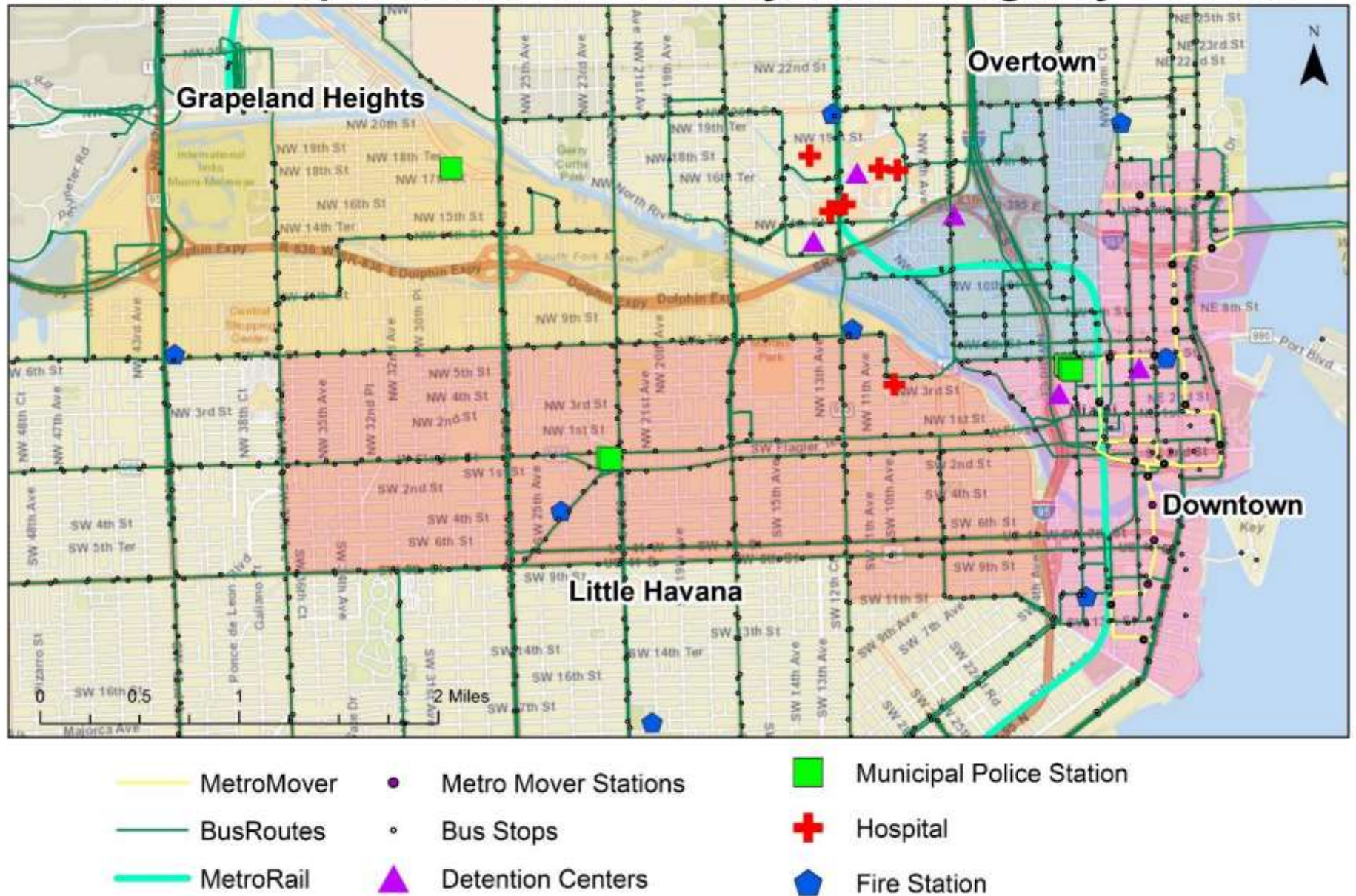


Figure 10: Public Transportation, Safety, and Emergency Services in study area cluster

Public Transportation, Public Safety, and Emergency Services

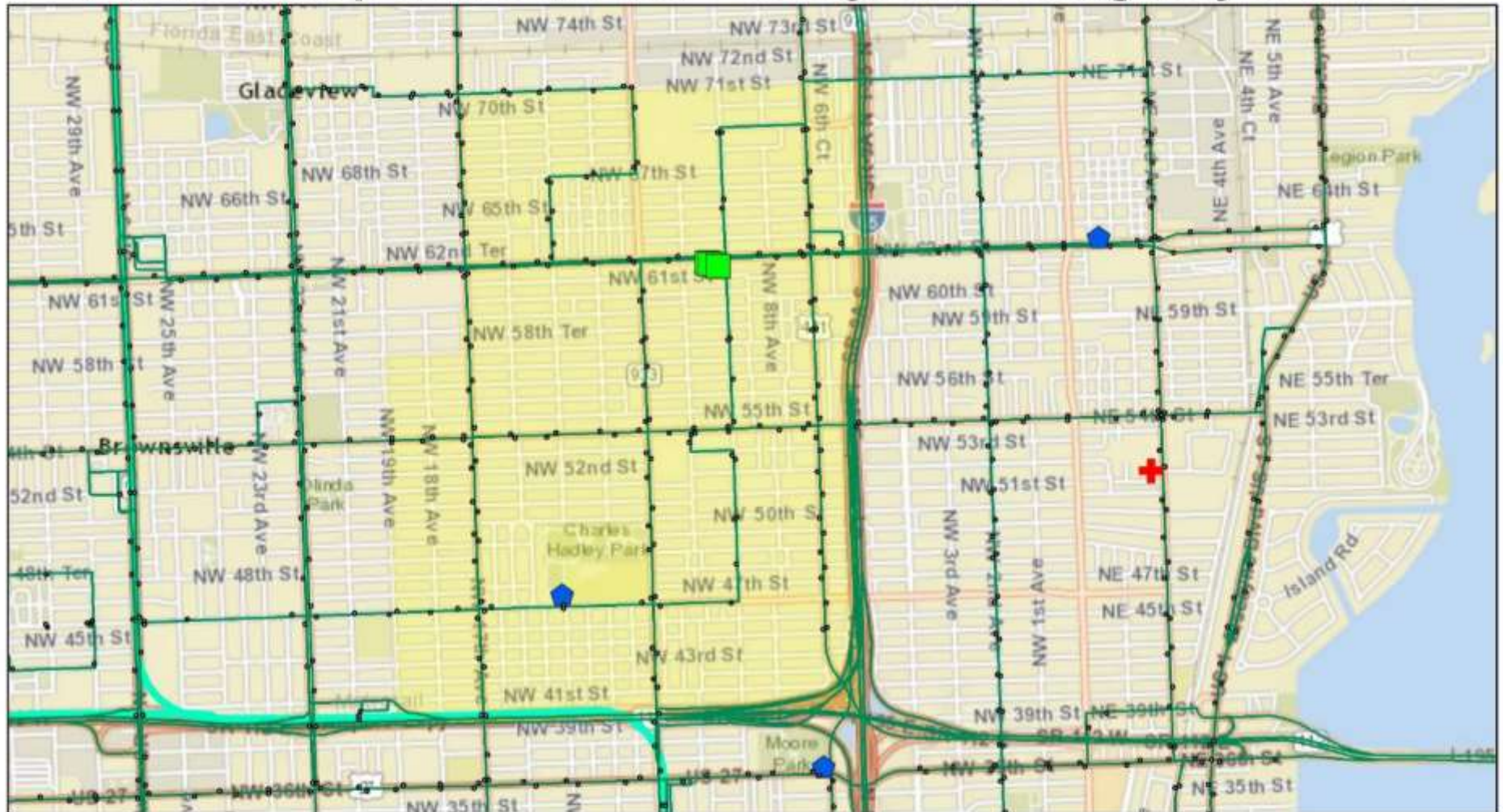
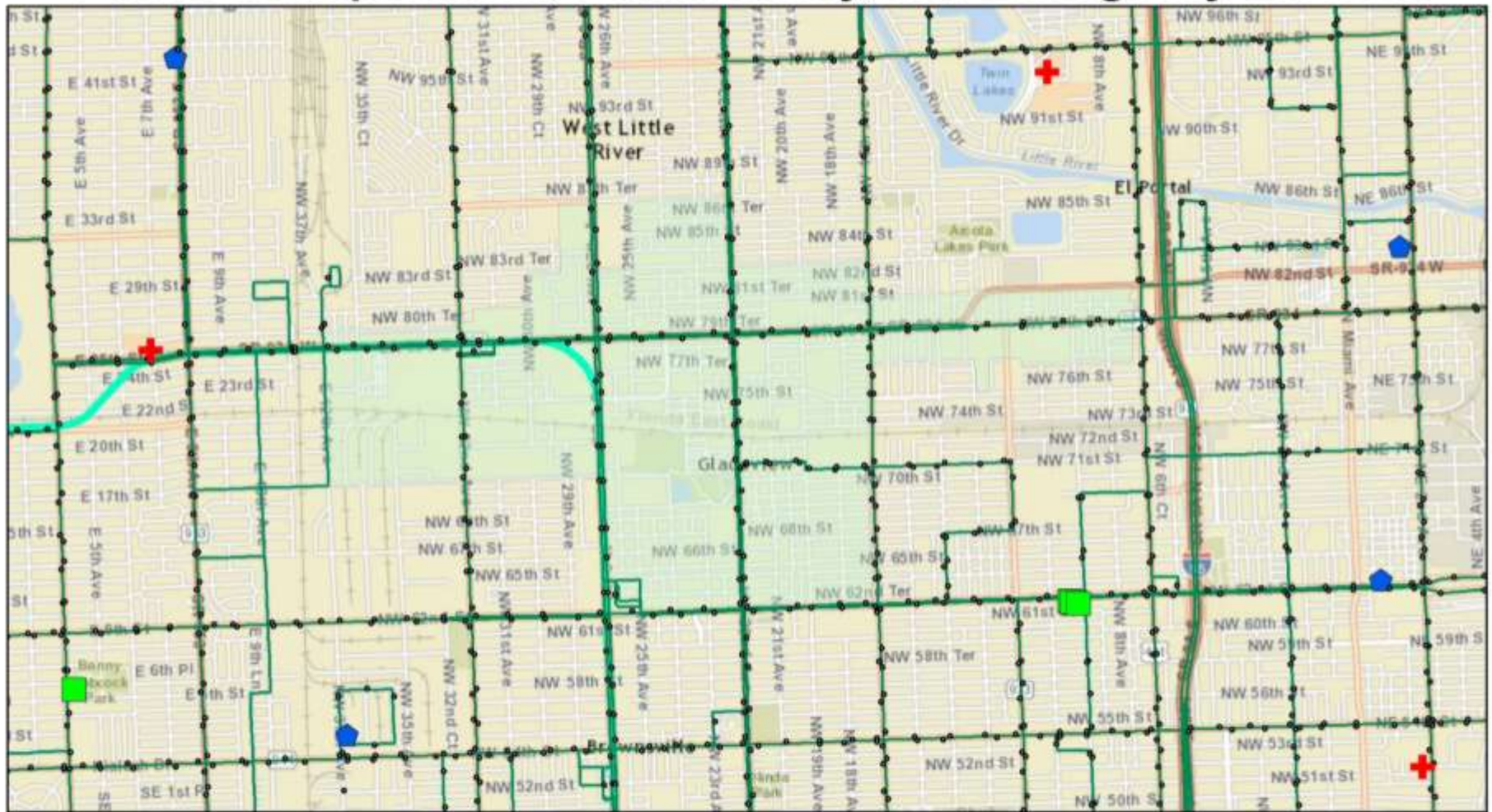


Figure 11: Public Transportation, Safety, and Emergency Services in Liberty City

Public Transportation, Public Safety, and Emergency Services



- MetroMover
 - BusRoutes
 - MetroRail
 - Metro Mover Stations
 - Bus Stops
 - Detention Centers
 - Municipal Police Station
 - Hospital
 - Fire Station
- ## 79th Street CRA

Figure 13 Public Transportation, Safety, and Emergency Services in the 79th Street CRA

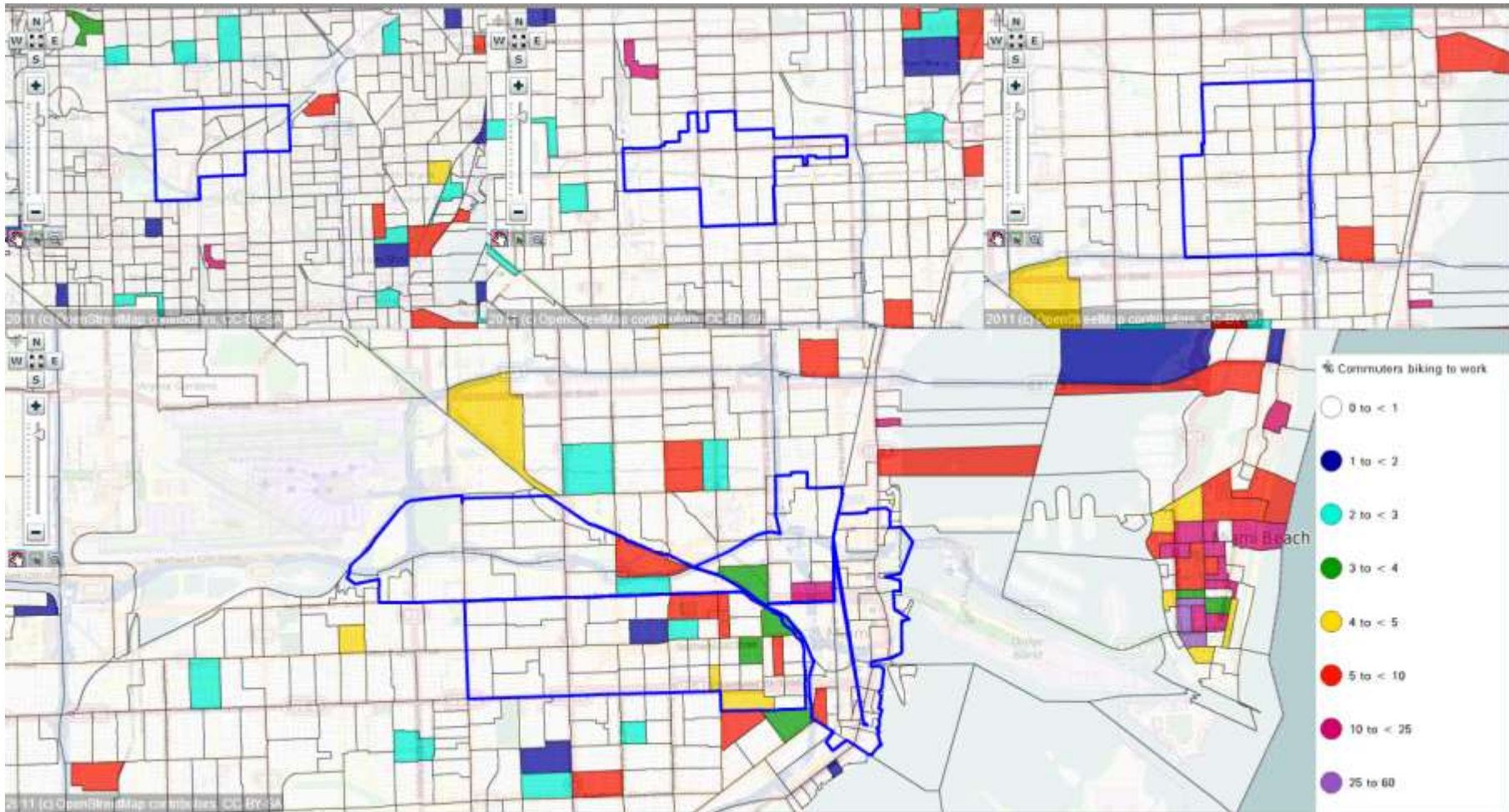


Figure 14: Screen shot of Weave Visualization for Percent of Commuters Biking to Work Source: American Community Survey Means of Transportation to Work 5-year average 2007-2011

View at <http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/bike711.weave>

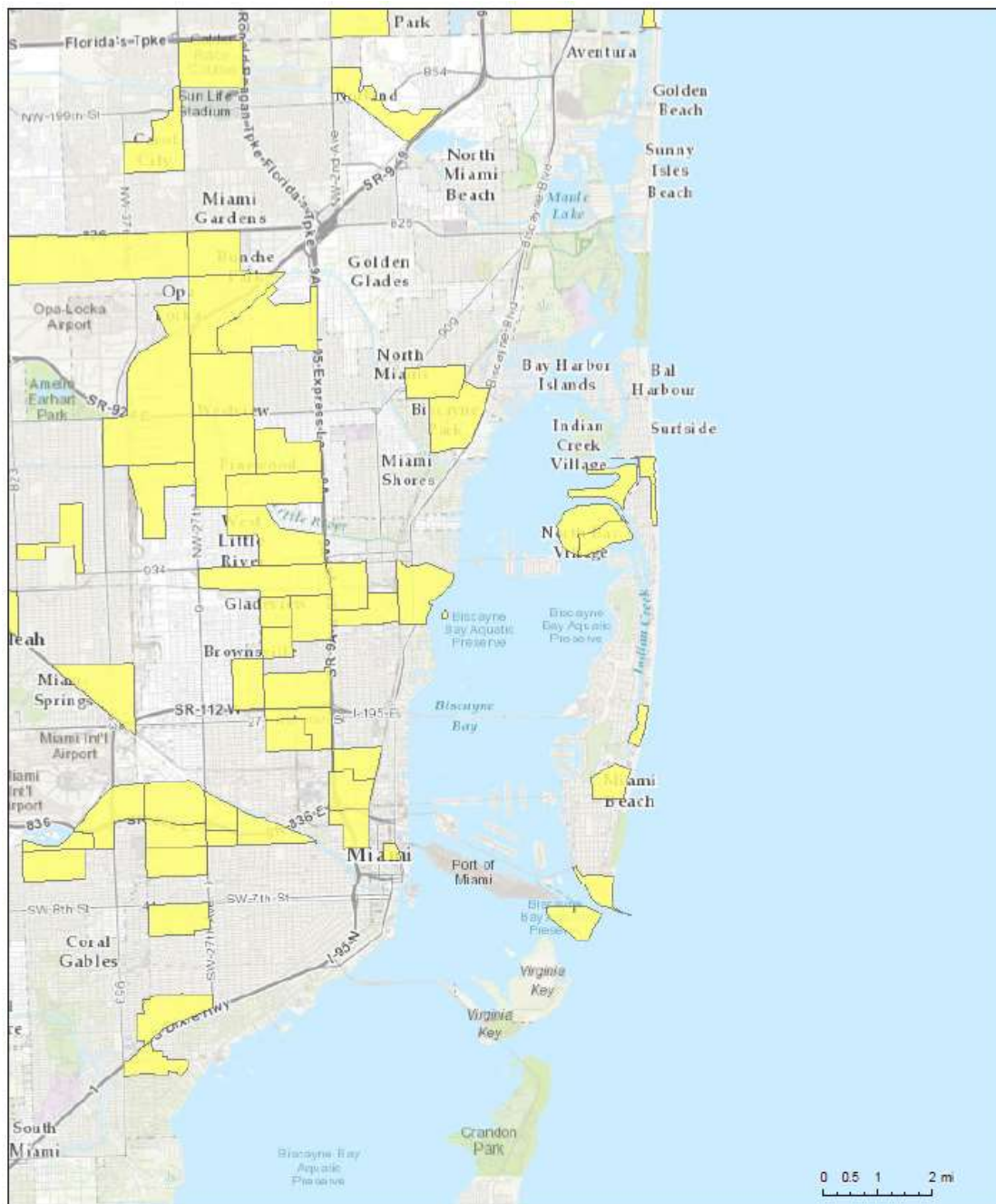


Figure 15: Food Deserts Based on Vehicle Access Using Tracts

Source: USDA Economic Research Service, ESRI. For more information:

<http://www.ers.usda.gov/data-products/food-access-research-atlas/documentation.aspx>

Figure 16 looks at food choices in a different way, by comparing the amount of money spent eating out (fast food or restaurants) versus at home. While there are many restaurants which offer healthy meal options, this scenario is more likely in the more affluent areas and in areas with family restaurants. Figure 16 shows that the ratio of expenditures at home versus those away from home is lowest (indicated in blue) around the northern part of Downtown and Miami Beach. Meanwhile, the study areas closer to Downtown, Grapeland Heights, Overtown, and Little Havana, have the highest prevalence of money spent on food that is consumed at home.

Figure 17 illustrates the modes of public transportation, when overlaid with a data layer which explores income and supermarket access. The supermarkets included are indicated by a blue S with a circle around it. The green circles indicate high supermarket access, and the red circles indicate low supermarket access. The size of the circles, however, indicates the relative proportion of people in poverty. Therefore, whether the circles are green or red, the large ones represent high levels of poverty. The 79th St. CRA has limited access to supermarkets in the southeast portion, and higher access in the Northwest. The largest need runs along NW. 68th St. and NW. 21st Ave., indicated by the larger red circles. This map also shows the municipal parks in the area, and that there are none in the unincorporated area. However, the area does have Gwen Cherry Park and Northwest Highlands Park.

Figure 18 shows that Liberty City has many more municipal parks and a supermarket right in the center, along several bus routes. The larger green circles, indicating larger populations living in poverty are clustered at the northwest corner of the neighborhood. Figure 19 shows that Downtown, Overtown, and Little Havana have relatively better access to supermarkets than Grapeland Heights, particularly the eastern portion of Grapeland Heights. The largest gap lacking municipal parks is in the western portion of little Havana.

Figure 20 shows that Opa Locka is the area with the least access to supermarkets. The entire city does not have any green circles. The densest populations living in poverty are in the central parts of the city. Bus routes to supermarkets in the outlying areas are not direct. Figure 21 shows the 79th St. CRA with the same public transportation layers, but with additional kinds of health service locations. As indicated in the legend, there are 10 different kinds of additional facilities. The department of health (DOH) WIC centers are locations where families can receive vouchers for healthy foods. The Florida department of children and families (DCF) facilities provide services related to community-based care, child welfare, children's legal services, homelessness, mental health and more. The 79th St. CRA has a WIC center along main transportation routes, however, there is not a TCF facility within the CRA boundary. This map also shows nursing homes and daycare facilities. Many of these facilities are not along public transportation routes.

Figure 22 shows the same variables as figure 21, but for Liberty City. Here, there are many more daycares along the public transportation routes. However, the only clinics within the neighborhood boundary are school-based clinics. For the study area cluster, figure 23 shows that the majority of facilities related to health are clustered around Overtown and Downtown. However, the mental health centers are all much further west. For figures 21, 22, and 23, most of the day care locations are along transit routes.

Figure 24 reflects significant gaps in Opa-locka, compared to the surrounding areas. Opa-locka only has one nursing home, and limited municipal parks. Very few of the health facilities are in walking distance, so if a resident cannot afford transit costs, they cannot reach the necessary clinics or health centers.

Many of the day care locations are not along transit routes. On a positive note, there is a comparatively larger bike lane network in the city.

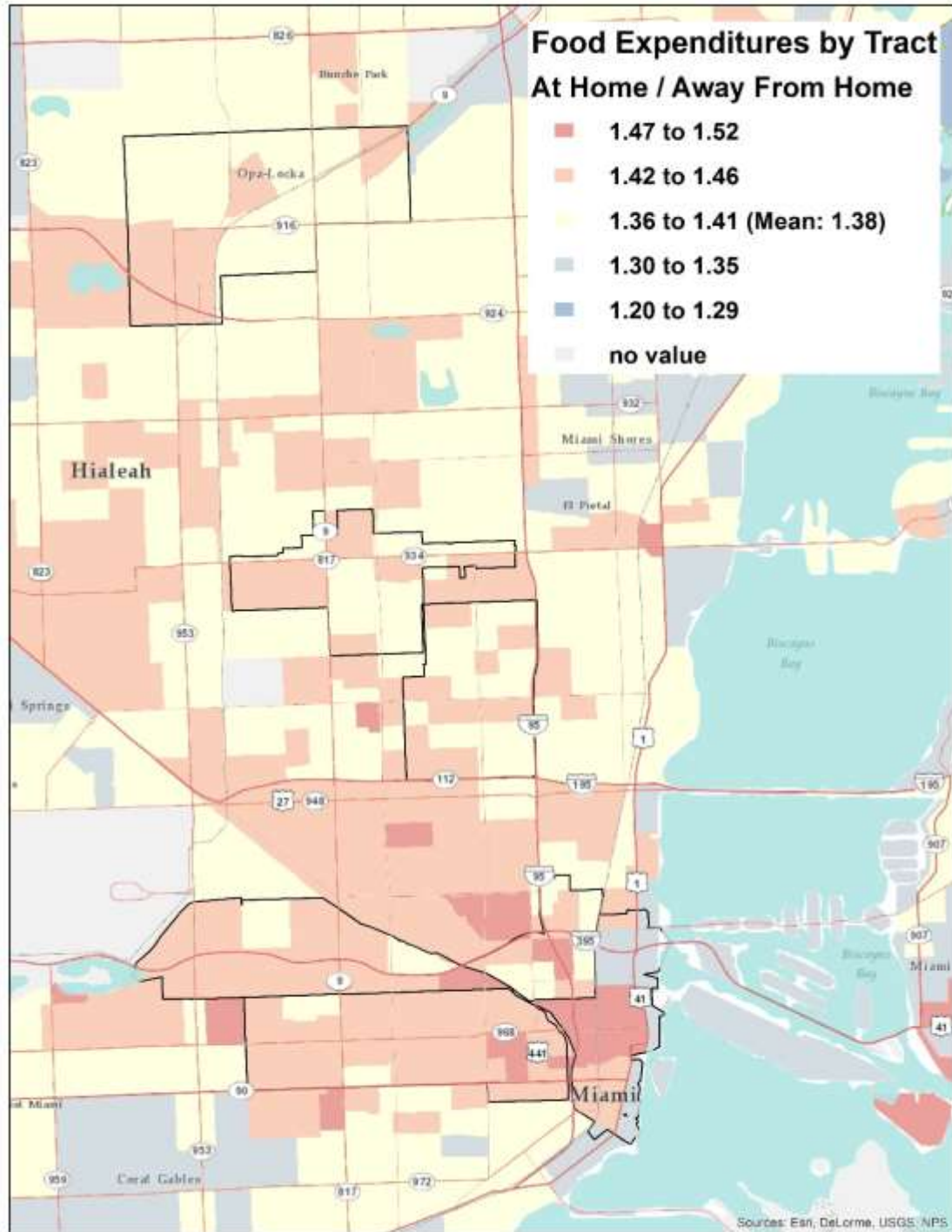


Figure 16: Food Expenditures as a ratio of at home to away from home

79th Street CRA Public Transportation, Safety, Poverty & Recreation/Supermarket Access

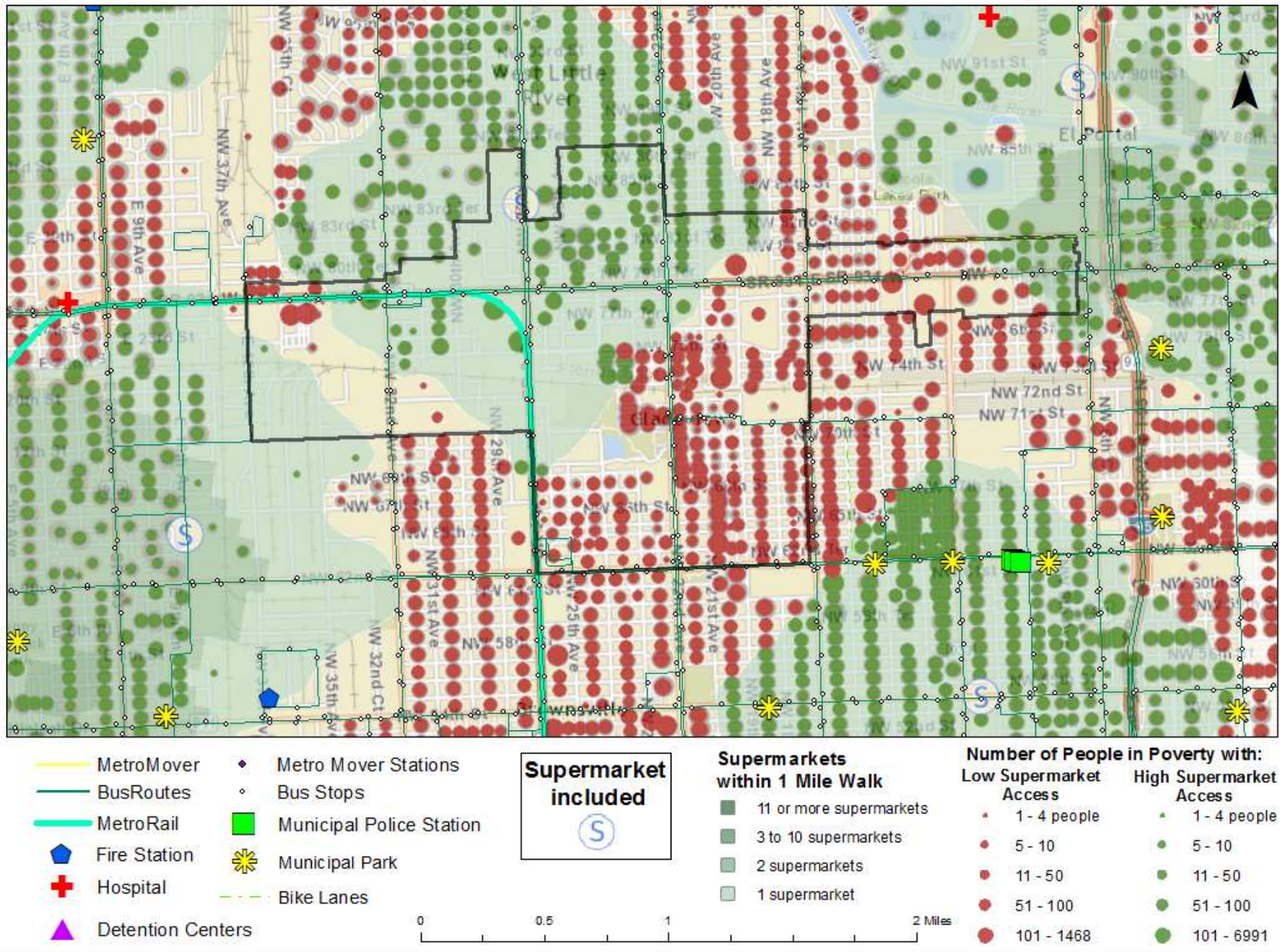


Figure 17 79th Street CRA Public Transportation, Safety, Poverty & Recreation/Supermarket Access

Liberty City Public Transportation, Safety, Poverty & Recreation/Supermarket Access

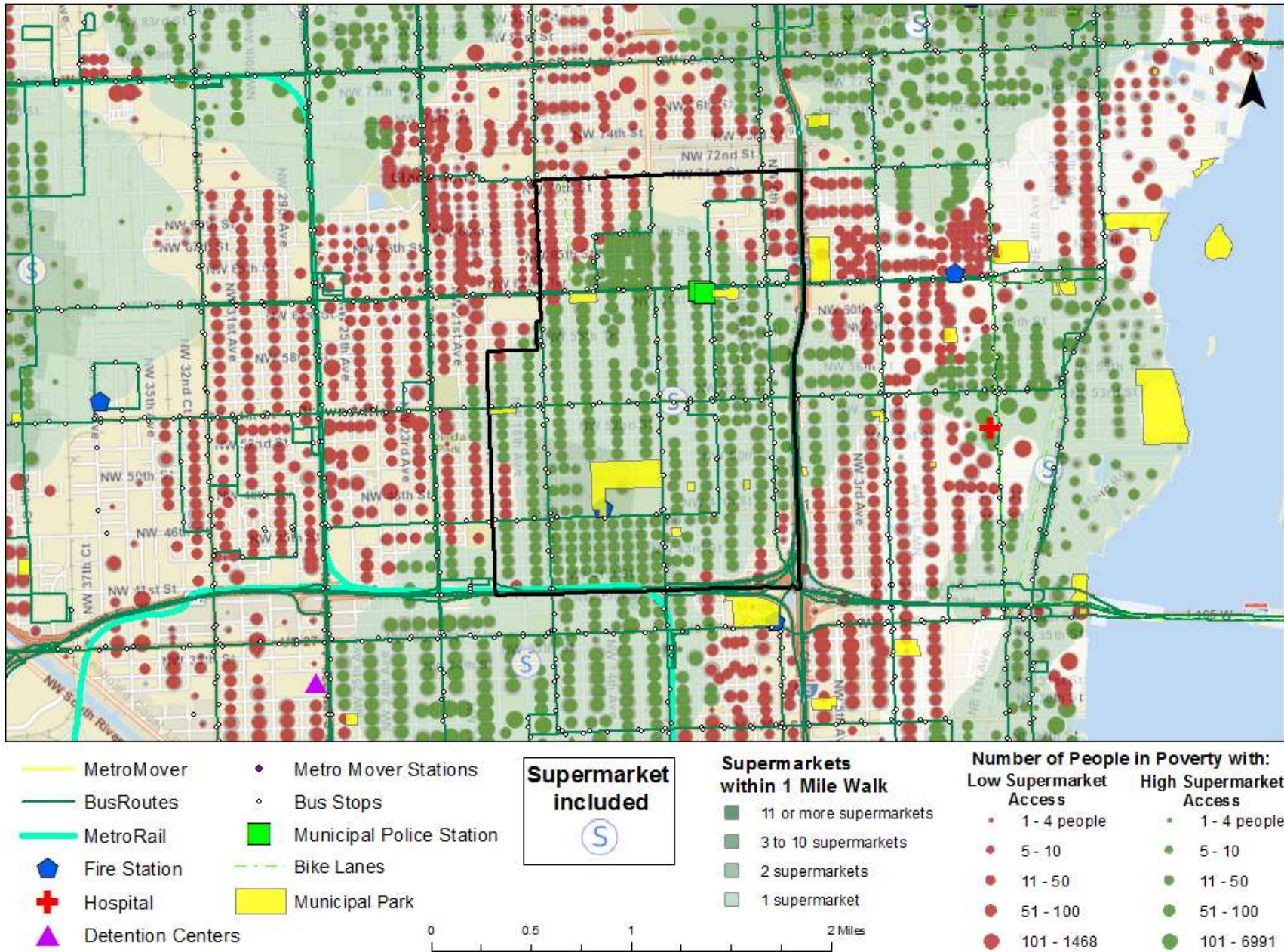
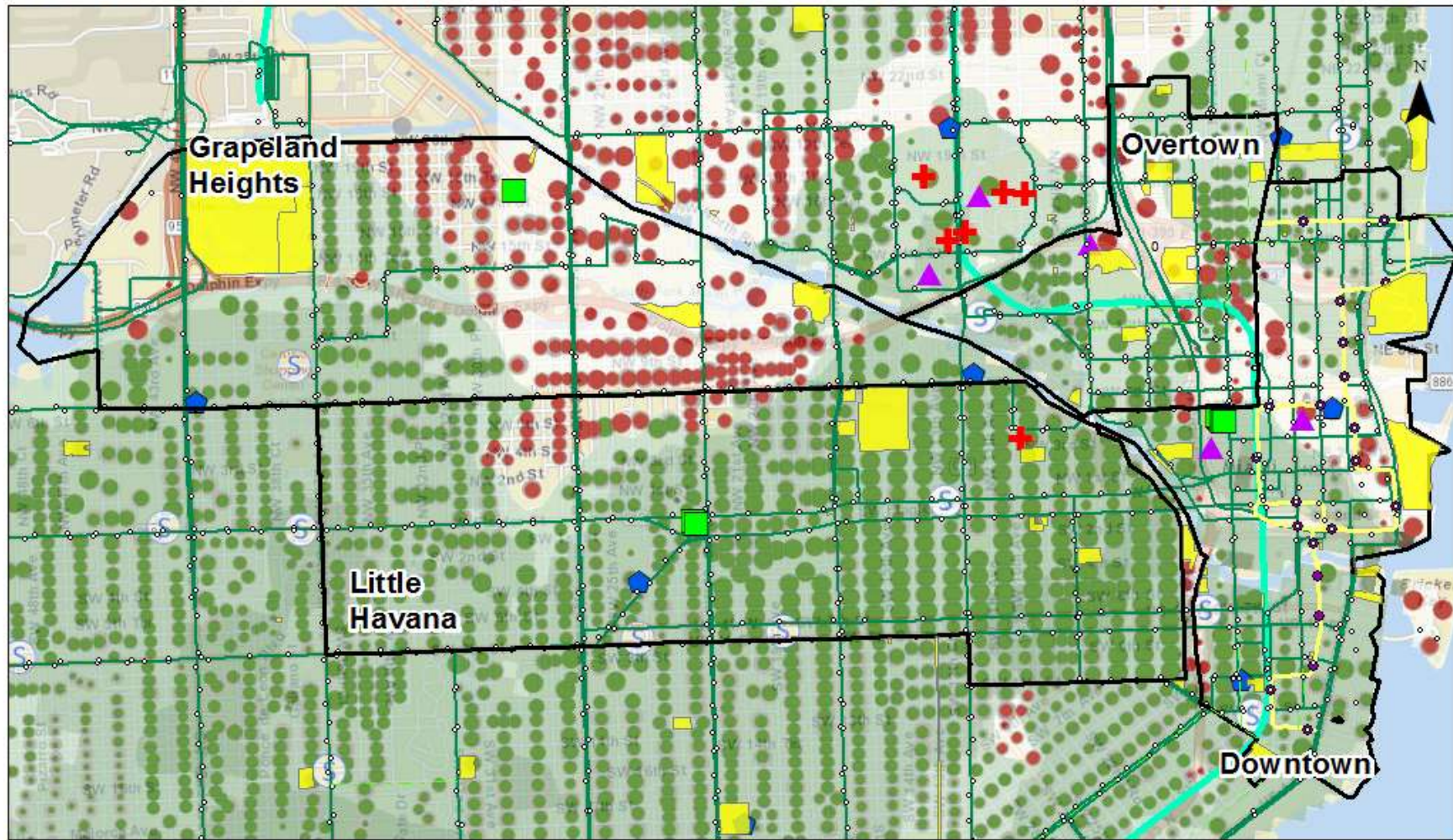


Figure 18: Liberty City Public Transportation, Safety, Poverty & Recreation/Supermarket Access

Downtown Miami Public Transportation, Safety, Poverty & Recreation/Supermarket Access

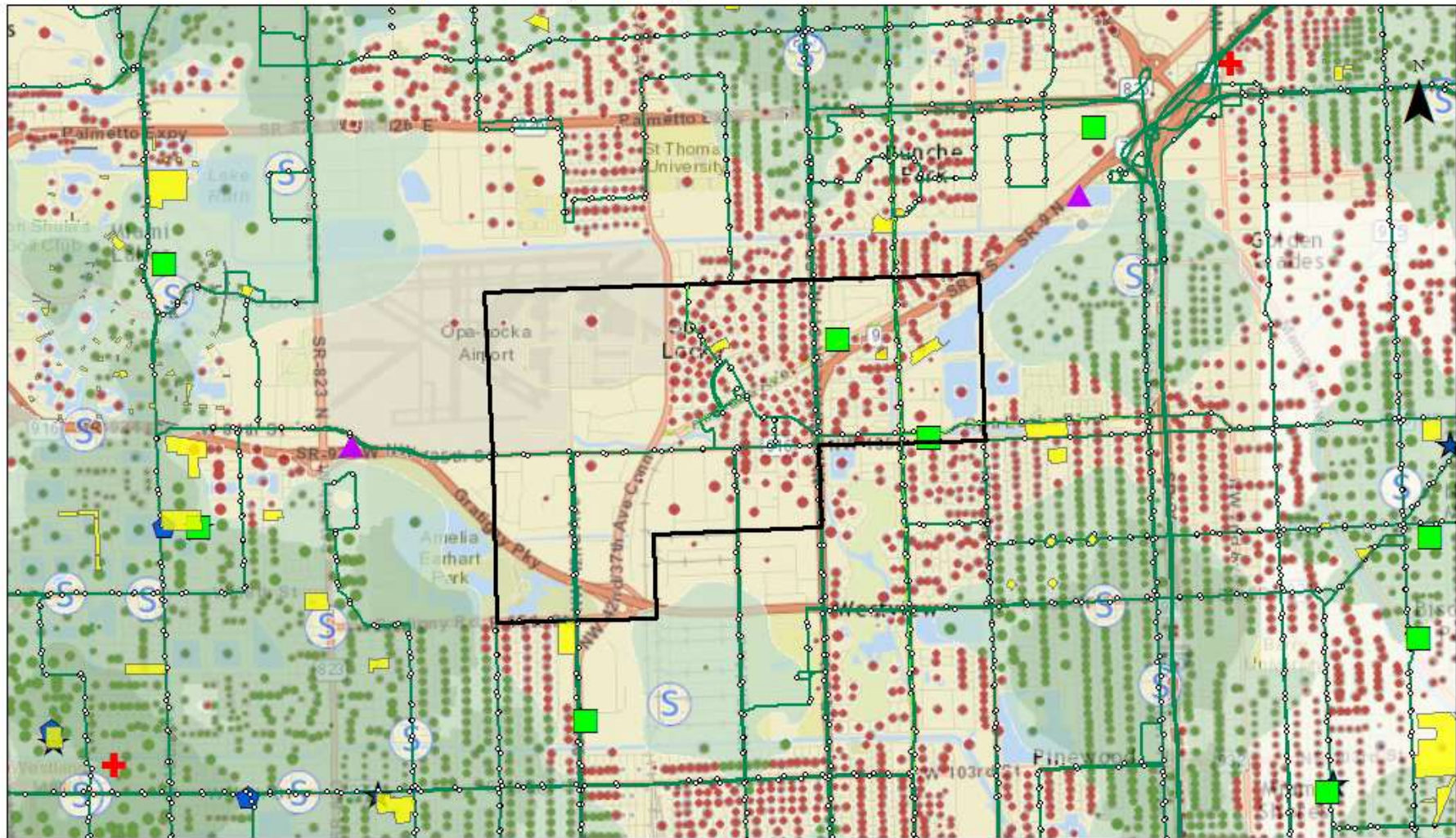


MetroMover	Metro Mover Stations	Supermarket included 	Supermarkets within 1 Mile Walk		Number of People in Poverty with:	
BusRoutes	Bus Stops		11 or more supermarkets	1 - 4 people	1 - 4 people	
MetroRail	Municipal Police Station	3 to 10 supermarkets	5 - 10	5 - 10		
Fire Station	Bike Lanes	2 supermarkets	11 - 50	11 - 50		
Hospital	Municipal Park	1 supermarket	51 - 100	51 - 100		
Detention Centers			101 - 1468	101 - 6991		

0 0.5 1 2 Miles

Figure 19: Downtown Miami Public Transportation, Safety, Poverty & Recreation/Supermarket Access

Opa-locka Public Transportation, Safety, Poverty & Recreation/Supermarket Access



MetroMover	Metro Mover Stations	Supermarket included 	Supermarkets within 1 Mile Walk		Number of People in Poverty with:	
BusRoutes	Bus Stops		11 or more supermarkets	1 - 4 people	Low Supermarket Access	High Supermarket Access
MetroRail	Municipal Police Station	3 to 10 supermarkets	5 - 10		5 - 10	
Fire Station	Bike Lanes	2 supermarkets	11 - 50		11 - 50	
Hospital	Municipal Park	1 supermarket	51 - 100		51 - 100	
Detention Centers			101 - 1468		101 - 6991	

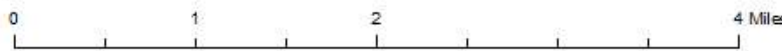


Figure 20: Opa-locka Public Transportation, Safety, Poverty & Recreation/Supermarket Access

79th St. CRA Public Transportation and Health Service Locations

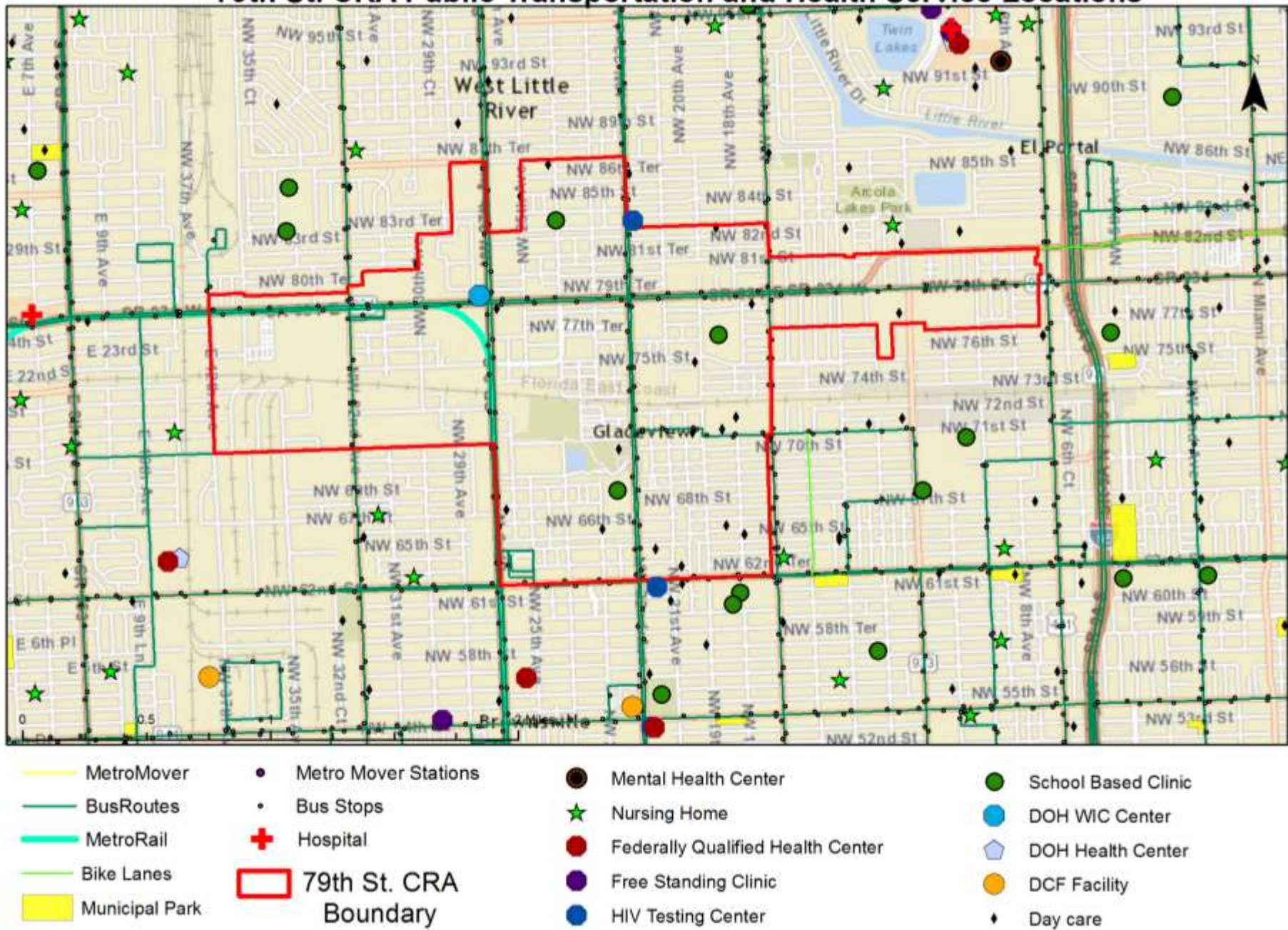


Figure 21: 79th St. CRA Public Transportation, and Health Service Locations

Liberty City Public Transportation and Health Service Locations

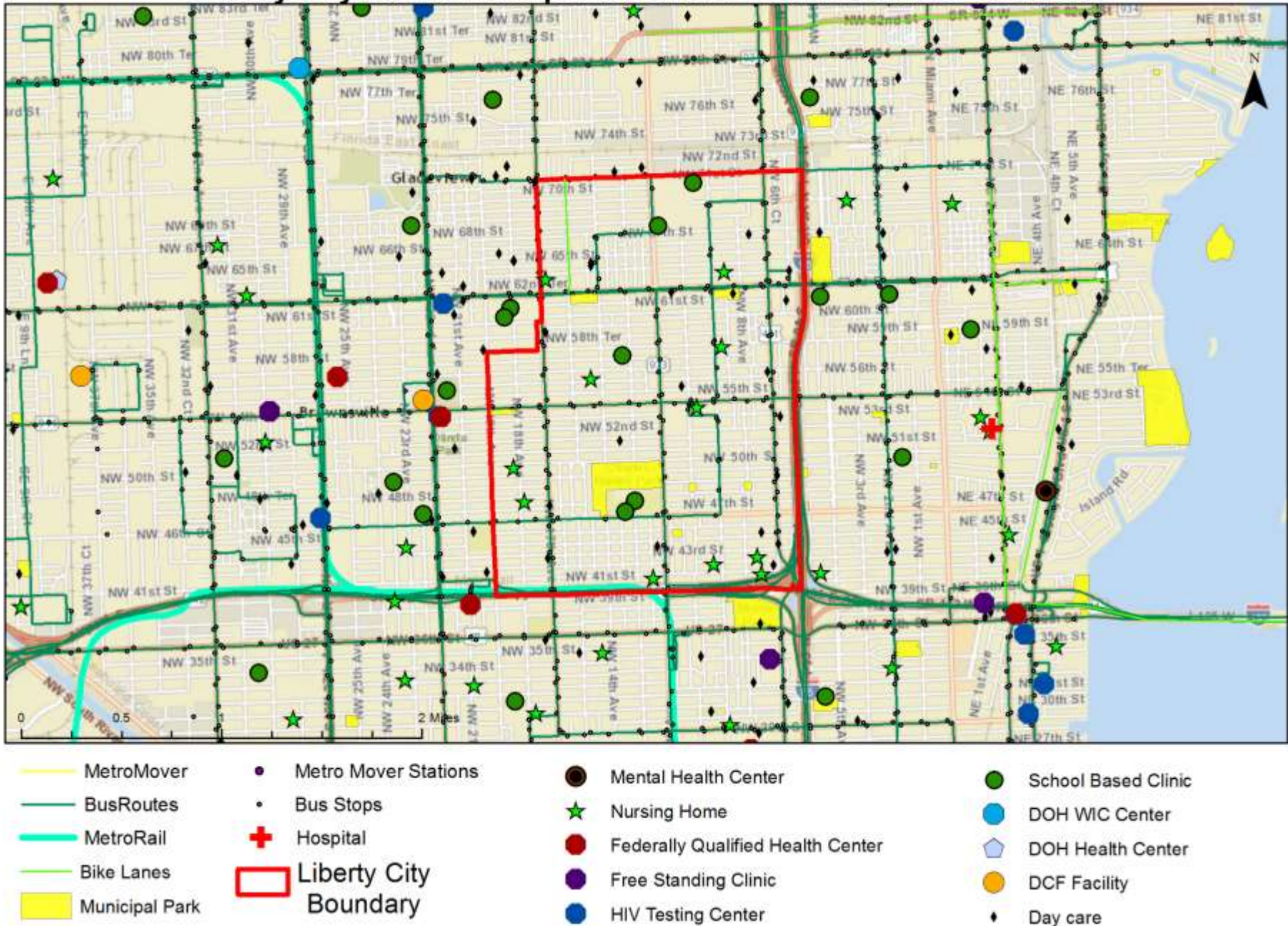


Figure 22: Liberty City Public Transportation, and Health Service Locations

Public Transportation and Health Service Locations



- | | | | |
|----------------|-------------------------|-----------------------------------|---------------------|
| MetroMover | Metro Mover Stations | Mental Health Center | School Based Clinic |
| BusRoutes | Bus Stops | Nursing Home | DOH WIC Center |
| MetroRail | Hospital | Federally Qualified Health Center | DOH Health Center |
| Bike Lanes | Neighborhood Boundaries | Free Standing Clinic | DCF Facility |
| Municipal Park | | HIV Testing Center | Day care |

Figure 23: Miami Cluster CRA Public Transportation, and Health Service Locations

Opa-locka Public Transportation and Health Service Locations

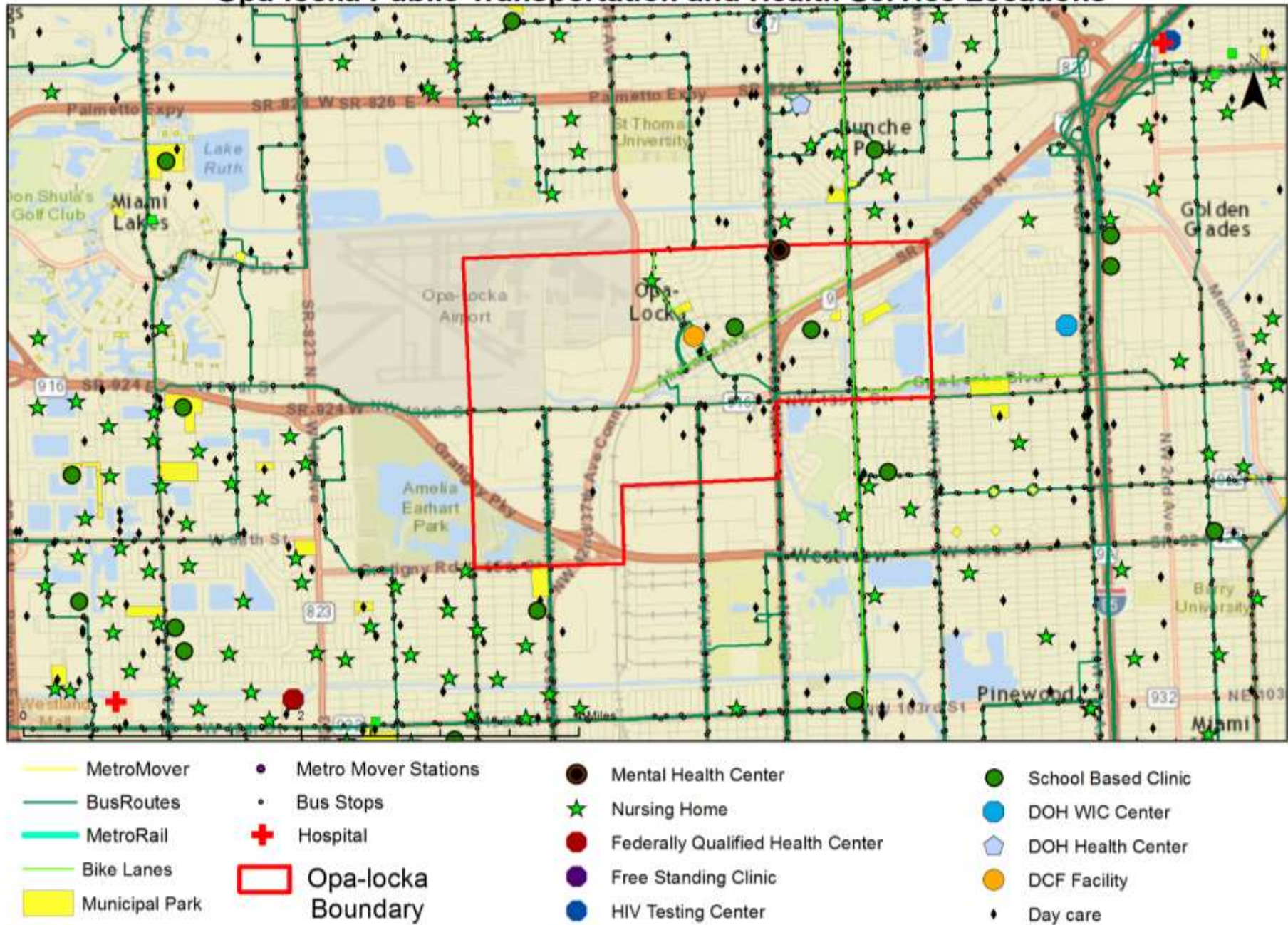


Figure 24: Opa-locka Public Transportation, and Health Service Locations

Recommendations

As the objective is to target areas that are in need and to identify gaps, the following points aim to characterize the most significant gaps. These are centered on data and research gaps, but also ideas for changing neighborhood environments to support healthy eating.

- More health data collection and monitoring
- Better modeling for health access
 - There is much data lacking here – particularly below the zip code level
- Complete streets efforts which focus on improving access
- Further inquiry on specific health access needs
- Explore further items that limit the ability to access
 - Access to Emergency services
 - Access to health services
 - Connectivity of communities
 - Connectivity of economic opportunities
 - Asset value vs vulnerability/protection

Bringing attention to these gaps in food access among lower income communities will raise awareness. Mapping access to walkability and healthy food sheds light on the overall goal for countywide connectivity and fostering of ladders of opportunity. Integrating transportation planning with land use planning enhances efforts within both sectors to increase quality of life for residents.

How can results translate to be relevant to transportation planners and to ultimately drive the creation of equitable communities? How do we shift from ameliorating deficits to creating opportunity? Research suggests that raising awareness of the correlation between health impacts and socioeconomic and transportation among key stakeholders and policymakers is crucial to meet these goals.

“Miami residents currently have great transportation and clinic services available to them but require more outreach and marketing of these services to educate the public about how to utilize them.”

- from Transportation Access throughout the Life Course (2012) by Urban Health Partnerships

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Appendix A – Miami Dade County Data Profiles from <http://factfinder.census.gov/>

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing of the forgoing data can be found on the American Community Survey website in the Data and Documentation section. Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Table A1: Economic Characteristics — includes Income, Employment, Occupation, Commuting to Work

Subject	Miami-Dade County, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
EMPLOYMENT STATUS				
Population 16 years and over	2,066,991	+/-1,188	2,066,991	(X)
In labor force	1,294,865	+/-4,720	62.6%	+/-0.2
Civilian labor force	1,292,661	+/-4,679	62.5%	+/-0.2
Employed	1,139,865	+/-5,034	55.1%	+/-0.2
Unemployed	152,796	+/-3,239	7.4%	+/-0.2
Armed Forces	2,204	+/-389	0.1%	+/-0.1
Not in labor force	772,126	+/-4,810	37.4%	+/-0.2
Civilian labor force	1,292,661	+/-4,679	1,292,661	(X)
Percent Unemployed	(X)	(X)	11.8%	+/-0.2
Females 16 years and over	1,076,868	+/-895	1,076,868	(X)
In labor force	614,167	+/-3,902	57.0%	+/-0.4
Civilian labor force	613,908	+/-3,915	57.0%	+/-0.4
Employed	542,220	+/-4,171	50.4%	+/-0.4
Own children under 6 years	177,165	+/-1,356	177,165	(X)
All parents in family in labor force	118,066	+/-1,954	66.6%	+/-1.1
Own children 6 to 17 years	346,859	+/-1,436	346,859	(X)
All parents in family in labor force	254,517	+/-3,146	73.4%	+/-0.8
COMMUTING TO WORK				
Workers 16 years and over	1,122,339	+/-5,216	1,122,339	(X)
Car, truck, or van -- drove alone	861,035	+/-4,880	76.7%	+/-0.3

Car, truck, or van -- carpooled	106,014	+/-3,227	9.4%	+/-0.3
Public transportation (excluding taxicab)	60,428	+/-2,308	5.4%	+/-0.2
Walked	26,291	+/-1,874	2.3%	+/-0.2
Other means	22,027	+/-1,411	2.0%	+/-0.1
Worked at home	46,544	+/-1,892	4.1%	+/-0.2
Mean travel time to work (minutes)	29.0	+/-0.2	(X)	(X)
OCCUPATION				
Civilian employed population 16 years and over	1,139,865	+/-5,034	1,139,865	(X)
Management, business, science, and arts occupations	353,985	+/-4,513	31.1%	+/-0.4
Service occupations	238,715	+/-4,066	20.9%	+/-0.3
Sales and office occupations	323,000	+/-4,567	28.3%	+/-0.4
Natural resources, construction, and maintenance occupations	106,489	+/-2,761	9.3%	+/-0.2
Production, transportation, and material moving occupations	117,676	+/-2,507	10.3%	+/-0.2
INDUSTRY				
Civilian employed population 16 years and over	1,139,865	+/-5,034	1,139,865	(X)
Agriculture, forestry, fishing and hunting, and mining	8,458	+/-987	0.7%	+/-0.1
Construction	77,103	+/-2,039	6.8%	+/-0.2
Manufacturing	56,988	+/-1,929	5.0%	+/-0.2
Wholesale trade	48,524	+/-2,047	4.3%	+/-0.2
Retail trade	143,734	+/-3,245	12.6%	+/-0.3
Transportation and warehousing, and utilities	80,518	+/-2,675	7.1%	+/-0.2
Information	25,048	+/-1,228	2.2%	+/-0.1
Finance and insurance, and real estate and rental and leasing	84,130	+/-2,640	7.4%	+/-0.2
Professional, scientific, and management, and administrative and waste management services	142,378	+/-2,937	12.5%	+/-0.3
Educational services, and health care and social assistance	231,878	+/-3,820	20.3%	+/-0.3
Arts, entertainment, and recreation, and accommodation and food services	125,852	+/-3,262	11.0%	+/-0.3
Other services, except public administration	72,238	+/-2,361	6.3%	+/-0.2
Public administration	43,016	+/-1,511	3.8%	+/-0.1
CLASS OF WORKER				
Civilian employed population 16 years and over	1,139,865	+/-5,034	1,139,865	(X)
Private wage and salary workers	923,429	+/-5,775	81.0%	+/-0.3
Government workers	124,344	+/-2,896	10.9%	+/-0.3
Self-employed in own not incorporated business workers	90,520	+/-2,347	7.9%	+/-0.2

Unpaid family workers	1,572	+/-284	0.1%	+/-0.1
INCOME AND BENEFITS (IN 2013 INFLATION-ADJUSTED DOLLARS)				
Total households	828,031	+/-3,696	828,031	(X)
Less than \$10,000	87,606	+/-2,236	10.6%	+/-0.3
\$10,000 to \$14,999	55,600	+/-1,490	6.7%	+/-0.2
\$15,000 to \$24,999	108,424	+/-2,341	13.1%	+/-0.3
\$25,000 to \$34,999	94,566	+/-2,103	11.4%	+/-0.2
\$35,000 to \$49,999	116,778	+/-2,497	14.1%	+/-0.3
\$50,000 to \$74,999	136,299	+/-2,686	16.5%	+/-0.3
\$75,000 to \$99,999	83,229	+/-2,008	10.1%	+/-0.2
\$100,000 to \$149,999	80,399	+/-1,959	9.7%	+/-0.2
\$150,000 to \$199,999	29,272	+/-1,341	3.5%	+/-0.2
\$200,000 or more	35,858	+/-1,197	4.3%	+/-0.1
Median household income (dollars)	43,100	+/-420	(X)	(X)
Mean household income (dollars)	65,616	+/-615	(X)	(X)
With earnings	657,041	+/-3,609	79.3%	+/-0.3
Mean earnings (dollars)	68,578	+/-680	(X)	(X)
With Social Security	236,888	+/-2,416	28.6%	+/-0.3
Mean Social Security income (dollars)	14,268	+/-123	(X)	(X)
With retirement income	72,220	+/-1,798	8.7%	+/-0.2
Mean retirement income (dollars)	21,618	+/-1,078	(X)	(X)
With Supplemental Security Income	53,484	+/-1,436	6.5%	+/-0.2
Mean Supplemental Security Income (dollars)	7,825	+/-168	(X)	(X)
With cash public assistance income	16,577	+/-783	2.0%	+/-0.1
Mean cash public assistance income (dollars)	3,143	+/-179	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	184,843	+/-2,760	22.3%	+/-0.3
Families	567,717	+/-3,852	567,717	(X)
Less than \$10,000	35,290	+/-1,457	6.2%	+/-0.3
\$10,000 to \$14,999	30,121	+/-1,281	5.3%	+/-0.2
\$15,000 to \$24,999	71,603	+/-1,961	12.6%	+/-0.3
\$25,000 to \$34,999	67,327	+/-1,848	11.9%	+/-0.3
\$35,000 to \$49,999	83,616	+/-2,198	14.7%	+/-0.4
\$50,000 to \$74,999	97,941	+/-2,307	17.3%	+/-0.4
\$75,000 to \$99,999	64,087	+/-1,763	11.3%	+/-0.3
\$100,000 to \$149,999	63,944	+/-1,867	11.3%	+/-0.3
\$150,000 to \$199,999	24,059	+/-1,145	4.2%	+/-0.2
\$200,000 or more	29,729	+/-996	5.2%	+/-0.2
Median family income (dollars)	49,138	+/-571	(X)	(X)
Mean family income (dollars)	73,252	+/-815	(X)	(X)
Per capita income (dollars)	23,174	+/-224	(X)	(X)
Nonfamily households	260,314	+/-3,144	260,314	(X)

Median nonfamily income (dollars)	26,815	+/-496	(X)	(X)
Mean nonfamily income (dollars)	45,195	+/-953	(X)	(X)
Median earnings for workers (dollars)	25,695	+/-187	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	36,225	+/-462	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	31,242	+/-249	(X)	(X)
HEALTH INSURANCE COVERAGE				
Civilian noninstitutionalized population	2,515,873	+/-1,315	2,515,873	(X)
With health insurance coverage	1,765,537	+/-9,354	70.2%	+/-0.4
With private health insurance	1,116,672	+/-10,288	44.4%	+/-0.4
With public coverage	752,218	+/-5,907	29.9%	+/-0.2
No health insurance coverage	750,336	+/-9,208	29.8%	+/-0.4
Civilian noninstitutionalized population under 18 years	546,309	+/-146	546,309	(X)
No health insurance coverage	81,007	+/-2,800	14.8%	+/-0.5
Civilian noninstitutionalized population 18 to 64 years	1,609,951	+/-1,133	1,609,951	(X)
In labor force:	1,228,933	+/-4,537	1,228,933	(X)
Employed:	1,084,175	+/-4,826	1,084,175	(X)
With health insurance coverage	686,226	+/-6,286	63.3%	+/-0.5
With private health insurance	649,107	+/-6,114	59.9%	+/-0.5
With public coverage	46,406	+/-1,715	4.3%	+/-0.2
No health insurance coverage	397,949	+/-5,619	36.7%	+/-0.5
Unemployed:	144,758	+/-3,081	144,758	(X)
With health insurance coverage	48,325	+/-1,567	33.4%	+/-1.0
With private health insurance	28,278	+/-1,243	19.5%	+/-0.9
With public coverage	20,999	+/-1,078	14.5%	+/-0.7
No health insurance coverage	96,433	+/-2,871	66.6%	+/-1.0
Not in labor force:	381,018	+/-4,542	381,018	(X)
With health insurance coverage	220,830	+/-3,727	58.0%	+/-0.8
With private health insurance	125,107	+/-2,726	32.8%	+/-0.8
With public coverage	104,510	+/-2,755	27.4%	+/-0.6
No health insurance coverage	160,188	+/-3,913	42.0%	+/-0.8
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	16.4%	+/-0.4
With related children under 18 years	(X)	(X)	22.5%	+/-0.6
With related children under 5 years only	(X)	(X)	19.5%	+/-1.3
Married couple families	(X)	(X)	10.8%	+/-0.4
With related children under 18 years	(X)	(X)	12.9%	+/-0.7
With related children under 5 years only	(X)	(X)	9.4%	+/-1.2
Families with female householder, no	(X)	(X)	29.4%	+/-0.9

husband present				
With related children under 18 years	(X)	(X)	39.3%	+/-1.1
With related children under 5 years only	(X)	(X)	41.2%	+/-3.1
All people	(X)	(X)	19.9%	+/-0.4
Under 18 years	(X)	(X)	26.6%	+/-0.7
Related children under 18 years	(X)	(X)	26.3%	+/-0.7
Related children under 5 years	(X)	(X)	27.8%	+/-1.0
Related children 5 to 17 years	(X)	(X)	25.7%	+/-0.8
18 years and over	(X)	(X)	18.1%	+/-0.3
18 to 64 years	(X)	(X)	17.3%	+/-0.4
65 years and over	(X)	(X)	21.7%	+/-0.6
People in families	(X)	(X)	17.0%	+/-0.4
Unrelated individuals 15 years and over	(X)	(X)	34.5%	+/-0.7

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Table A2: Demographic Characteristics — includes Sex and Age, Race, Hispanic Origin, Housing Units

Subject	Miami-Dade County, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
Total population	2,549,075	*****	2,549,075	(X)
Male	1,236,500	+/-318	48.5%	+/-0.1
Female	1,312,575	+/-318	51.5%	+/-0.1
Under 5 years	152,561	+/-114	6.0%	+/-0.1
5 to 9 years	147,784	+/-2,298	5.8%	+/-0.1
10 to 14 years	150,039	+/-2,294	5.9%	+/-0.1
15 to 19 years	164,606	+/-81	6.5%	+/-0.1
20 to 24 years	181,925	+/-204	7.1%	+/-0.1
25 to 34 years	351,789	+/-203	13.8%	+/-0.1
35 to 44 years	373,114	+/-216	14.6%	+/-0.1
45 to 54 years	377,060	+/-214	14.8%	+/-0.1
55 to 59 years	151,646	+/-2,377	5.9%	+/-0.1
60 to 64 years	131,832	+/-2,354	5.2%	+/-0.1
65 to 74 years	194,103	+/-77	7.6%	+/-0.1
75 to 84 years	122,727	+/-1,277	4.8%	+/-0.1
85 years and over	49,889	+/-1,291	2.0%	+/-0.1

Median age (years)	38.5	+/-0.1	(X)	(X)
18 years and over	2,002,286	+/-88	78.5%	+/-0.1
21 years and over	1,896,354	+/-1,495	74.4%	+/-0.1
62 years and over	442,356	+/-2,025	17.4%	+/-0.1
65 years and over	366,719	+/-139	14.4%	+/-0.1
18 years and over	2,002,286	+/-88	2,002,286	(X)
Male	956,927	+/-339	47.8%	+/-0.1
Female	1,045,359	+/-314	52.2%	+/-0.1
65 years and over	366,719	+/-139	366,719	(X)
Male	152,764	+/-14	41.7%	+/-0.1
Female	213,955	+/-136	58.3%	+/-0.1
RACE				
Total population	2,549,075	*****	2,549,075	(X)
One race	2,513,029	+/-1,950	98.6%	+/-0.1
Two or more races	36,046	+/-1,950	1.4%	+/-0.1
One race	2,513,029	+/-1,950	98.6%	+/-0.1
White	1,916,250	+/-5,012	75.2%	+/-0.2
Black or African American	480,201	+/-2,964	18.8%	+/-0.1
American Indian and Alaska Native	4,092	+/-733	0.2%	+/-0.1
Cherokee tribal grouping	300	+/-164	0.0%	+/-0.1
Chippewa tribal grouping	150	+/-188	0.0%	+/-0.1
Navajo tribal grouping	0	+/-32	0.0%	+/-0.1
Sioux tribal grouping	46	+/-61	0.0%	+/-0.1
Asian	40,515	+/-1,095	1.6%	+/-0.1
Asian Indian	9,422	+/-1,123	0.4%	+/-0.1
Chinese	13,177	+/-1,450	0.5%	+/-0.1
Filipino	5,528	+/-711	0.2%	+/-0.1
Japanese	2,075	+/-525	0.1%	+/-0.1
Korean	1,397	+/-437	0.1%	+/-0.1
Vietnamese	2,728	+/-746	0.1%	+/-0.1
Other Asian	6,188	+/-1,315	0.2%	+/-0.1
Native Hawaiian and Other Pacific Islander	644	+/-142	0.0%	+/-0.1
Native Hawaiian	103	+/-109	0.0%	+/-0.1
Guamanian or Chamorro	0	+/-32	0.0%	+/-0.1
Samoan	185	+/-243	0.0%	+/-0.1
Other Pacific Islander	356	+/-209	0.0%	+/-0.1
Some other race	71,327	+/-3,760	2.8%	+/-0.1
Two or more races	36,046	+/-1,950	1.4%	+/-0.1
White and Black or African American	10,695	+/-1,213	0.4%	+/-0.1
White and American Indian and Alaska Native	2,253	+/-571	0.1%	+/-0.1
White and Asian	3,973	+/-672	0.2%	+/-0.1
Black or African American and American Indian and Alaska Native	737	+/-238	0.0%	+/-0.1

Race alone or in combination with one or more other races				
Total population	2,549,075	*****	2,549,075	(X)
White	1,945,195	+/-4,888	76.3%	+/-0.2
Black or African American	497,101	+/-2,969	19.5%	+/-0.1
American Indian and Alaska Native	8,429	+/-885	0.3%	+/-0.1
Asian	49,487	+/-890	1.9%	+/-0.1
Native Hawaiian and Other Pacific Islander	2,414	+/-547	0.1%	+/-0.1
Some other race	85,182	+/-4,008	3.3%	+/-0.2
HISPANIC OR LATINO AND RACE				
Total population	2,549,075	*****	2,549,075	(X)
Hispanic or Latino (of any race)	1,653,390	*****	64.9%	*****
Mexican	55,303	+/-3,533	2.2%	+/-0.1
Puerto Rican	100,942	+/-3,656	4.0%	+/-0.1
Cuban	876,855	+/-8,763	34.4%	+/-0.3
Other Hispanic or Latino	620,290	+/-9,308	24.3%	+/-0.4
Not Hispanic or Latino	895,685	*****	35.1%	*****
White alone	396,762	+/-834	15.6%	+/-0.1
Black or African American alone	436,385	+/-1,110	17.1%	+/-0.1
American Indian and Alaska Native alone	2,277	+/-357	0.1%	+/-0.1
Asian alone	38,484	+/-841	1.5%	+/-0.1
Native Hawaiian and Other Pacific Islander alone	619	+/-147	0.0%	+/-0.1
Some other race alone	6,135	+/-1,105	0.2%	+/-0.1
Two or more races	15,023	+/-1,177	0.6%	+/-0.1
Two races including Some other race	2,348	+/-480	0.1%	+/-0.1
Two races excluding Some other race, and Three or more races	12,675	+/-1,182	0.5%	+/-0.1
Total housing units	990,697	+/-588	(X)	(X)

Table A3: Housing Characteristics — includes Occupancy and Structure, Housing Value and Costs

Subject	Miami-Dade County, Florida			
	Estimate	Margin of Error	Percent	Percent Margin of Error
HOUSING OCCUPANCY				
Total housing units	990,697	+/-588	990,697	(X)
Occupied housing units	828,031	+/-3,696	83.6%	+/-0.4
Vacant housing units	162,666	+/-3,615	16.4%	+/-0.4
Homeowner vacancy rate	3.2	+/-0.2	(X)	(X)
Rental vacancy rate	8.6	+/-0.4	(X)	(X)
UNITS IN STRUCTURE				
Total housing units	990,697	+/-588	990,697	(X)

1-unit, detached	405,691	+/-2,858	41.0%	+/-0.3
1-unit, attached	102,181	+/-2,084	10.3%	+/-0.2
2 units	20,745	+/-969	2.1%	+/-0.1
3 or 4 units	34,136	+/-1,432	3.4%	+/-0.1
5 to 9 units	50,088	+/-1,881	5.1%	+/-0.2
10 to 19 units	62,447	+/-2,001	6.3%	+/-0.2
20 or more units	301,972	+/-2,471	30.5%	+/-0.2
Mobile home	13,008	+/-632	1.3%	+/-0.1
Boat, RV, van, etc.	429	+/-173	0.0%	+/-0.1
YEAR STRUCTURE BUILT				
Total housing units	990,697	+/-588	990,697	(X)
Built 2010 or later	3,169	+/-449	0.3%	+/-0.1
Built 2000 to 2009	140,304	+/-1,767	14.2%	+/-0.2
Built 1990 to 1999	118,490	+/-2,343	12.0%	+/-0.2
Built 1980 to 1989	153,982	+/-2,754	15.5%	+/-0.3
Built 1970 to 1979	192,654	+/-2,802	19.4%	+/-0.3
Built 1960 to 1969	132,657	+/-2,562	13.4%	+/-0.3
Built 1950 to 1959	148,516	+/-2,729	15.0%	+/-0.3
Built 1940 to 1949	63,041	+/-1,812	6.4%	+/-0.2
Built 1939 or earlier	37,884	+/-1,210	3.8%	+/-0.1
ROOMS				
Total housing units	990,697	+/-588	990,697	(X)
1 room	35,905	+/-1,372	3.6%	+/-0.1
2 rooms	30,621	+/-1,007	3.1%	+/-0.1
3 rooms	176,599	+/-2,606	17.8%	+/-0.3
4 rooms	227,204	+/-3,241	22.9%	+/-0.3
5 rooms	216,227	+/-2,771	21.8%	+/-0.3
6 rooms	143,286	+/-2,324	14.5%	+/-0.2
7 rooms	85,434	+/-2,125	8.6%	+/-0.2
8 rooms	41,308	+/-1,273	4.2%	+/-0.1
9 rooms or more	34,113	+/-1,188	3.4%	+/-0.1
Median rooms	4.6	+/-0.1	(X)	(X)
BEDROOMS				
Total housing units	990,697	+/-588	990,697	(X)
No bedroom	38,924	+/-1,499	3.9%	+/-0.2
1 bedroom	189,450	+/-2,930	19.1%	+/-0.3
2 bedrooms	314,486	+/-3,397	31.7%	+/-0.3
3 bedrooms	305,212	+/-2,940	30.8%	+/-0.3
4 bedrooms	116,851	+/-2,030	11.8%	+/-0.2
5 or more bedrooms	25,774	+/-1,014	2.6%	+/-0.1
HOUSING TENURE				
Occupied housing units	828,031	+/-3,696	828,031	(X)
Owner-occupied	461,562	+/-4,046	55.7%	+/-0.4
Renter-occupied	366,469	+/-2,890	44.3%	+/-0.4
Average household size of owner-occupied unit				
Average household size of owner-occupied unit	3.17	+/-0.02	(X)	(X)

Average household size of renter-occupied unit	2.83	+/-0.02	(X)	(X)
YEAR HOUSEHOLDER MOVED INTO UNIT				
Occupied housing units	828,031	+/-3,696	828,031	(X)
Moved in 2010 or later	157,428	+/-2,660	19.0%	+/-0.3
Moved in 2000 to 2009	406,761	+/-3,111	49.1%	+/-0.4
Moved in 1990 to 1999	143,884	+/-2,460	17.4%	+/-0.3
Moved in 1980 to 1989	65,491	+/-1,508	7.9%	+/-0.2
Moved in 1970 to 1979	37,364	+/-1,270	4.5%	+/-0.2
Moved in 1969 or earlier	17,103	+/-822	2.1%	+/-0.1
VEHICLES AVAILABLE				
Occupied housing units	828,031	+/-3,696	828,031	(X)
No vehicles available	94,635	+/-1,883	11.4%	+/-0.2
1 vehicle available	330,905	+/-3,840	40.0%	+/-0.4
2 vehicles available	287,632	+/-3,725	34.7%	+/-0.4
3 or more vehicles available	114,859	+/-2,197	13.9%	+/-0.3
HOUSE HEATING FUEL				
Occupied housing units	828,031	+/-3,696	828,031	(X)
Utility gas	16,675	+/-903	2.0%	+/-0.1
Bottled, tank, or LP gas	3,721	+/-405	0.4%	+/-0.1
Electricity	766,009	+/-3,080	92.5%	+/-0.2
Fuel oil, kerosene, etc.	771	+/-158	0.1%	+/-0.1
Coal or coke	60	+/-41	0.0%	+/-0.1
Wood	392	+/-147	0.0%	+/-0.1
Solar energy	157	+/-73	0.0%	+/-0.1
Other fuel	204	+/-88	0.0%	+/-0.1
No fuel used	40,042	+/-1,234	4.8%	+/-0.1
SELECTED CHARACTERISTICS				
Occupied housing units	828,031	+/-3,696	828,031	(X)
Lacking complete plumbing facilities	3,914	+/-516	0.5%	+/-0.1
Lacking complete kitchen facilities	6,847	+/-632	0.8%	+/-0.1
No telephone service available	38,446	+/-1,301	4.6%	+/-0.2
OCCUPANTS PER ROOM				
Occupied housing units	828,031	+/-3,696	828,031	(X)
1.00 or less	782,956	+/-3,795	94.6%	+/-0.2
1.01 to 1.50	31,603	+/-1,408	3.8%	+/-0.2
1.51 or more	13,472	+/-892	1.6%	+/-0.1
VALUE				
Owner-occupied units	461,562	+/-4,046	461,562	(X)
Less than \$50,000	19,071	+/-868	4.1%	+/-0.2
\$50,000 to \$99,999	58,229	+/-1,807	12.6%	+/-0.4
\$100,000 to \$149,999	70,608	+/-1,843	15.3%	+/-0.4
\$150,000 to \$199,999	81,657	+/-1,546	17.7%	+/-0.3
\$200,000 to \$299,999	107,356	+/-2,284	23.3%	+/-0.4
\$300,000 to \$499,999	76,175	+/-1,657	16.5%	+/-0.3

\$500,000 to \$999,999	33,853	+/-1,307	7.3%	+/-0.3
\$1,000,000 or more	14,613	+/-726	3.2%	+/-0.2
Median (dollars)	201,000	+/-1,596	(X)	(X)
MORTGAGE STATUS				
Owner-occupied units	461,562	+/-4,046	461,562	(X)
Housing units with a mortgage	315,360	+/-3,581	68.3%	+/-0.4
Housing units without a mortgage	146,202	+/-2,247	31.7%	+/-0.4
SELECTED MONTHLY OWNER COSTS (SMOC)				
Housing units with a mortgage	315,360	+/-3,581	315,360	(X)
Less than \$300	145	+/-67	0.0%	+/-0.1
\$300 to \$499	2,218	+/-372	0.7%	+/-0.1
\$500 to \$699	7,062	+/-638	2.2%	+/-0.2
\$700 to \$999	25,448	+/-1,108	8.1%	+/-0.3
\$1,000 to \$1,499	74,926	+/-1,859	23.8%	+/-0.5
\$1,500 to \$1,999	75,613	+/-2,137	24.0%	+/-0.6
\$2,000 or more	129,948	+/-2,557	41.2%	+/-0.7
Median (dollars)	1,800	+/-14	(X)	(X)
Housing units without a mortgage				
Less than \$100	864	+/-177	0.6%	+/-0.1
\$100 to \$199	5,769	+/-445	3.9%	+/-0.3
\$200 to \$299	14,592	+/-795	10.0%	+/-0.5
\$300 to \$399	20,883	+/-822	14.3%	+/-0.5
\$400 or more	104,094	+/-2,073	71.2%	+/-0.7
Median (dollars)	567	+/-7	(X)	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (SMOCAPI)				
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	311,730	+/-3,470	311,730	(X)
Less than 20.0 percent	65,035	+/-1,854	20.9%	+/-0.5
20.0 to 24.9 percent	38,487	+/-1,456	12.3%	+/-0.4
25.0 to 29.9 percent	34,379	+/-1,476	11.0%	+/-0.4
30.0 to 34.9 percent	28,270	+/-1,283	9.1%	+/-0.4
35.0 percent or more	145,559	+/-2,379	46.7%	+/-0.6
Not computed				
3,630	+/-539	(X)	(X)	
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)				
Less than 10.0 percent	42,645	+/-1,272	29.7%	+/-0.8
10.0 to 14.9 percent	25,102	+/-932	17.5%	+/-0.6
15.0 to 19.9 percent	17,505	+/-785	12.2%	+/-0.5
20.0 to 24.9 percent	12,631	+/-764	8.8%	+/-0.5
25.0 to 29.9 percent	9,357	+/-700	6.5%	+/-0.5
30.0 to 34.9 percent	6,214	+/-586	4.3%	+/-0.4

35.0 percent or more	29,891	+/-1,065	20.9%	+/-0.7
Not computed	2,857	+/-391	(X)	(X)
GROSS RENT				
Occupied units paying rent	352,708	+/-2,681	352,708	(X)
Less than \$200	8,458	+/-587	2.4%	+/-0.2
\$200 to \$299	11,759	+/-670	3.3%	+/-0.2
\$300 to \$499	12,983	+/-772	3.7%	+/-0.2
\$500 to \$749	37,213	+/-1,442	10.6%	+/-0.4
\$750 to \$999	79,016	+/-1,946	22.4%	+/-0.5
\$1,000 to \$1,499	129,993	+/-2,431	36.9%	+/-0.7
\$1,500 or more	73,286	+/-1,994	20.8%	+/-0.5
Median (dollars)	1,085	+/-6	(X)	(X)
No rent paid	13,761	+/-776	(X)	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRAPI)				
Occupied units paying rent (excluding units where GRAPI cannot be computed)	341,734	+/-2,651	341,734	(X)
Less than 15.0 percent	20,632	+/-1,160	6.0%	+/-0.3
15.0 to 19.9 percent	25,430	+/-1,268	7.4%	+/-0.4
20.0 to 24.9 percent	34,028	+/-1,249	10.0%	+/-0.4
25.0 to 29.9 percent	37,627	+/-1,481	11.0%	+/-0.4
30.0 to 34.9 percent	32,006	+/-1,484	9.4%	+/-0.4
35.0 percent or more	192,011	+/-2,446	56.2%	+/-0.6
Not computed	24,735	+/-1,187	(X)	(X)

Appendix B - Data summary for “Roadmap to Healthy Living”

Florida's Roadmap to Living Healthy

<http://app2.freshfromflorida.com/gis/roadmaptohealth/>

For general help using this web map or for information about its content, please view the [Map User Guide](#).

NOTE: This map is intended to convey information across the State of Florida, and so the map layers provided may not appear if you zoom in to specific locations (such as your neighborhood) or zoom out too far (such as outside the State of Florida).

For a better understanding of the Urban and Rural High-Impact Census Tract designations, please read this [Technical Addendum](#).

To understand the Limited Supermarket Access (LSA) designations, please read this [Summary Report](#) (<http://www.trfund.com/wp-content/uploads/2013/07/SearchingForMarketsSummary.pdf>).

Disclaimer:

Florida Department of Agriculture and Consumer Services (FDACS) geographic information systems (GIS) products are not legal descriptions or documents. No warranty, either written or implied, is made as to the accuracy or completeness of the information provided or referenced with this communication. FDACS reserves the right to update, replace, or discontinue GIS products without notification.

Sources:

Florida Department of Agriculture and Consumer Services ([FDACS](#)), Division of Food, Nutrition and Wellness ([DFNW](#)); Mari Gallagher Research & Consulting Group ([MG](#)); Florida Department of Children and Families ([FDCE](#)); Florida Department of Health ([FDOH](#)); Florida Department of Economic Opportunity ([FDEO](#)); Florida Association of Food Banks ([FAFB](#)); The Reinvestment Fund ([TRF](#)); Health Resources and Services Administration ([HRSA](#)); US Department of the Treasury [CDFI](#) Fund; US [Census Bureau](#); US Department of Agriculture ([USDA](#)); US Department of Education ([US ED](#)); US Bureau of Labor Statistics ([US BLS](#)); [Esri](#).

Appendix C: Metadata for Data Layers**TITLE: FLORIDA DEPARTMENT OF TRANSPORTATION ANNUAL AVERAGE DAILY TRAFFIC - JANUARY 2015**

Geodataset Name: AADT_JAN15
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYLINE
 Feature Count: 18367

GENERAL DESCRIPTION:

This dataset contains Annual Average Daily Traffic from the January 2015 version of the Florida Department of Transportation Roads Characteristics inventory (RCI) dataset.

DATA SOURCE(S): Florida Department of Transportation,
 Transportation Statistics Office (TRANSTAT)
 SCALE OF ORIGINAL SOURCE MAPS: 24000
 GEODATASET EXTENT: State of Florida
 PUBLICATION DATE: 20150110
 TIME PERIOD OF CONTENT: 20150110

TITLE: HEALTH FACILITY PARCELS IN FLORIDA - 2010

Geodataset Name: PAR_HEALTH_10
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 6014

GENERAL DESCRIPTION:

This data set contains health facility parcel data from 67 individual counties obtained through the State of Florida Department of Revenue (DOR) 2010 tax data. Please Note: This layer has not been ground-truthed and should not be the sole data source used to identify health facility locations. There are known errors in this layer where parcels included may not physically include a health care facility building. Some parcels identified in this layer have been assigned their land use designation based on the owner of the property rather than their current use. In such cases, these lots may actually be vacant and/or used for parking or other purposes related to the owner. To better identify spatially accurate health care facility locations, this layer should be used in conjunction with FGDL Layers Health Care Facilities (FGDL layer name = GC_HEALTH) and Florida Hospitals (FGDL layer name = GC_HOSPITALS). The locations in GC_HEALTH and GC_HOSPITALS can be used to cross-reference the health facility parcels included in this layer. This layer is an update of the previously released FGDL layer " PAR_HEALTH_09

DATA SOURCE(S) :	Florida Department of Revenue
SCALE OF ORIGINAL SOURCE MAPS:	Various
GEODATASET EXTENT:	State of Florida
PUBLICATION DATE:	20101220
TIME PERIOD OF CONTENT:	20101220

TITLE: FLORIDA NURSING HOMES 2010 Q1

Geodataset Name:	FDEM_NURSINGHOME_FEB10
Geodataset Type:	SHAPEFILE
Geodataset Feature:	POINT
Feature Count:	3904

GENERAL DESCRIPTION:

This dataset contains 2010 Nursing Homes Information for the State of Florida. A nursing home is commonly referred to as a skilled nursing facility, long term care (LTC) facility, or rest home, and may have a different standardized name throughout the United States, but is most commonly referred to as a nursing home. A nursing home traditionally offers 24-hour (skilled) nursing to the elderly or to disabled patients having a variety of medical conditions who require personal care services above that of an assisted living but do not require hospitalization. The personal care services provided may or may not include, but are not limited to: skilled nursing, long term inpatient care, room and board, meals, laundry, and assistance with: dressing, grooming, getting in and out of bed, medications, bathing, and toileting. This dataset was created by TechniGraphics, Inc. for the Florida Division of Emergency Management.

DATA SOURCE(S) :	Florida Division of Emergency Management
SCALE OF ORIGINAL SOURCE MAPS:	VARIOUS
GEODATASET EXTENT:	State of Florida
PUBLICATION DATE:	20100226
TIME PERIOD OF CONTENT:	Begin Date: 20090922 End Date: 20100121

TITLE: FLORIDA EMERGENCY OPERATIONS CENTERS 2007

Geodataset Name: FDEM_EOC_JUN07
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POINT
 Feature Count: 95

GENERAL DESCRIPTION:

This dataset contains Emergency Operations Centers (EOC) in the State of Florida. This dataset defines EOC's as "The physical location at which the coordination of information and resources to support domestic incident management activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOC s may be organized by major functional disciplines (e.g., fire, law enforcement, and medical services), by jurisdiction (e.g., Federal, State, regional, county, city, tribal), or some combination thereof." (Excerpted from the National Incident Management System) In instances where TGS could not verify the location of an Emergency Operations Center due to non-cooperation of the entity and to the exhaustion of all possible alternative resources, its location was depicted at the center of the service area. In cases where an Emergency Operations Center has a mobile unit, TGS captured the location of the mobile unit as a separate record. This record represents where the mobile unit is stored. Text fields in this dataset have been set to all upper case to facilitate consistent database engine search results. All diacritics (e.g., the German umlaut or the Spanish tilde) have been replaced with their closest equivalent English character to facilitate use with database systems that may not support diacritics. The currentness of this dataset is indicated by the [CONTDAT] attribute. Based upon this attribute, the oldest record dates from 03/30/2007 and the newest record dates from 04/30/2007. This dataset was created by TechniGraphics, Inc. for the Florida Division of Emergency Management.

DATA SOURCE(S) : Florida Division of Emergency Management
 SCALE OF ORIGINAL SOURCE MAPS: N/A
 DATE OF AUTOMATION OF SOURCE: 20070615
 GEODATASET EXTENT: State of Florida

TITLE: FLORIDA EMERGENCY MEDICAL SERVICES 2008

Geodataset Name: FDEM_EMS_SEP08
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POINT
 Feature Count: 1603

GENERAL DESCRIPTION:

This dataset contains Emergency Medical Service Locations in Florida. The EMS stations dataset consists of any location where emergency medical services (EMS) personnel are stationed or based out of, or where equipment that such personnel use in carrying out their jobs is stored for ready use. This dataset was created by TechniGraphics, Inc. for the Florida Division of Emergency Management.

DATA SOURCE(S) : Florida Division of Emergency Management

SCALE OF ORIGINAL SOURCE MAPS: N/A
 GEODATASET EXTENT: State of Florida
 PUBLICATION DATE: 20080919
 TIME PERIOD OF CONTENT: Begin Date: 20050831 End Date: 20080827

TITLE: BIKE ACCIDENTS IN FLORIDA BY COUNTY 1998 - 2011

Geodataset Name: BIKE_ACCIDENTS_2011
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 67

GENERAL DESCRIPTION:

This dataset contains bike accident information, including the number of bike injuries and fatalities occurring by county in the State of Florida. This data was collected from 1998 through 2011. This is an update to the FGDL layer BIKE_ACCIDENTS_2009.shp.

DATA SOURCE(S): Florida Department of Highway Safety and
 Motor Vehicles
 SCALE OF ORIGINAL SOURCE MAPS: 100000
 GEODATASET EXTENT: State of Florida
 PUBLICATION DATE: 2011
 TIME PERIOD OF CONTENT: Begin Date: 1998 End Date: 2011

TITLE: FLORIDA PROJECTED POPULATION GROWTH - 2060

Geodataset Name: FL2060GROWTH
 Geodataset Type: SHAPEFILE
 Geodataset Feature: RASTER
 Feature Count: N/A

GENERAL DESCRIPTION:

This dataset contains the results of land use suitability analysis performed by the GeoPlan Center for 1000 Friends of Florida. This dataset explores the physical reality of projected population growth through 2060 for the entire State of Florida given no changes to existing policy and density.

DATA SOURCE(S): University of Florida GeoPlan Center
 SCALE OF ORIGINAL SOURCE MAPS: N/A
 DATE OF AUTOMATION OF SOURCE: 20060815
 GEODATASET EXTENT: State of Florida

This dataset explores the physical reality of the population growth from 2005 to 2060 without changes to existing land use policy or gross urban density. The land use suitability analysis displayed in this dataset was performed by the GeoPlan Center for

1000 Friends of Florida and is a companion study to "A Time for Leadership: Growth Management and Florida 2060" prepared for 1000 Friends of Florida by researchers at Georgia Tech's Center for Quality Growth and Regional Development. GeoPlan's project was undertaken using relatively straightforward geographic information systems (GIS) suitability analysis constructed on a foundation of clearly articulated assumptions. The three key assumptions were: 1) Population projections derived from the Bureau of Economic and Business Research (BEBR) moderate population projections and interpolation (used for calculating population beyond BEBR year projection horizon); 2) 2005 gross urban density figures would remain the same through 2060; and 3) population would be allocated to the most suitable land for future urban development.

2020 = Population Growth from 2005 - 2020
 2040 = Population Growth from 2021 - 2040
 2060 = Population Growth from 2021 - 2040

TITLE: GENERALIZED LAND USE DERIVED FROM 2014 PARCELS - FLORIDA DOT DISTRICT 6

Geodataset Name: D6_LU_GEN_2014
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 102619

GENERAL DESCRIPTION:

This dataset contains generalized land use derived from parcel specific land use for Florida Department of Transportation (FDOT) District 6. The original 99 land use classes from the parcel data have been collapsed into 15 generalized classes. This layer is an update to the FGDL layer D6_LU_GEN_2012.shp

DATA SOURCE(S): University of Florida GeoPlan Center
 SCALE OF ORIGINAL SOURCE MAPS: Various
 GEODATASET EXTENT: FDOT District 6

PUBLICATION DATE: 20141006
 TIME PERIOD OF CONTENT: 20140915

TITLE: GREENWAYS PROJECT CULTURAL AND HISTORIC FEATURES

Geodataset Name: GWCHF
 Geodataset Type: SHAPE

Geodataset Feature: POINT

GENERAL DESCRIPTION:

This dataset contains Cultural and Historic Features recommended by the Bureau of Archaeological Research, Division of Historical Resources, Florida Department of State, and edited by the GeoPlan Center, DEP Office of Greenways and Trails, and Public Comment (Regional Greenways Task Force).

DATA SOURCE: GeoPlan Center

SCALE OF ORIGINAL SOURCE MAPS: 1:24,000, 7.5 Quads USGS
 DATE OF AUTOMATION OR SOURCE: 1995 - 1998
 GEODATASET EXTENT: State of Florida

TITLE: PARCELS OWNED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION - 2009

Geodataset Name: PAR_FDOT_09
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 12393

GENERAL DESCRIPTION:

This data set contains parcels owned by the Florida Department of Transportation (FDOT) from 67 individual counties obtained through the state DOR 2009 tax data. Please Note: This layer has not been ground-truthed and should not be the sole data source used to identify FDOT owned lands. There are known errors in this layer where parcels included may not be owned by the FDOT, but rather the local transportation authority or the county. Some parcels identified in this layer have been assigned their land use designation based on the owner of the property rather than their current use. In such cases, these lots may actually be vacant and/or used for parking or other purposes related to the owner. This dataset does not represent a 100% inventory of FDOT owned property. This layer is an update of the previously released FGDL layer "PAR_FDOT_07.shp".

DATA SOURCE(S): Florida Department of Revenue
 SCALE OF ORIGINAL SOURCE MAPS: Various
 GEODATASET EXTENT: State of Florida

PUBLICATION DATE: 20091209
 TIME PERIOD OF CONTENT: 20091209

TITLE: FLORIDA STATE PARK MANAGEMENT ZONES - FEBRUARY 2015

Geodataset Name: STPARK_MZONES_FEB15
 Geodataset Type: SHAPEFILE

Geodataset Feature: POLYGON
 Feature Count: 4975

GENERAL DESCRIPTION:

State Park Management Zones are divisions of land within Florida State Parks based on factors such as Natural Community types, physical boundaries, land use and geography. This is an update to the FGDL layer STPARK_MZONES_AUG13.shp

DATA SOURCE(S): Florida Department of Environmental
 Protection, Division of Recreation and Parks
 SCALE OF ORIGINAL SOURCE MAPS: 24000
 GEODATASET EXTENT: State of Florida

 PUBLICATION DATE: 20150216
 TIME PERIOD OF CONTENT: 2015021

TITLE: FLORIDA STATE PARK MANAGEMENT ZONES - FEBRUARY 2015

Geodataset Name: STPARK_MZONES_FEB15
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 4975

GENERAL DESCRIPTION:

State Park Management Zones are divisions of land within Florida State Parks based on factors such as Natural Community types, physical boundaries, land use and geography. This is an update to the FGDL layer STPARK_MZONES_AUG13.shp

DATA SOURCE(S): Florida Department of Environmental
 Protection, Division of Recreation and Parks
 SCALE OF ORIGINAL SOURCE MAPS: 24000
 GEODATASET EXTENT: State of Florida

 PUBLICATION DATE: 20150216
 TIME PERIOD OF CONTENT: 20150212

TITLE: ZIP CODE AREAS (FIVE-DIGIT) IN FLORIDA - 2012

Geodataset Name: ZIPBND_2012
 Geodataset Type: SHAPEFILE
 Geodataset Feature: POLYGON
 Feature Count: 959

GENERAL DESCRIPTION:

This dataset represents Florida ZIP Code Areas (Five-Digit) used by the U.S. Postal Service to deliver mail more effectively. This layer represents an update to the FGDL layer

ZIPBND_2009.shp.

DATA SOURCE(S) :	University of Florida GeoPlan Center
SCALE OF ORIGINAL SOURCE MAPS:	100000
GEODATASET EXTENT:	State of Florida
PUBLICATION DATE:	20120306
TIME PERIOD OF CONTENT:	Begin Date: 20060413 End Date: 20120306

Appendix D: Generalized land use

Derived from parcel specific land use for Florida Department of Transportation (FDOT) District 6 and spatially quantified in GIS.

	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Centrally Assessed	60.6	5.0%	0.148	0.0%	0	0.0%	0	0.0%	9.7	0.6%	23.1	5.2%	22.14	2.9%
Industrial	172.4	14.2%	437.5	15.6%	9.2	0.9%	16.5	1.3%	47	2.9%	15.3	3.5%	20.6	2.7%
Institutional	24.6	2.0%	42.2	1.5%	32.1	3.0%	13.8	1.0%	10.6	0.7%	7.1	1.6%	16.5	2.1%
Other	52.6	4.3%	136.1	4.9%	39.2	3.6%	62.5	4.7%	5.6	0.4%	45.1	10.2%	54.4	7.0%
Public/Semi Public	171.2	14.1%	1180.0	42.1%	163.7	15.2%	285.8	21.7%	101.8	6.4%	112.7	25.4%	180.7	23.3%
Recreation	0	0.0%	38.7	1.4%	1.0	0.1%	13.1	1.0%	0	0.0%	5.6	1.3%	17	2.2%
Residential	366.2	30.2%	448.6	16.0%	677.3	63.1%	641.2	48.7%	1032.5	64.7%	104.1	23.5%	44.4	5.7%
Retail/Office	154.6	12.8%	185.0	6.6%	77.2	7.2%	165.6	12.6%	229.3	14.4%	28	6.3%	246	31.7%
Vacant Non-residential	145.95	12.1%	149.4	5.3%	36.5	3.4%	29.8	2.3%	50.8	3.2%	51.2	11.5%	83.1	10.7%

Appendix E: Child Opportunity Index data sources

Source: <http://www.diversitydatakids.org/data/childopportunitymap/3460/miami-fort-lauderdale-pompano-beach>

Data aggregated from: U.S. Census Bureau: Decennial Census 2010, American Community Survey 2007-2011, Zip Business Patterns 2009; State Department of Education 2010-2011; National Center for Education Statistics, Common Core of Data 2010-2011; diversitydatakids.org Early Childhood Database (State Early Childhood Care and Education Licensing Database 2012 and 2013, National Center for Education Statistics, Common Core of Data 2009-2010, National Association for the Education of Young Children Accredited Program Database, 2012 and 2013); ESRI Business Analyst 2011; Department of Housing and Urban Development, Neighborhood Stabilization Program 2010; Environmental Protection Agency, Toxic Release Inventory Program 2010.

Appendix F: WEAVE Explanation, Tutorial and Visualization links

Housing Affordability for the city of Opa-locka's Owners and Renters

A common benchmark for housing cost is whether a household is paying more than 30% of their income towards housing. This is referred to as the cost burden. Examining the affordability to homeowners and renters is a necessary first step to reducing the cost burden in our communities.

Reducing housing costs requires multiple policy strategies: boosting incomes, increasing housing production, and creating additional subsidized housing. These are related to transportation planning decisions when the linkages to gaps in public transportation routes and stops are overlaid with hotspots of housing and affordability needs. Decisions to implement these strategies can be informed through data analysis.

The WEAVE template allows for any combination of windows, composed of maps, scatterplots, and bar charts, Figure 1 displays a screenshot of the first WEAVE story for Opa-locka: Housing Affordability for Owners and Renters. There are four windows labeled A through D for introductory and explanatory purposes. These 4 windows are linked by block group (BG), and each communicates selected indicators, which are related to income and affordability.

Window A

Window A has a map of BGs which are partially contained within Opa-locka, and it allows us to see spatial distributions for the selected indicators. The color assignment throughout all of the windows is tied to Median Household Income, with the legend symbology showing that higher income is green, and lower is purple. On the interactive website, there is a textbox which shows up when any BG is hovered over, containing additional information.

Window B

Window B gives us a more in-depth look at owner affordability levels using a bar chart. Each block group is represented by a bar in this bar chart. The Y axis shows the owner affordability gap, the levels of which increase moving to the right. The owner affordability indicator is used to identify neighborhoods with potential housing cost burdens, as measured by the relationship between house price and the median local income. As a rule of thumb, to maintain affordability of lending costs, the purchase price of a home should not exceed three times the buyer's annual household income.

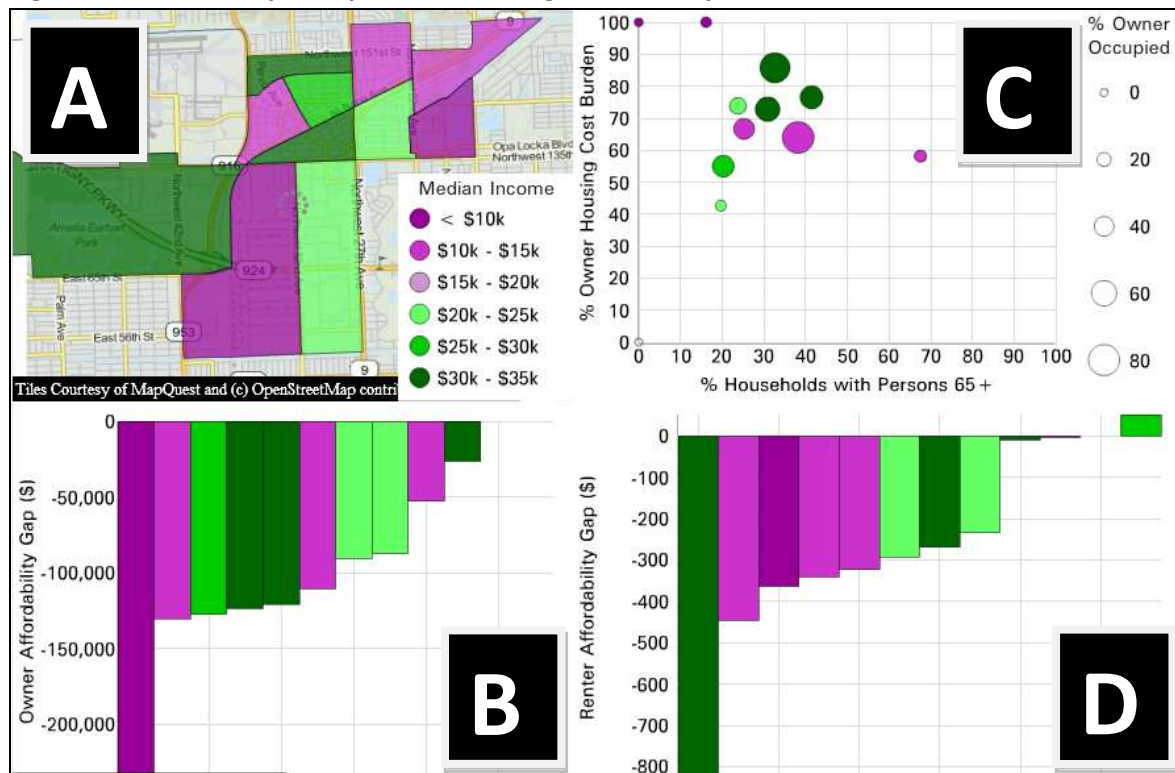
Window C

In window C, we are looking at a scatterplot that actually reflects 4 indicators. The Y axis shows cost burden, of the % of the owner households spending over 30% of their HH income on their mortgage payments. The X axis shows the percent of Housing Units that are owner occupied. The size of each circle increases with the increasing percent of all housing units that are vacant. The fourth indicator is the color for the median household income. Note that there are more purple circles, signifying low median household income correlated to lower % owner occupied. Higher incomes lead to increased ownership. Drag a box around any cluster of circles on the plot, they will be highlighted in other boxes.

Window D

Window D gives us a more in-depth look at renter affordability levels using a bar chart. Each block group is represented by a bar in this bar chart. The Y axis shows the renter affordability gap, the levels of which increase moving to the right. The renter affordability indicator is also used to identify neighborhoods with potentially unsustainable housing costs, this time as measured by the relationship between monthly rent and the median local income. The calculation of this affordability gap involves taking 30% of the median household income for all households, dividing it by 12 and comparing the resulting figure to the median gross rent. If the rent figure is higher than the derived monthly rent payment, an affordability gap exists.

Figure 1: WEAVE story for Opa-locka Housing Affordability for Owners and Renters



Education, Employment, and Income for the city of Opa-locka's Families and Labor Force

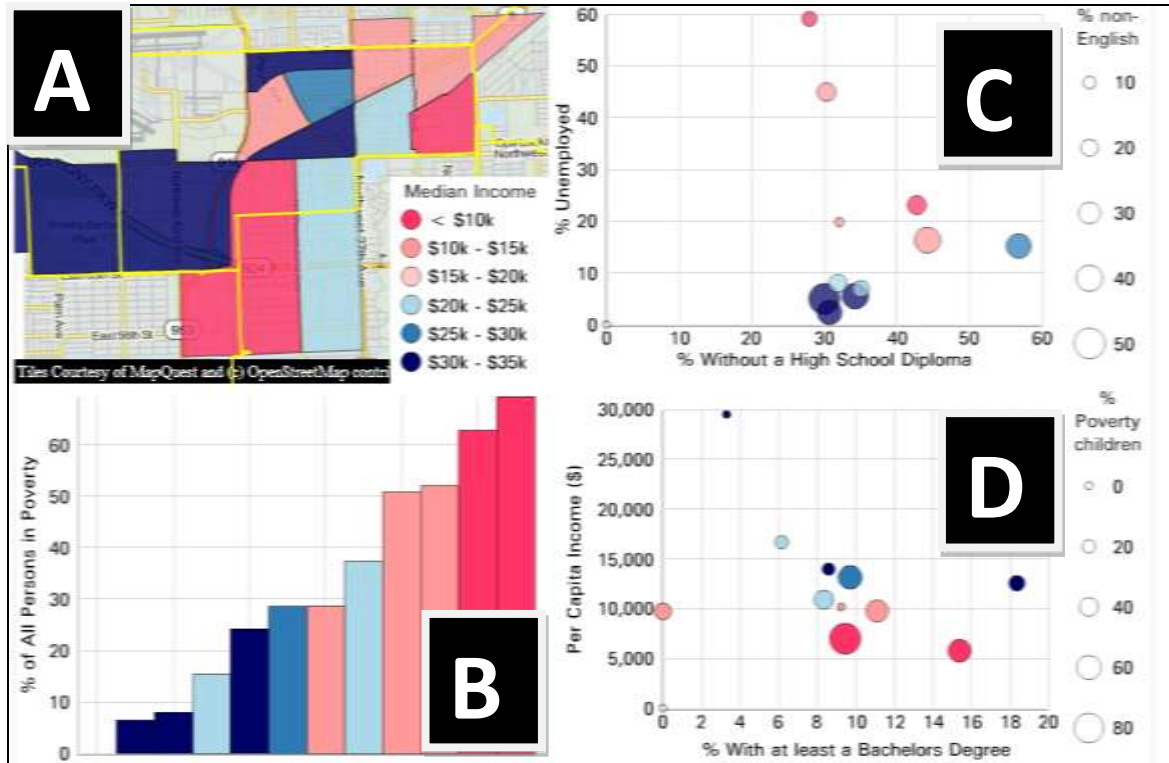
The next set of visualizations focus on equity and using data to consider a fair distribution of opportunities. Figure 2 shows a screenshot of the visualization, with the same 4 windows explained below. These 4 windows are all connected, but each has its own value in telling a piece of the story based on economic, employment, and education indicators.

Window A

The map of lock groups partially contained within Opa-Locka allows us to see spatial distributions for the median household income, but the colors assignments have shifted from blue to pink for high to low income. The text box which comes up when you hover over a block group lists values for indicators including housing units, population, and poverty levels. When we hover over a block group, you can see that the corresponding data values for this block group are highlighted in the other windows. We can also select an increment of median household income level. Highlighting a range on the legend and also an item in each of the other 3 window. Alternatively, we can select a cluster of block groups from different median

household income levels and it will select all of the BGs in each of the 4 windows that fall in that range.

Figure 2: WEAVE story for Opa-locka Education, Employment, and Income for Families and Labor Force



Window B

Window B gives a more in-depth look at the poverty levels using a bar chart. Each block group is represented by a bar in this bar chart. The City of Opa-locka has 12 block groups, one with no residents. The Y axis shows the percent of all persons in poverty, the levels of which increase moving to the right. There is a correspondence to median income with most of the blue bars clustered on the left of the bar chart. Most of the bars on the right part of the chart with high percentage of poverty are at the low median income range. It is possible to select a range in poverty level and have the corresponding block groups highlighted in the other windows.

Window C

In window C, the scatterplot actually reflects 4 indicators. The Y axis shows percent of the labor force unemployed. The X axis shows percent without a high school diploma. The size of each circle increases with the increasing percent of the population that does not speak English well.

The 4th indicator is the color for the median household income. Median household income represents the income level where half of total households earn more while the other half earns less. It is less skewed by dramatically higher or lower incomes (outliers) and is thus often considered a more useful income indicator than average income. Household income represents the combined earnings of all persons living in a household, whether those persons are related or not. Poverty indicators show what percentage of individuals or families are below poverty threshold. The Census Bureau identifies poverty thresholds according to the composition of the household. Different types of households have different poverty thresholds, and families are examined differently than single persons or unrelated households.

Window D

Window D has a scatterplot that reflects 4 more indicators. The Y axis shows per capita income. The X axis shows percent without at least a bachelor's degree. The size of each circle increases with the increasing percent of families with children living below the poverty threshold

The links below are consistent with the same explanations, but show change over time.

Preliminary Visualization Links for housing and income for Opa-locka over four time ranges from the American Community Survey (2006-2010, 2007-2011, 2008-2012, 2009-2013)

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Opa_Locka_FHEA_Income_2009_13.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Opa_Locka_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Opa_Locka_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Opa_Locka_FHEA_Income_2006_10.weave

Education, Employment, and Income for the 79th Street CRA's Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Income_2009_13.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Income_2008_12.weave

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Income_2006_10.weave

Housing Affordability for the 79th Street CRA's Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Housing_2009_13.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Housing_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/79th_Street_FHEA_Housing_2006_10.weave

Education, Employment, and Income for Downtown Miami's Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Income_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Income_2009_13.weave

Housing Affordability for Downtown Miami's Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Housing_2006_10.weave

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Housing_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Downtown_FHEA_Housing_2009_13.weave

Education, Employment, and Income for Grapeland Heights' Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Income_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Income_2009_13.weave

Housing Affordability for Grapeland Heights' Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Housing_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Housing_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Grapeland_Heights_FHEA_Housing_2009_13.weave

Education, Employment, and Income for Liberty City's Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Income_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Income_2009_13.weave

Housing Affordability for Liberty City's Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Housing_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Housing_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Liberty_City_FHEA_Housing_2009_13.weave

Education, Employment, and Income for Little Havana's Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FHEA_Income_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FHEA_Income_2009_13.weave

Housing Affordability for Little Havana's Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FH_EA_Housing_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FH_EA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FH_EA_Housing_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Little_Havana_FH_EA_Housing_2009_13.weave

Education, Employment, and Income for Overtown's Families and Labor Force

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Income_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Income_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Income_2008_12.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Income_2009_13.weave

Housing Affordability for Overtown's Owners and Renters

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Housing_2006_10.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Housing_2007_11.weave
- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Housing_2008_12.weave

- http://southeastfloridadatacommon.org/weave/weave.html?file=/weave/vis/Overtown_FHEA_Housing_2009_13.weave