MAPPING POVERTY

IN ALACHUA COUNTY

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URP 4273: Survey of Planning and Information Systems

DEFINE : POVERTY

The shortage of **basic resources** which determine quality of life such as food, clothing, shelter and safe drinking water. It may also include the lack of **access to opportunities** such as **education** and **employment** which aid the escape from poverty and/or allow one to enjoy the respect of fellow citizens.

Source: http://en.wikipedia.org/wiki/Poverty

DEFINE : POVERTY THRESHOLD

Minimum level of income deemed necessary to achieve an adequate standard of living in a given country. In other words, poverty from a society's **point of view**.

The common **international poverty line** has been roughly $1 a day, or more precisely $1.08 at 1993 purchasing-power parity (PPP).

Source: http://en.wikipedia.org/wiki/Poverty_line

MASLOW'S HIERARCHY OF NEEDS

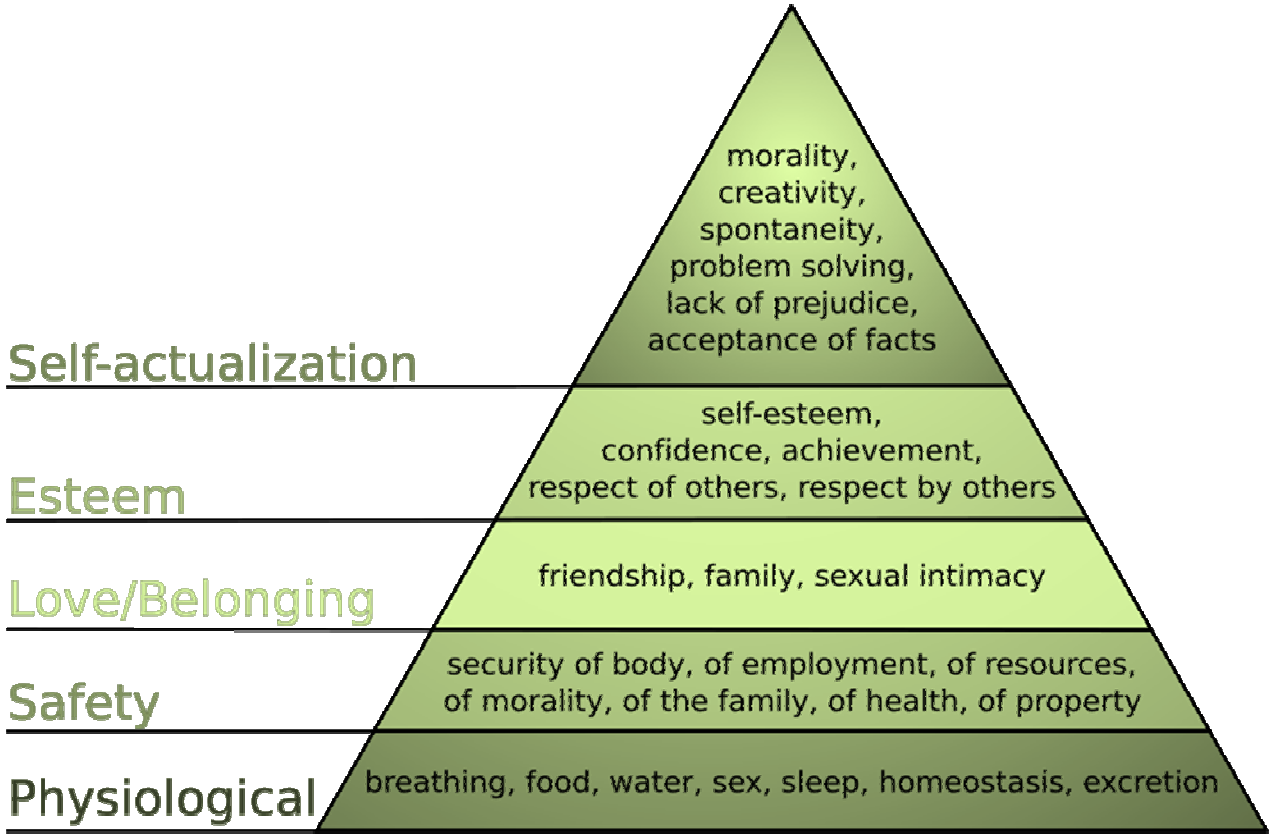


Image Source: http://easyandelegantlife.com/tag/maslows-hierarchy-of-needs/

MAPPING POVERTY

SPECIFIC OBJECTIVES

1: Where are the monetarily poor?

2: Who are the poor?

3: What are their access to services?

4: What can be done to improve access?

AREA OF EXTENT: Alachua County

UNIT OF ANALYSIS: U.S. Census Block and Block Group

OBJECTIVE 1 METHODOLOGY

Geography of Poverty : Where are the monetarily Poor?

- Create Composite Material Poverty Index (CMPI) map to identify three most impoverished regions of Alachua

- CMPI based on four variables concerned with basic needs and material wealth:

V1: Per Capita Income
V2: Federal Public Assistance
V3: Free and Reduced Lunch Students
V4: Substandard Housing

(values adjusted to exclude University of Florida students)

OBJECTIVE 1

VARIABLE 1: INCOME DISPARITY

1999 Average Household Size 2.25 - 2.9 = 3

1999 HHS Poverty Guidelines

Family Size	48 States and D.C.	Alaska	Hawaii
1	$8,240	$10,320	$ 9,490
2	11,060	13,840	12,730
3	13,880	17,360	15,970
4	16,700	20,880	19,210
5	19,520	24,400	22,450
6	22,340	27,920	25,690
7	25,160	31,440	28,930
8	27,980	34,960	32,170

Sources: http://www.indopedia.org/Gainesville,_Florida.html
http://aspe.hhs.gov/poverty/99poverty.htm

OBJECTIVE 1

VARIABLE 1: INCOME DISPARITY

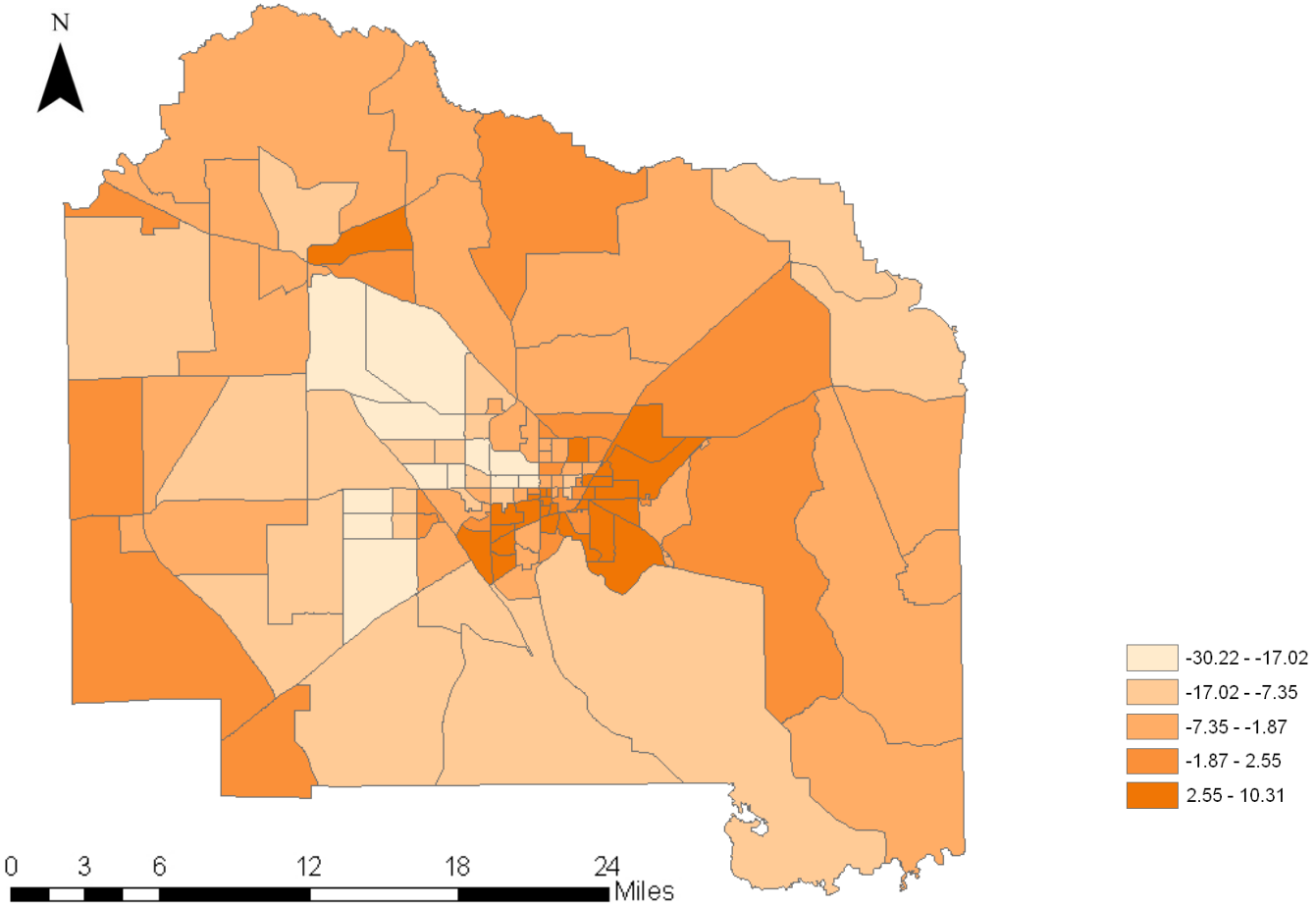
FORMULA:

$$V1 = \frac{(\text{Federal Poverty Level}) - (\text{Per Capita Income})}{1000}$$

$$V1 = \frac{(13{,}880) - (\text{Per Capita Income})}{1000}$$

OBJECTIVE 1

VARIABLE 1: INCOME DISPARITY



OBJECTIVE 1

VARIABLE 2: PUBLIC ASSISTANCE

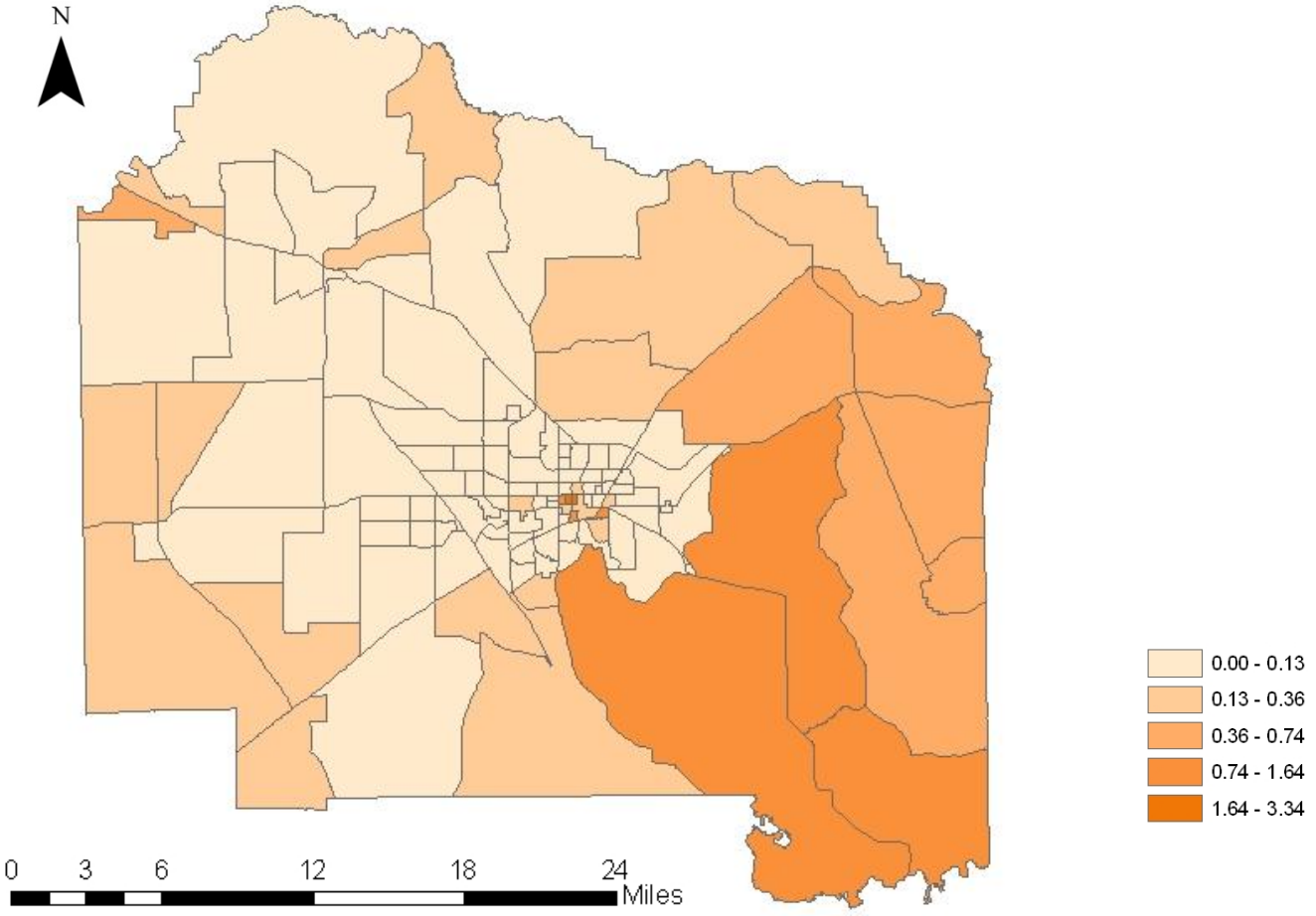
FORMULA:

$$V2 = \frac{\text{(Public Assistance)}}{\text{(Population – UF Population) (100)}}$$

- Values adjusted for UF students to obtain more accurate reflection of individuals receiving assistance

OBJECTIVE 1

VARIABLE 2: PUBLIC ASSISTANCE



OBJECTIVE 1

VARIABLE 3: FREE/REDUCED LUNCH

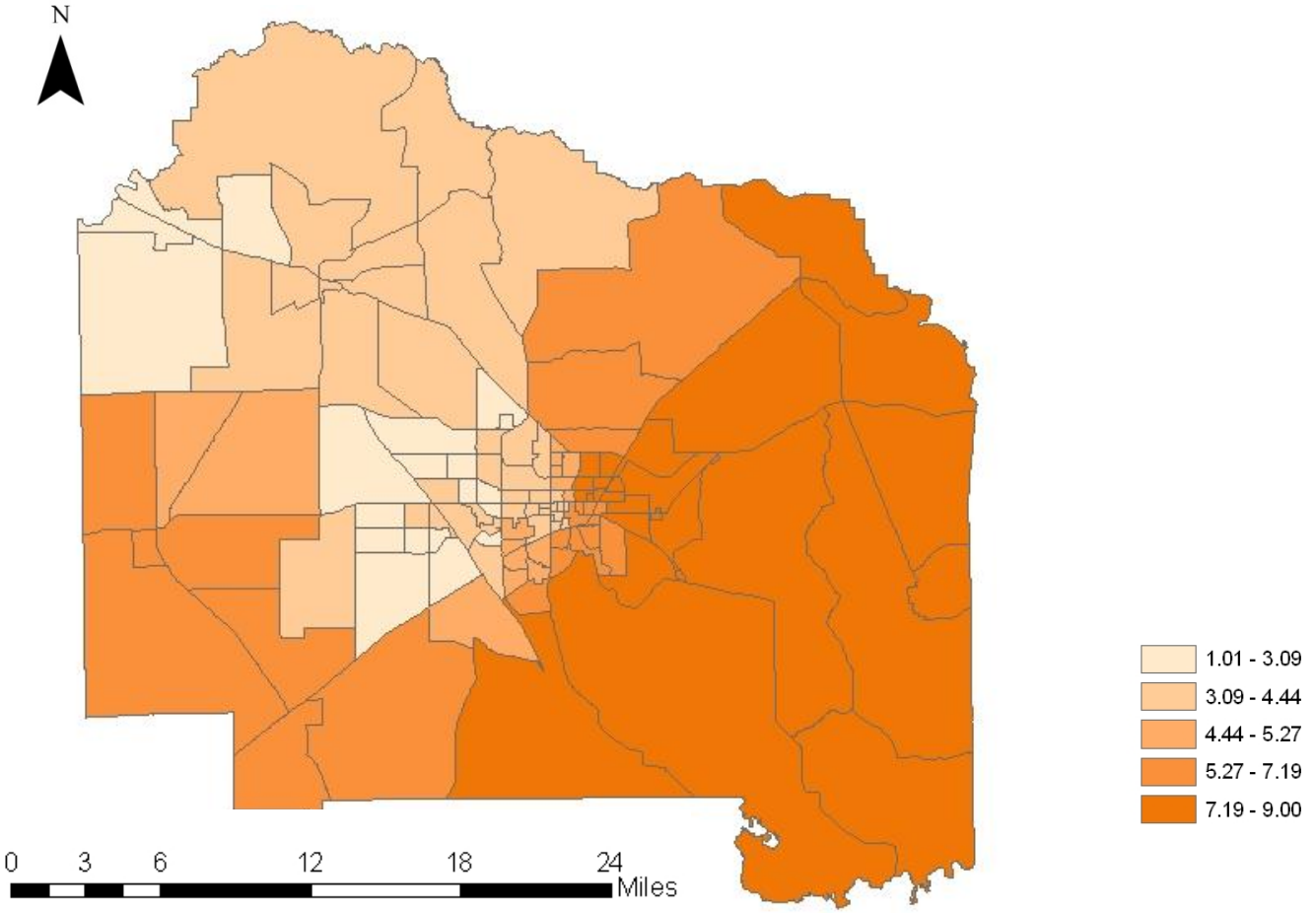
FORMULA:

$$V3 = \frac{\text{(Free/Reduced Lunch Students)}}{\text{(Total Students)}}$$

- Determine percentage of F/R Students per block group
- Rank 1 – 9 and divide into 5 breaks

OBJECTIVE 1

VARIABLE 3: FREE/REDUCED LUNCH



OBJECTIVE 1

VARIABLE 4: SUBSTANDARD HOUSING

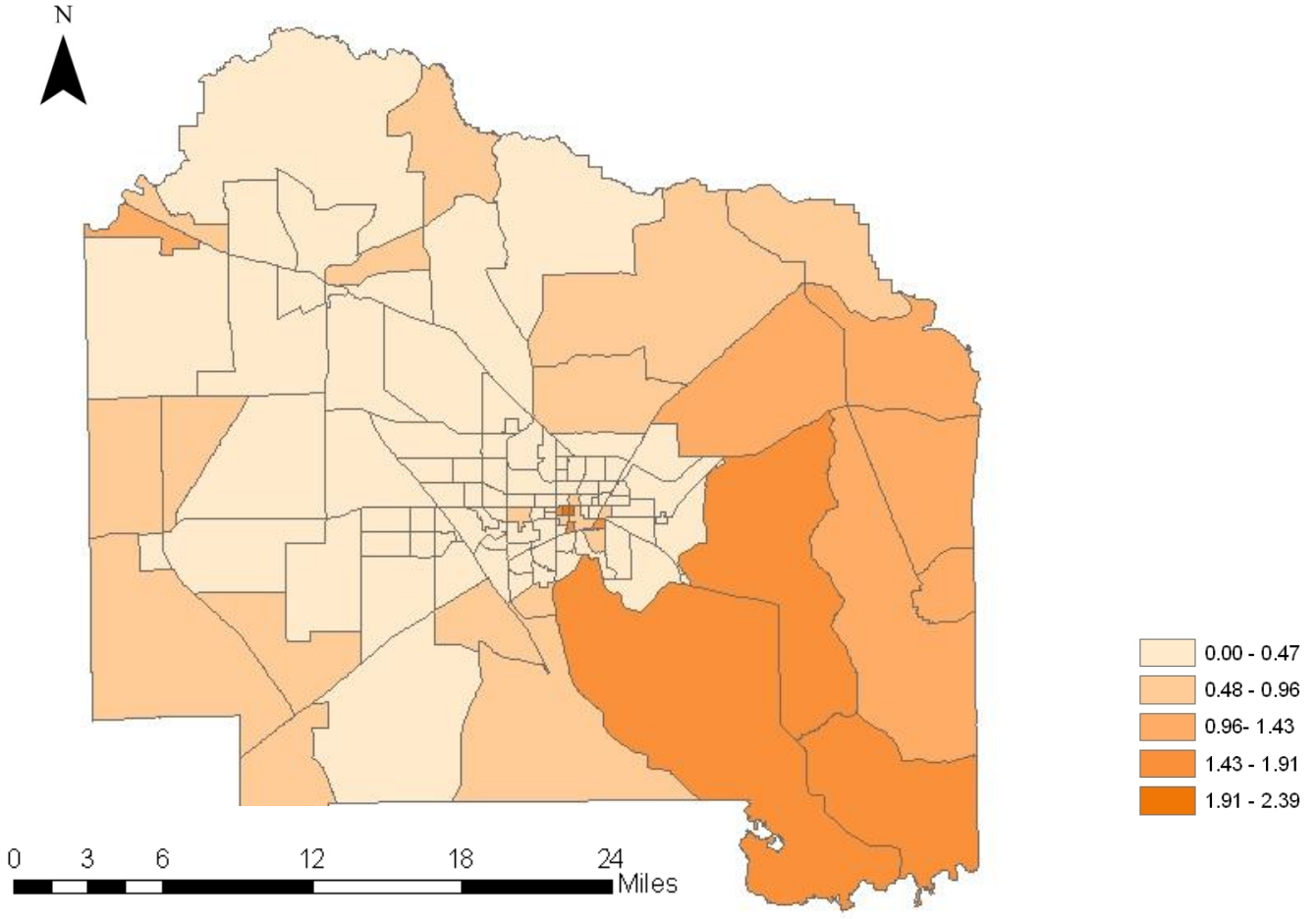
FORMULA:

$$V4 = \frac{(Low \times 1) + (Med \times 2) + (High \times 3)}{(Population - UF\ Population)}$$

- Values weighted by housing quality
- Population adjusted to account for UF students

OBJECTIVE 1

VARIABLE 4: SUBSTANDARD HOUSING



OBJECTIVE 1

OBJECTIVE 1: CMPI

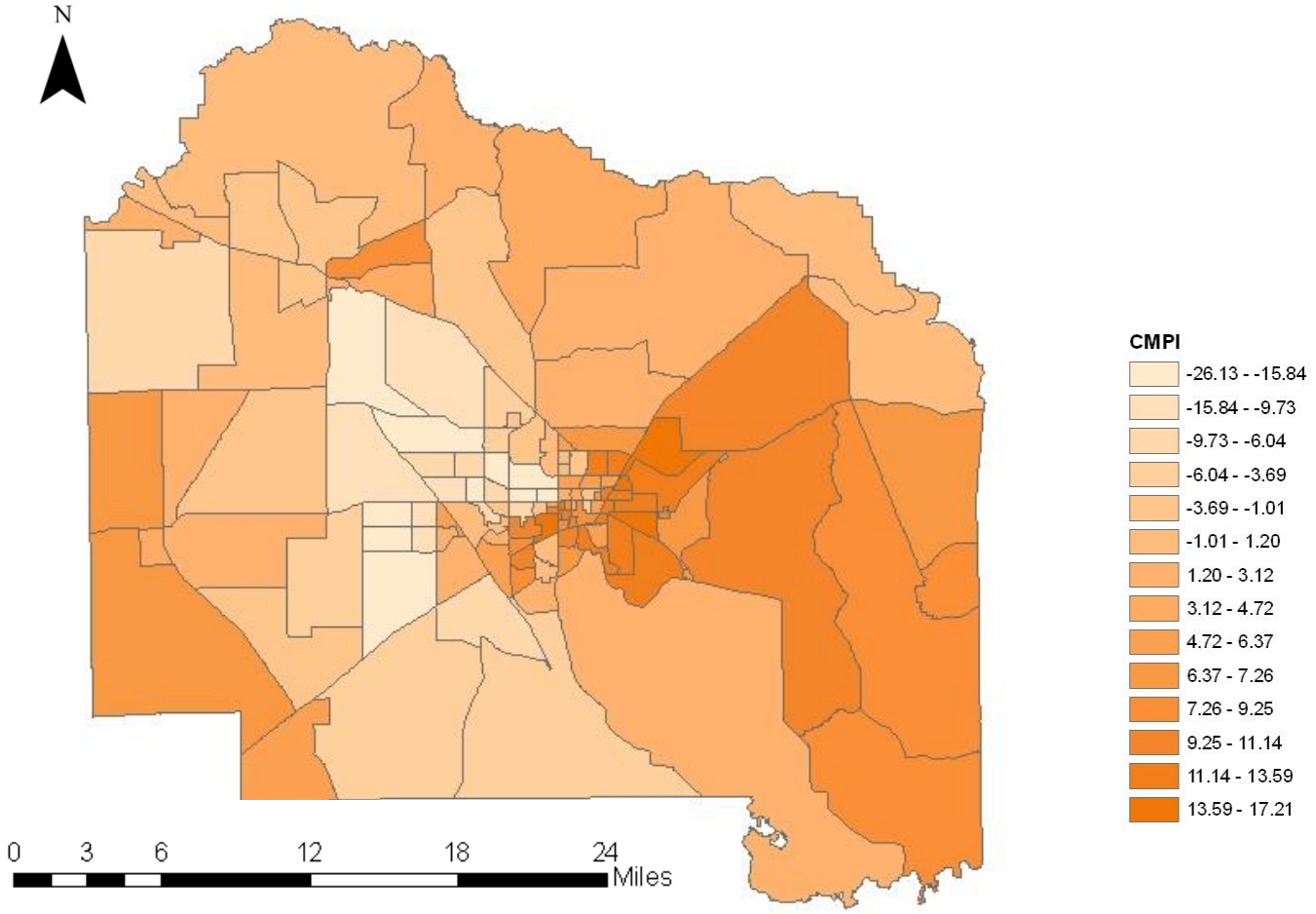
FORMULA:

$$V1 + V2 + V3 + V4 = CMPI$$

- Values from individual variables added to create indexed composite map of poverty
- Population adjusted to account for UF students

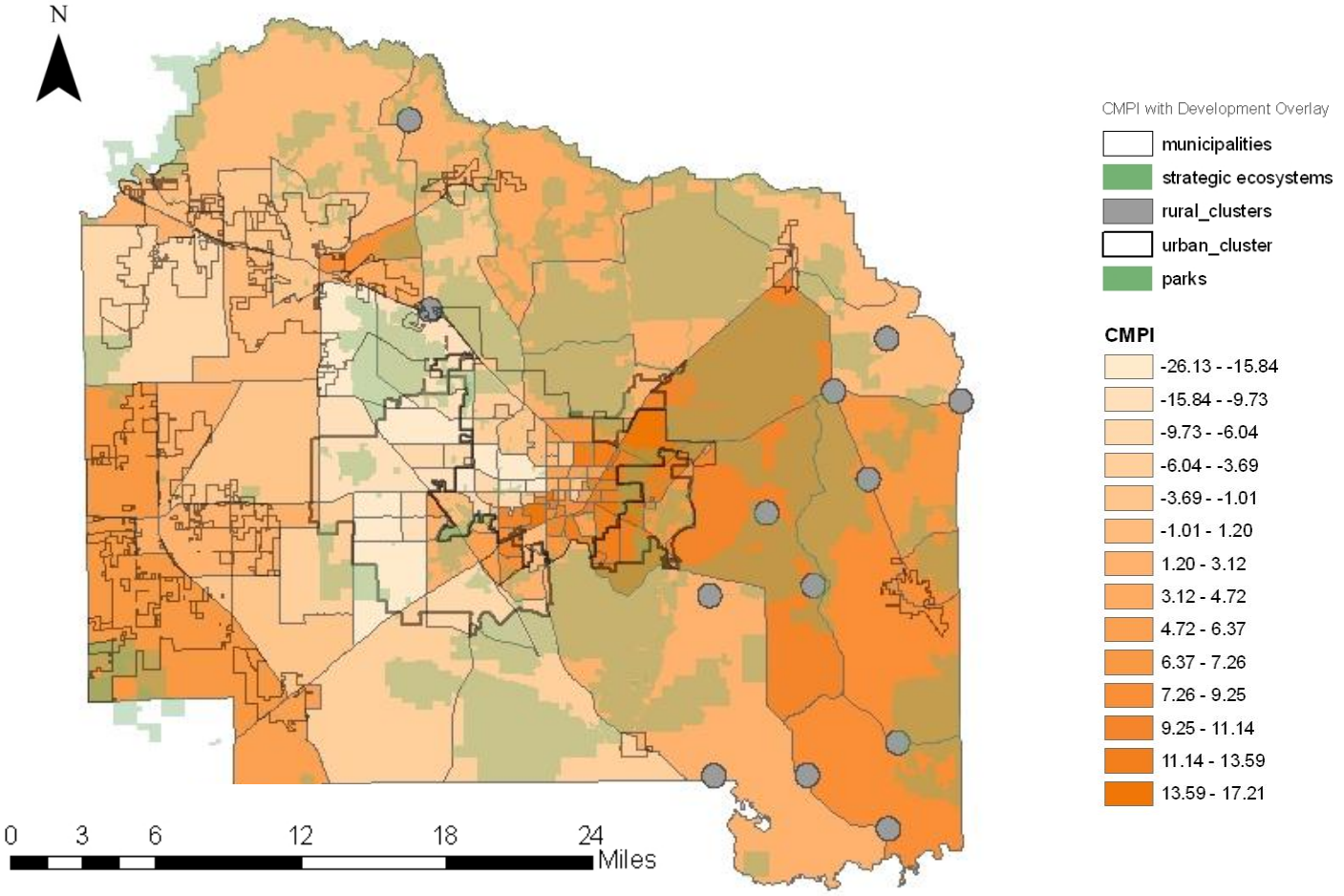
OBJECTIVE 1

OBJECTIVE COMPOSITE: CMPI



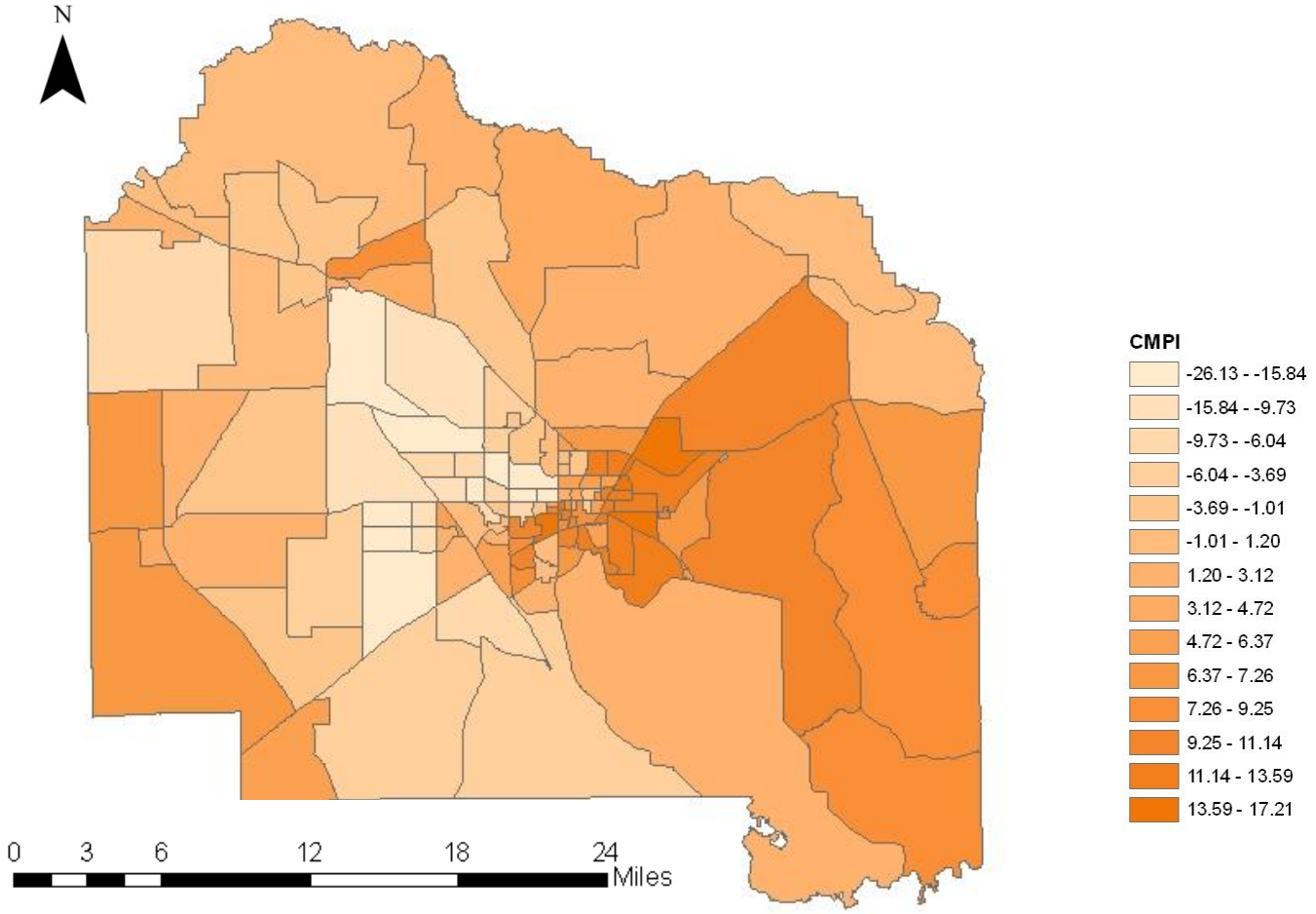
OBJECTIVE 1

OBJECTIVE COMPOSITE: FACTORS



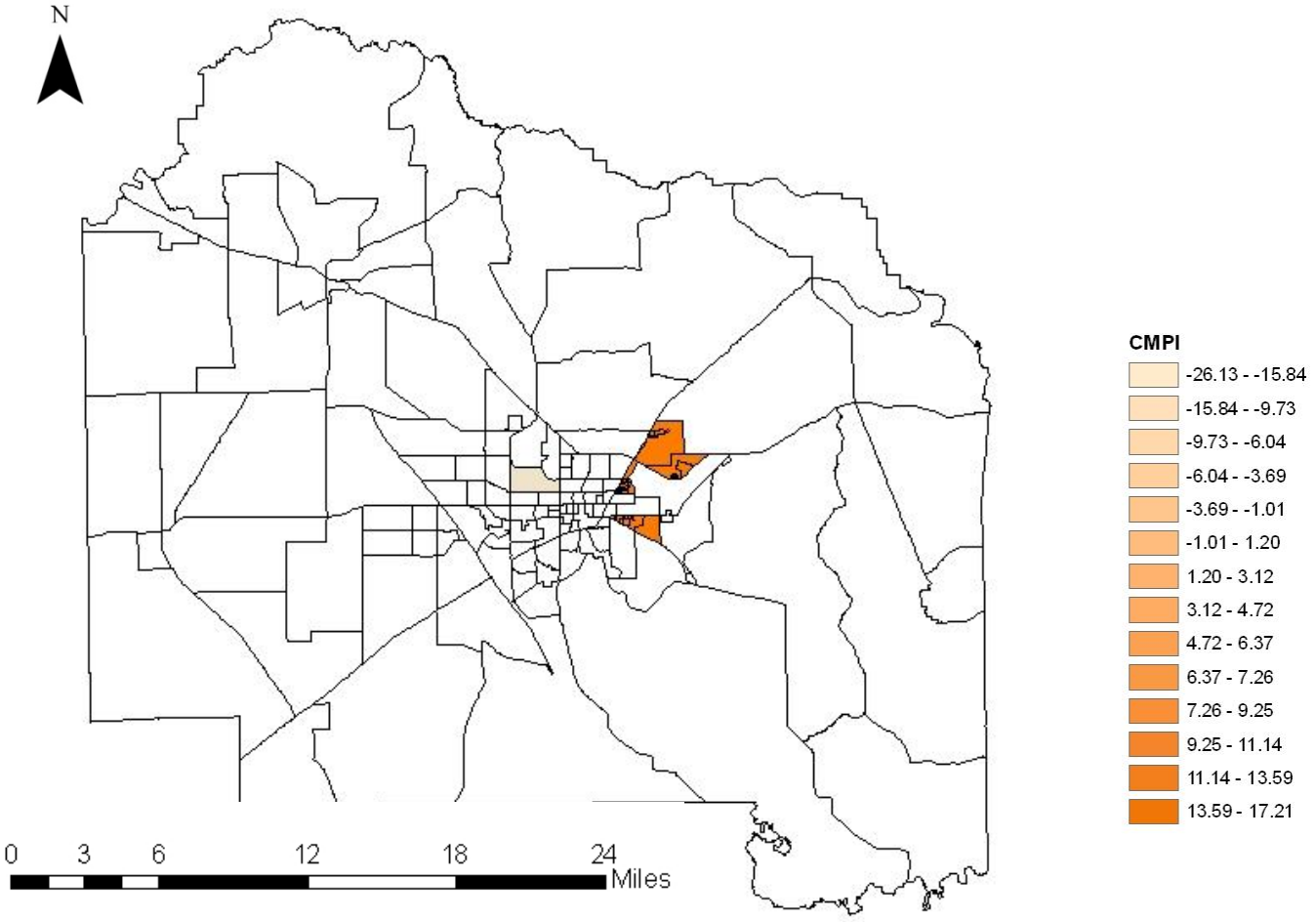
OBJECTIVE 1

OBJECTIVE COMPOSITE: CMPI



OBJECTIVE 1

OBJECTIVE COMPOSITE: TARGETS



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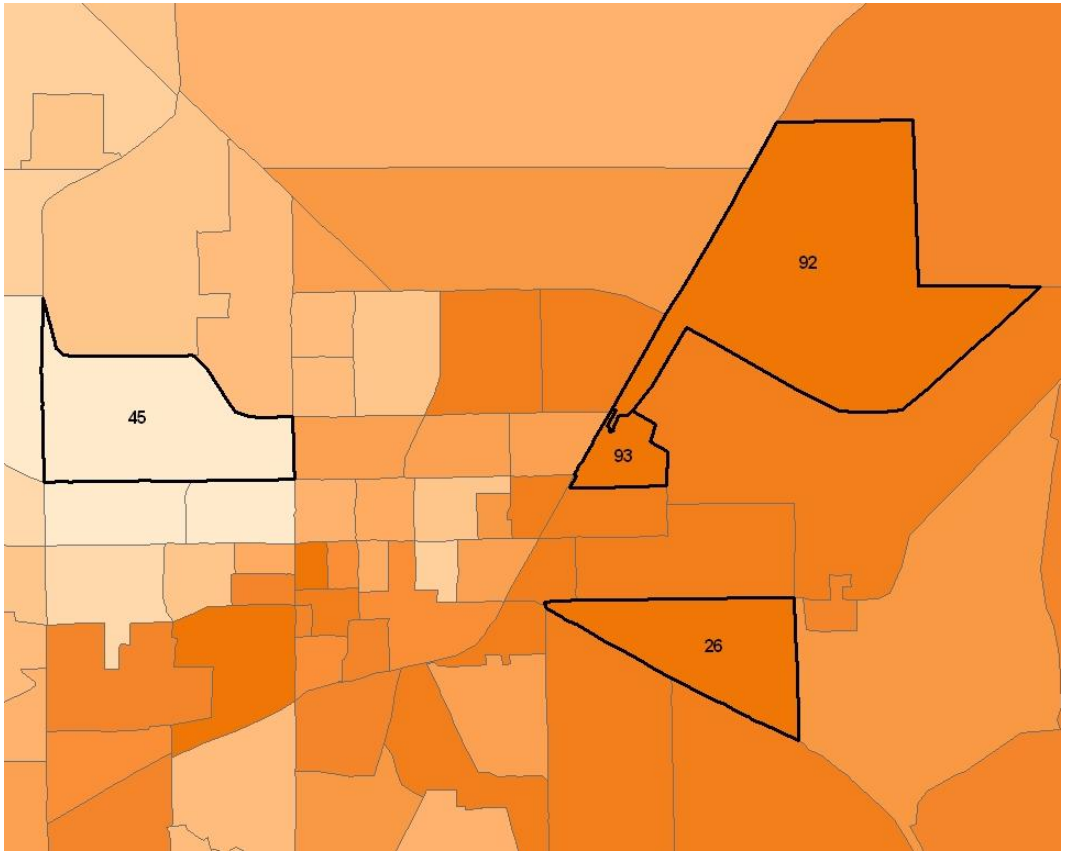
OBJECTIVE COMPOSITE: TARGETS



MAPPING POVERTY

OBJECTIVE 2 METHODOLOGY

Texture of Poverty : Who are the Poor?

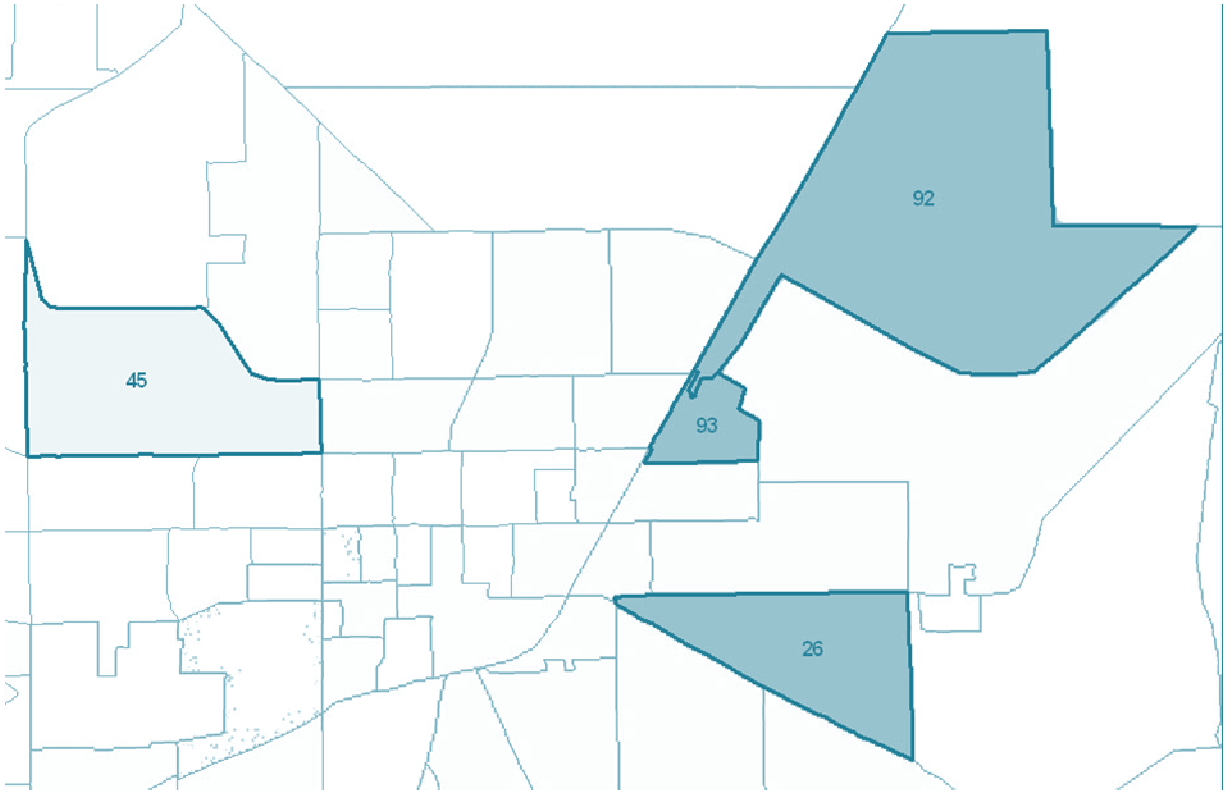
- Analyze socio-demographic statistics of regions targeted by CMPI as most impoverished

Statistic Variables

S1: Education
S2: Race
S3: Gender
S4: Age
S5: Family Employment Rate

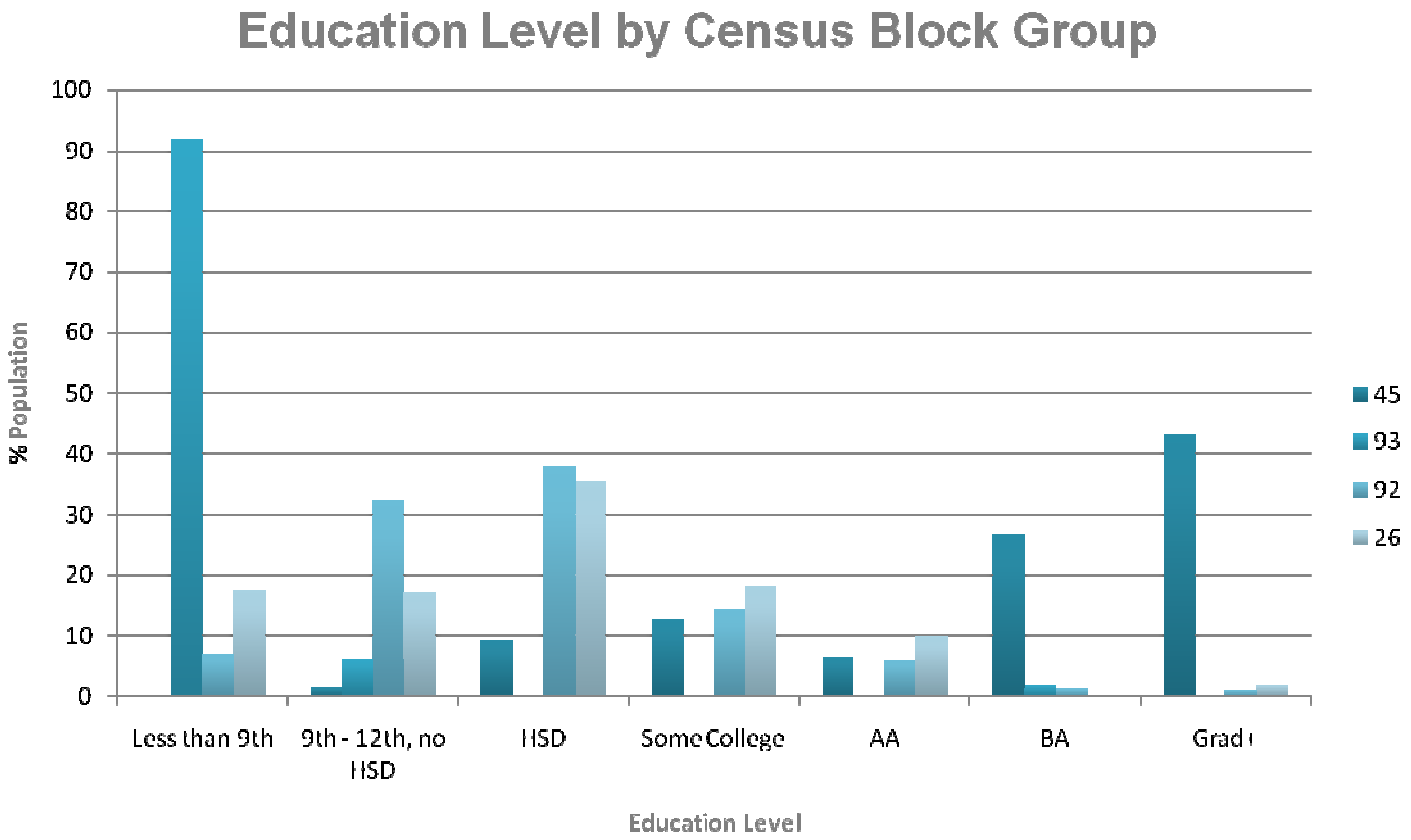
OBJECTIVE 1

OBJECTIVE COMPOSITE: TARGETS



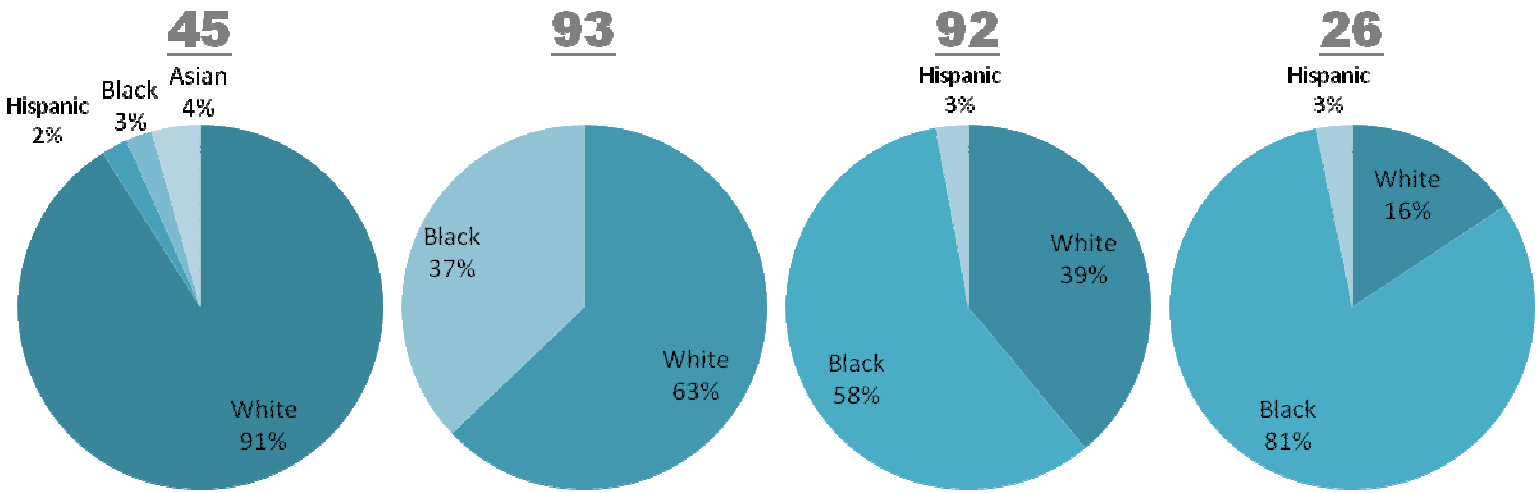
OBJECTIVE 2

STATISTIC 1: EDUCATION



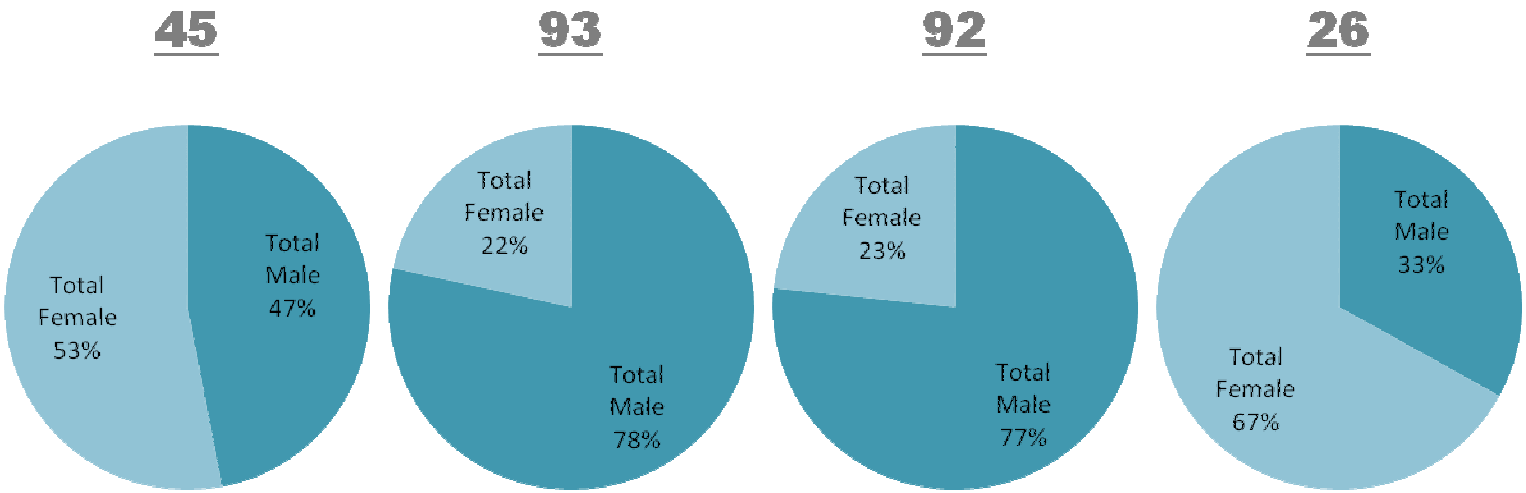
OBJECTIVE 2

STATISTIC 2: RACE



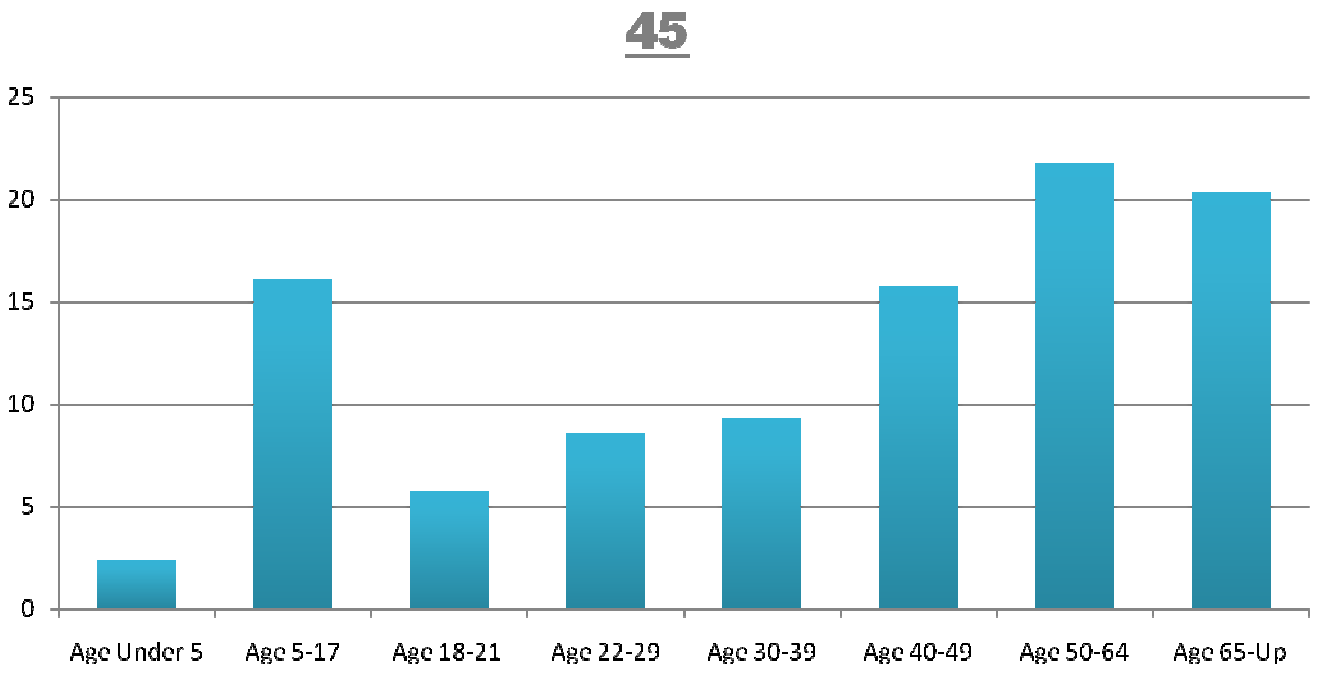
OBJECTIVE 2

STATISTIC 2: GENDER



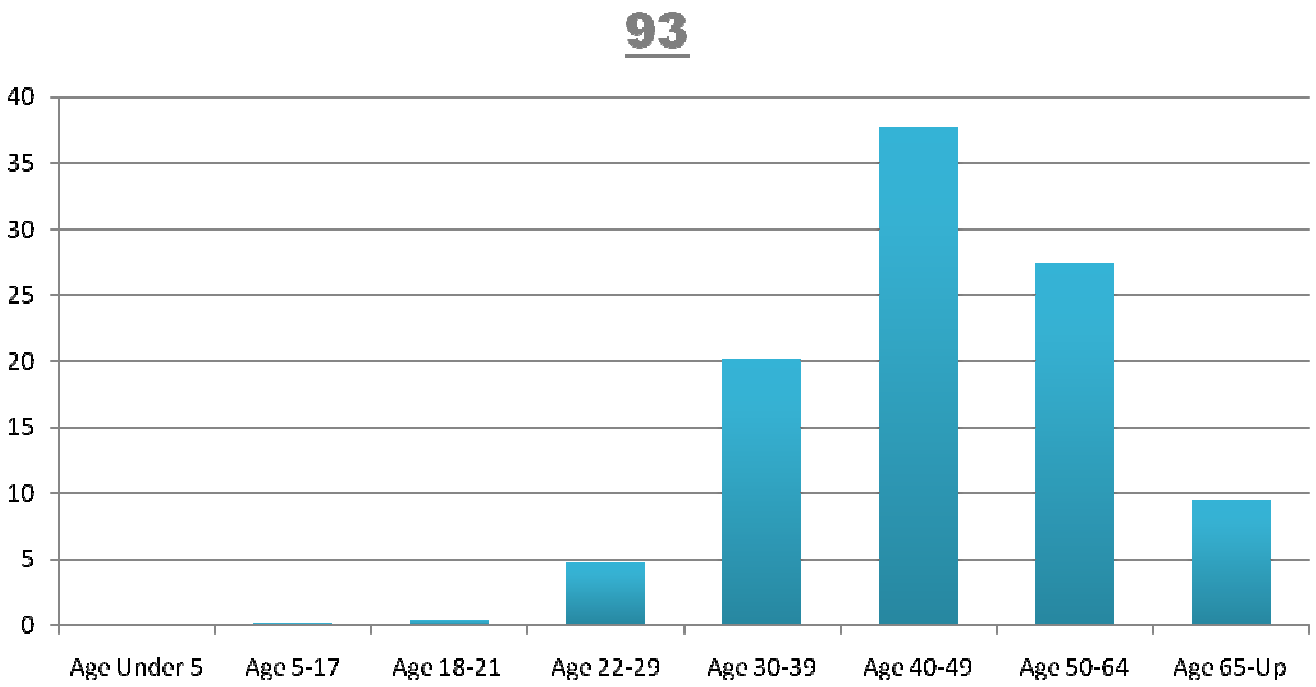
OBJECTIVE 2

STATISTIC 4: AGE



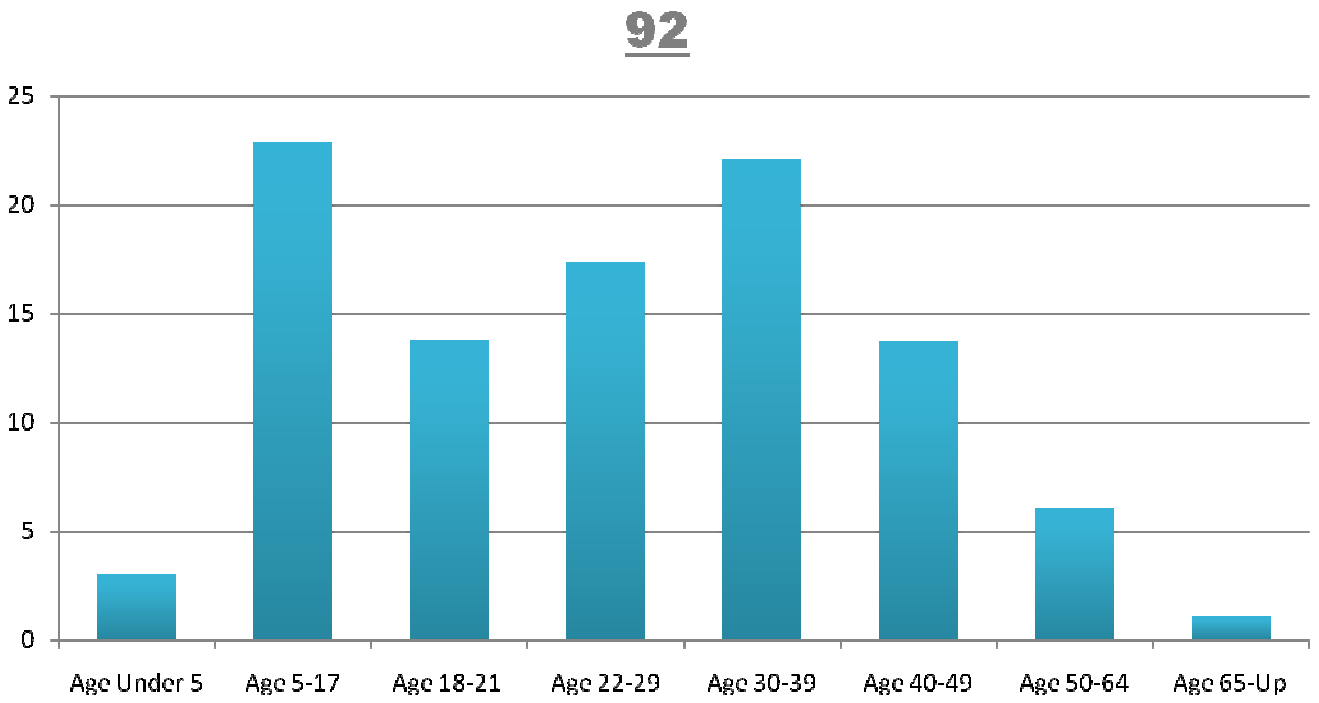
OBJECTIVE 2

STATISTIC 4: AGE



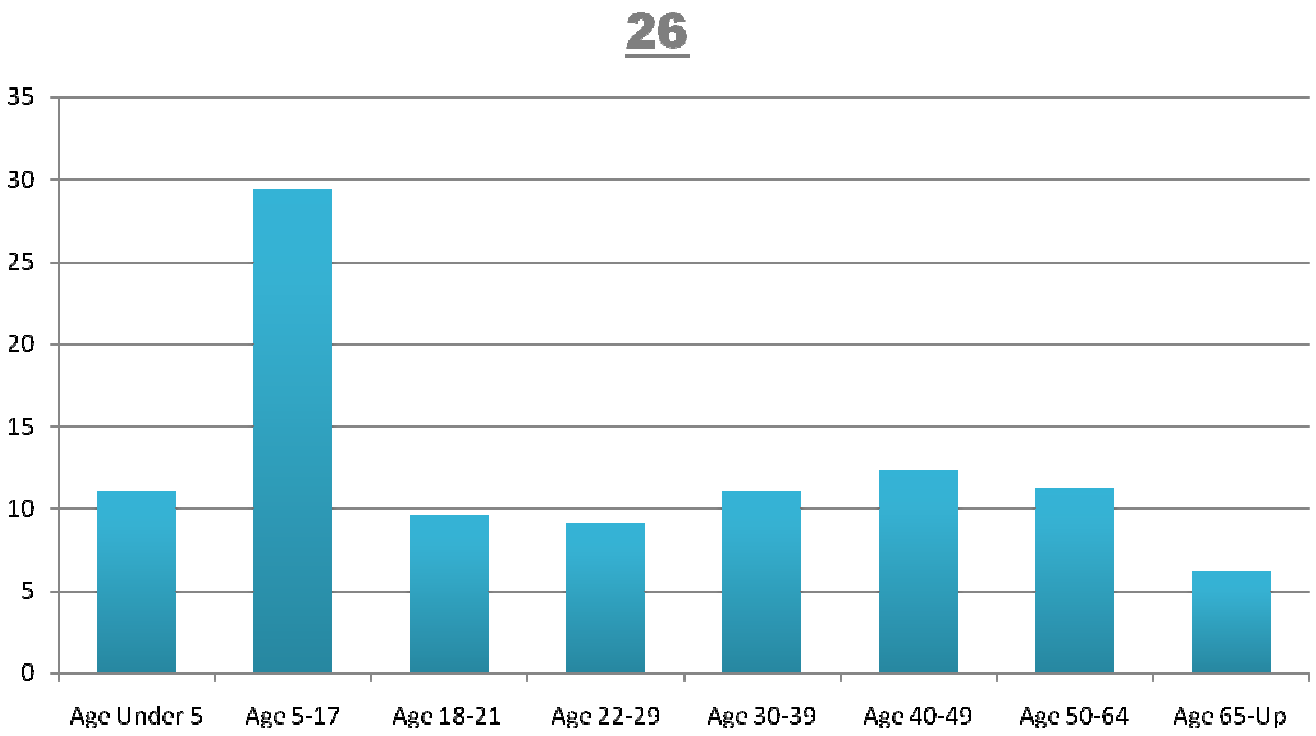
OBJECTIVE 2

STATISTIC 4: AGE



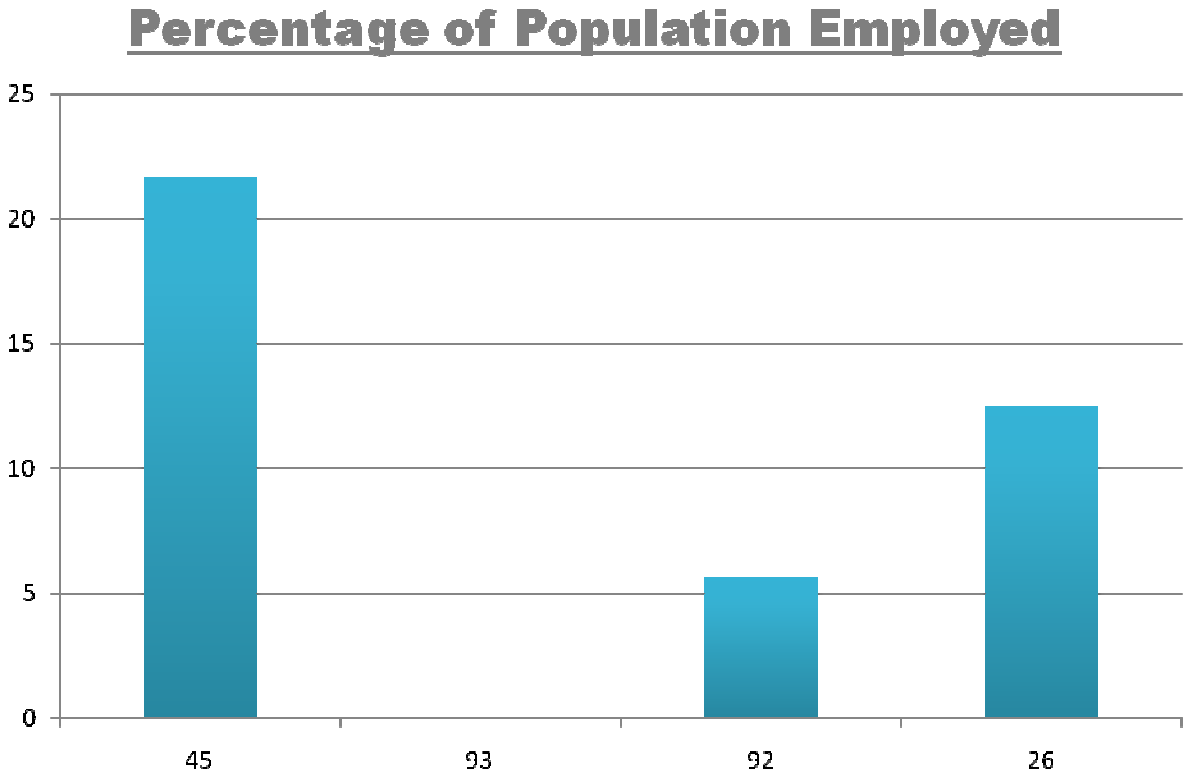
OBJECTIVE 2

STATISTIC 4: AGE



OBJECTIVE 2

STATISTIC 5: FAMILY EMPLOYMENT



MAPPING POVERTY

OBJECTIVE 3 METHODOLOGY

Access to Services : Opportunity and Vulnerability

Identify regions lacking to services using reasonable access buffers

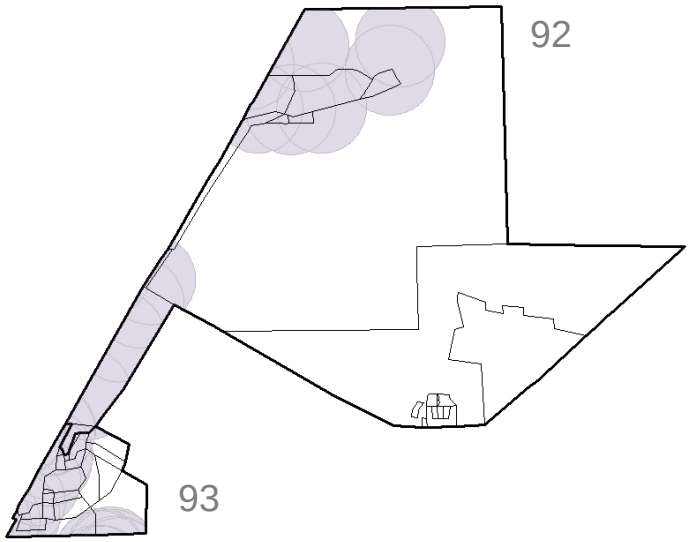
ACCESS VARIABLES

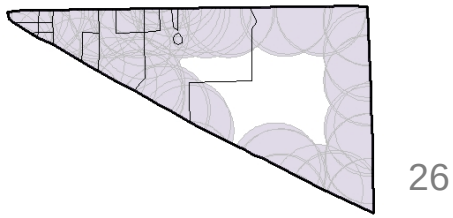
- Bus Stops
- Assisted Food Services
- Health Care Facilities
- Fire Protection
- Schools and Libraries
- Religious Centers
- Employment Opportunities

OBJECTIVE 3

ACCESS : BUS STOPS

- Buffer Radius: 0.25 miles

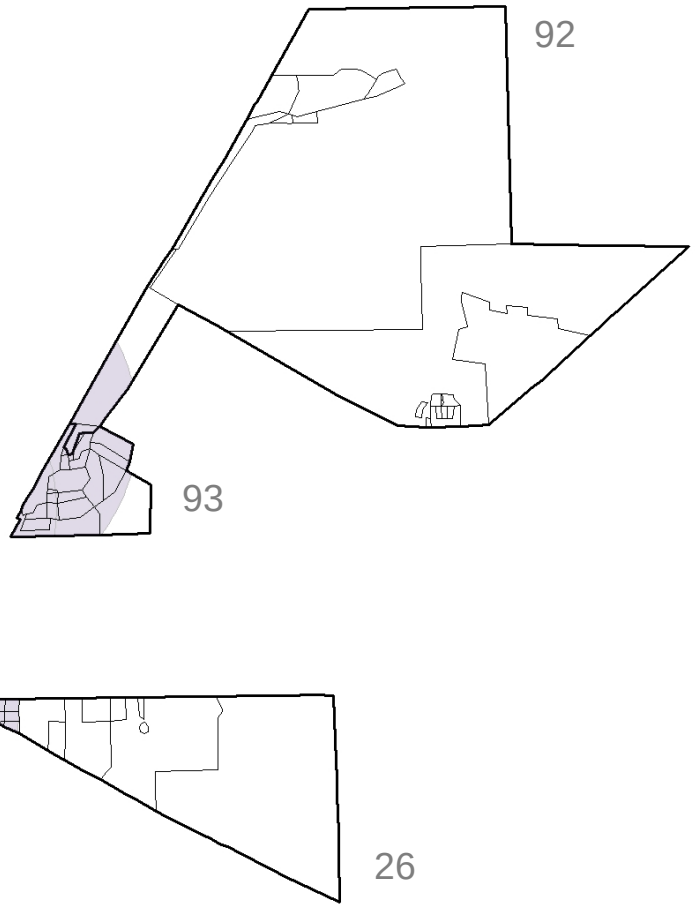




OBJECTIVE 3

ACCESS : ASSISTED FOOD SERVICES

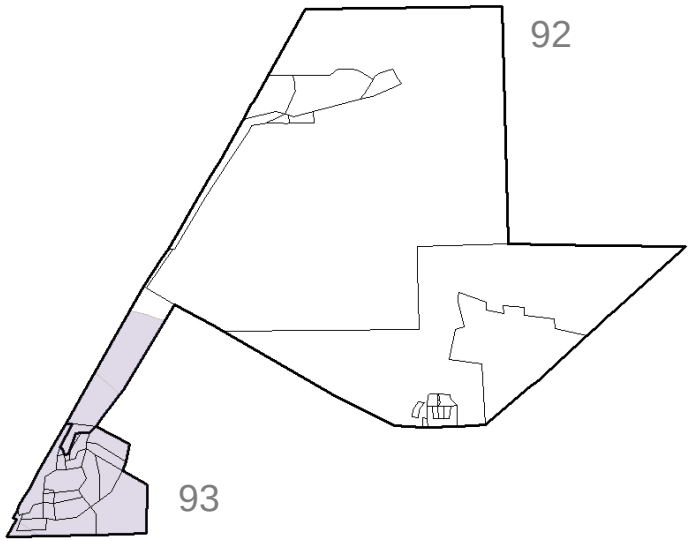
- Buffer Radius: 1 mile

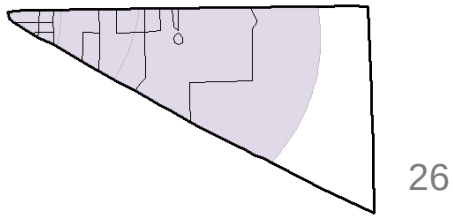


OBJECTIVE 3

ACCESS : HEALTH CARE FACILITIES

- Buffer Radius: 1 mile

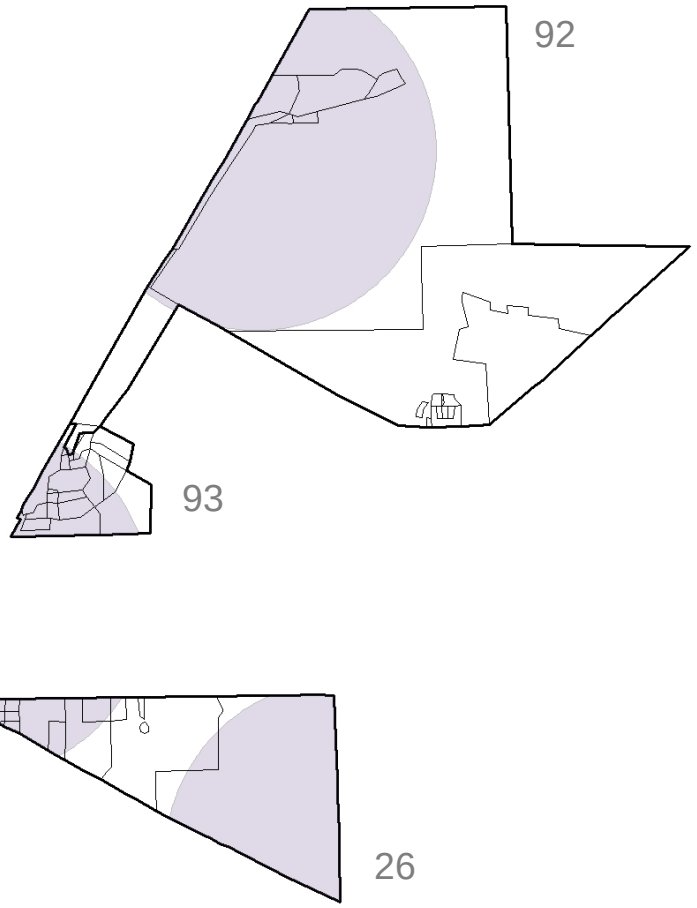




OBJECTIVE 3

ACCESS : FIRE PROTECTION

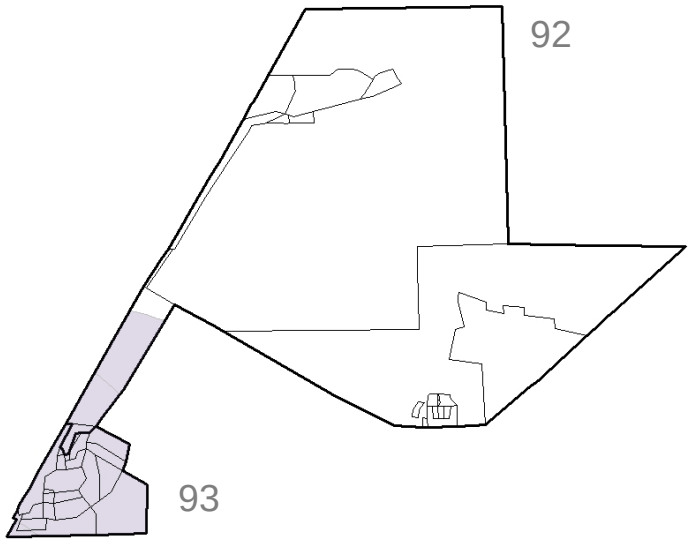
- Buffer Radius: 1 mile

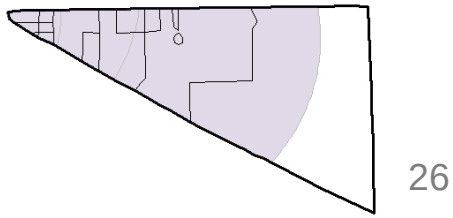


OBJECTIVE 3

ACCESS : EDUCATIONAL FACILITIES

- Buffer Radius: 1 mile

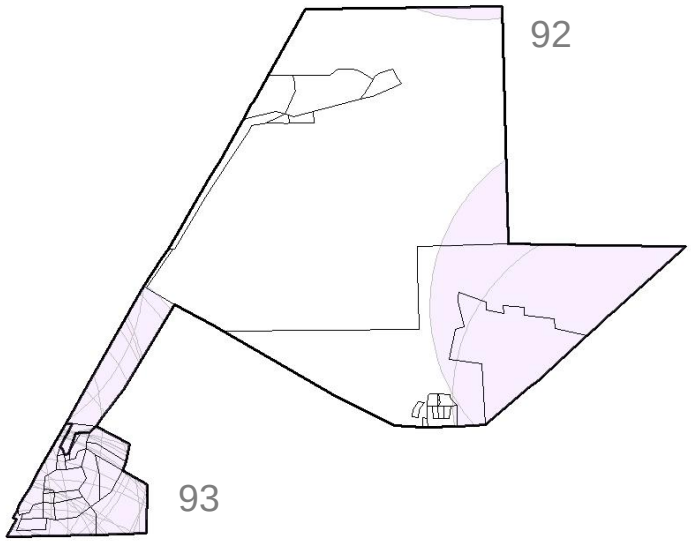


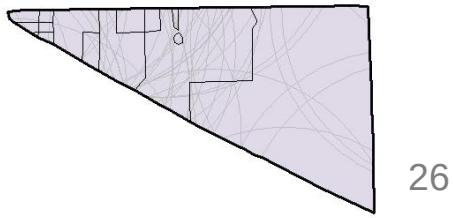


OBJECTIVE 3

ACCESS : RELIGIOUS CENTERS

- Buffer Radius: 1 mile

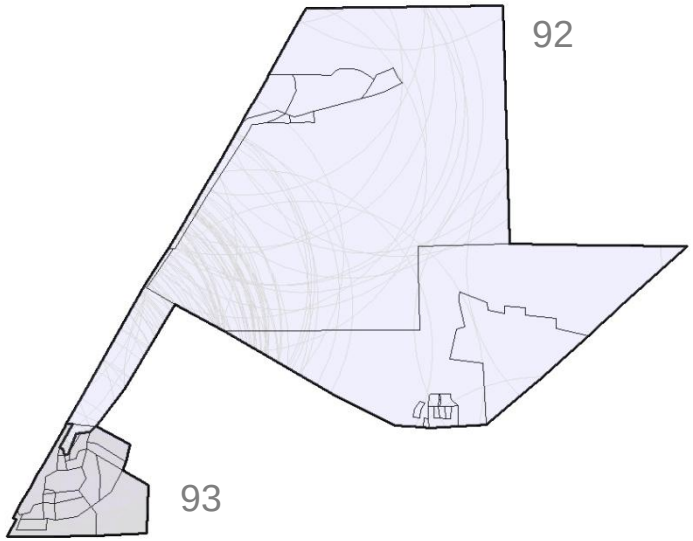


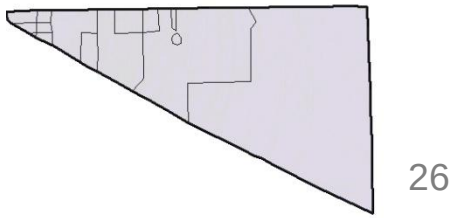


OBJECTIVE 3

ACCESS : EMPLOYMENT OPPORTUNITY

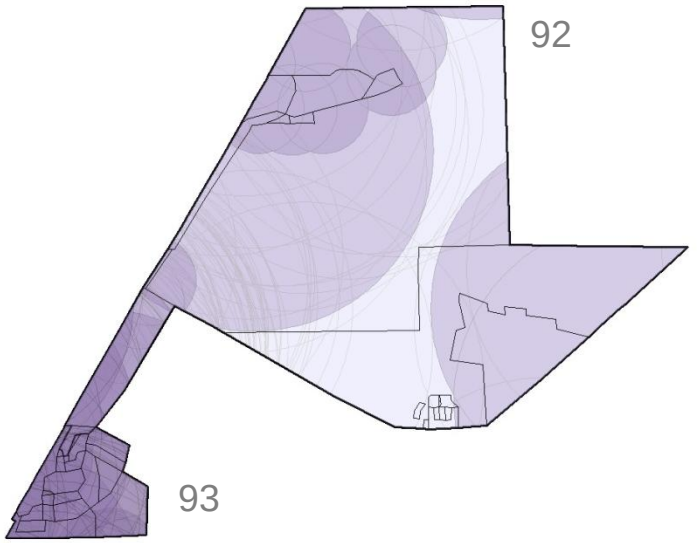
- Buffer Radius: 1 mile

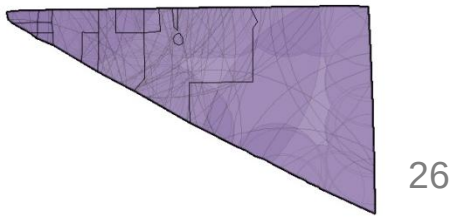




OBJECTIVE 3

ACCESS : COMPOSITE





OBJECTIVE 4:
IMPLICATIONS & RECOMMENDATIONS

- Access to services for **most** people in the target zones is sufficient.

- Areas lacking access do not have a population density to economically justify providing access.

RECOMMENDATION 1: Establish a government entity or non-profit assisted food services facility Census Block Group 26.

RECOMMENDATION 2: Re-route existing bus lines to serve interior areas of Census Block Group 93.

REDEFINE : POVERTY THRESHOLD

Minimum level of income deemed necessary to achieve an adequate standard of living in a given country. In other words, poverty from a society's **point of view**.

The common **international poverty line** has been roughly $1 a day, or more precisely $1.08 at 1993 purchasing-power parity (PPP).

Source: http://en.wikipedia.org/wiki/Poverty_line

HOW RICH *ARE* YOU?

Every year we gaze enviously at the lists of the richest people in world. Wondering what it would be like to have that sort of cash. But where would you sit on one of those lists? Here's your chance to find out.

Just enter your annual income into the box below and hit 'show me the money'

MY ANNUAL INCOME | $ US | 13,880 | Show me the money!

Your Rich List Position

= 748,765,901

You are the 748,765,901 richest person in the world!

You're in the TOP 12.47% richest people in the world!

YOU

POOREST — THE WHOLE POPULATION OF THE WORLD! — RICHEST

Source: http://globalrichlist.com/

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Just enter your annual income into the box below and hit 'show me the money'

MY ANNUAL INCOME | $ US | 365 | Show me the money!

Your RichList Position

= 5,460,000,000

You are the 5,460,000,000 richest person in the world!

You're in the TOP 91% richest people in the world!

YOU

POOREST — THE WHOLE POPULATION OF THE WORLD! — RICHEST

Source: http://globalrichlist.com/