

## Using Indicators to Identify Neighborhoods of Impoverished Families with Children

2017 Community Indicators Consortium Impact Summit November 16-17, 2017 St. Petersburg, Florida



#### Pinellas County Families

Pinellas County Population: 920,015

 Households with Children: 21% (84,183)

• Single-Parent Families: 14% (30,005)

 Households Struggling: 41% (164,000)

• Free and Reduced Lunch Eligible: 57% (55,000)

Children Reading at Grade Level:
 53% (8,049)











FACTS AT-A-GLANCE

Jwb Juvenile Welfare Board



#### The Project

Examine small levels of geography to identify areas where children and families may be struggling so that resources can be appropriately targeted to improve circumstances



### Case for the Project

#### • Beliefs:

- Children are influenced by their environments - home, school, and neighborhoods
- Each neighborhood is unique
- Catalyst:
  - A series of neighborhood flooding incidents



#### Project Objectives

- Use GIS to identify areas of interest (AOI)
- Triangulate and ground truth findings
- Provide AOI maps showing features associated with risk and protective factors
- Create a geodatabase to be used in further analyses



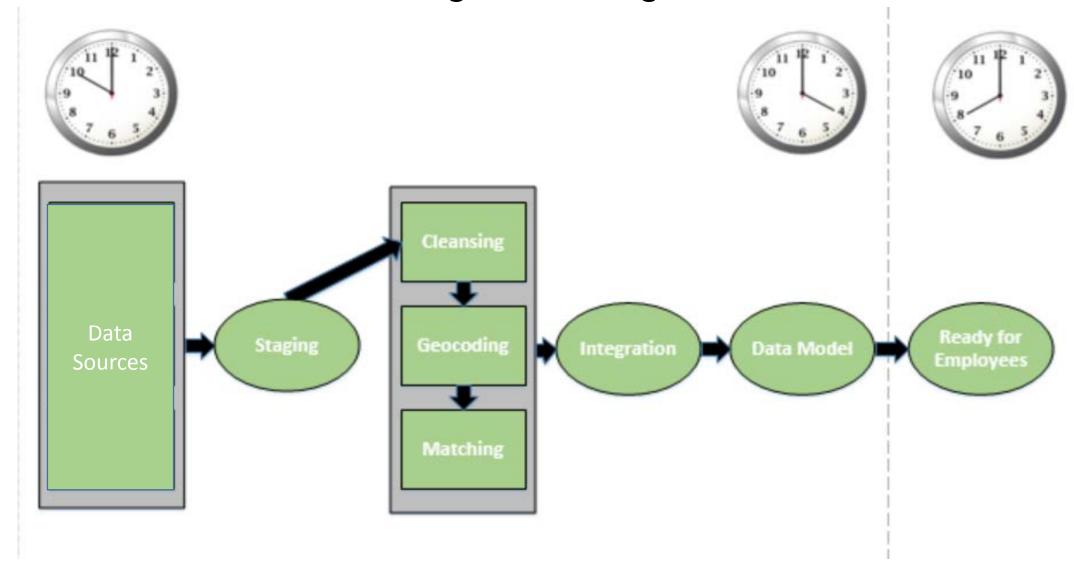
#### JWB Data Analytics System

s. 125.901(11), F.S - Florida statute - Public Records

Integrated Data System developed to improve the ability to make better decisions at all levels



#### JWB Data Analytics System





#### Data Sources

#### Sources of individual level data

- JWB funded agencies
- Pinellas County School Board
- Early Learning Coalition of Pinellas County

#### Aggregate data

- US Census Bureau
- Florida Department of Health for Florida Charts
- DOH-Pinellas for Child Care Center and Family Care Homes



## Other Data Sources

- Florida Geographic Data Library
- 2010 Decennial Census
- ACS 2015 5-Year estimates
- Pinellas County School Board
- Florida Department of Education
- Florida Department of Revenue
- Pinellas County Property Appraiser
- Florida Housing Data Clearinghouse
- Florida Department of Health
- Florida Commission for Human Relations

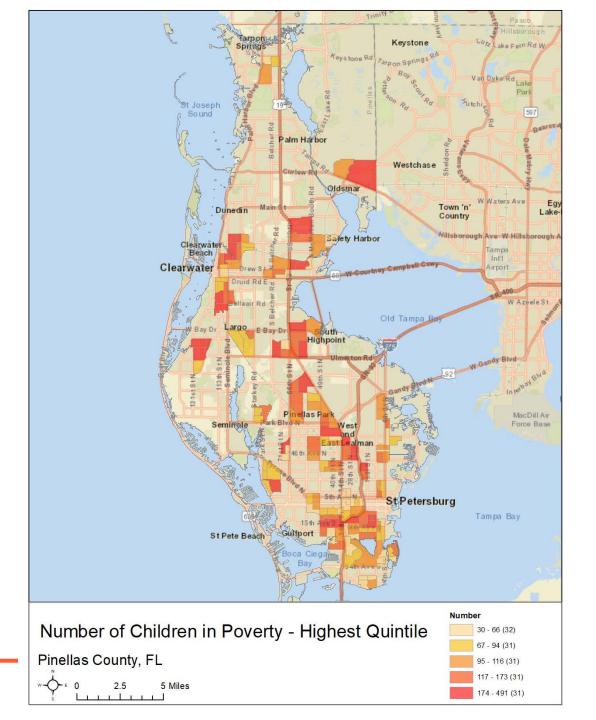


#### Method

- Data preparation, formatting, projection and symbolizing
- Ruled out Block Group as Unit of Analysis
- Computation used for poverty
  - # in Poverty by CT
  - % of Children by 2010 BG
- Highest quintile used to establish initial AOI

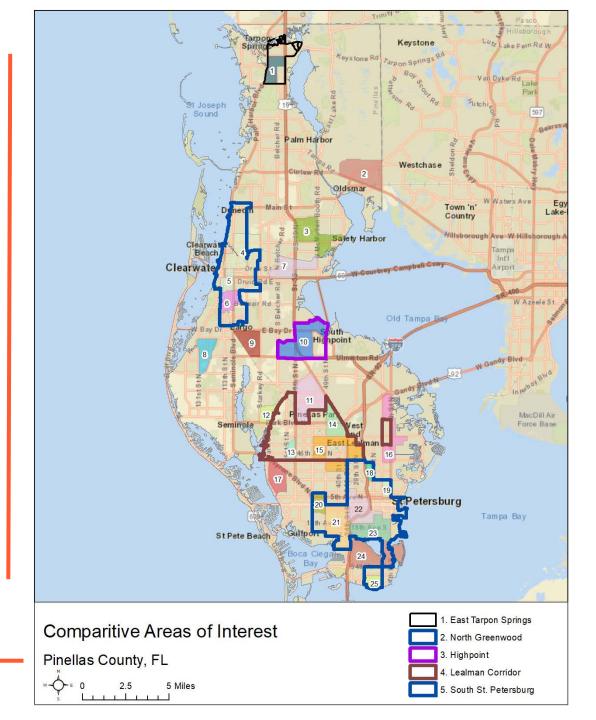


#### Initial Results



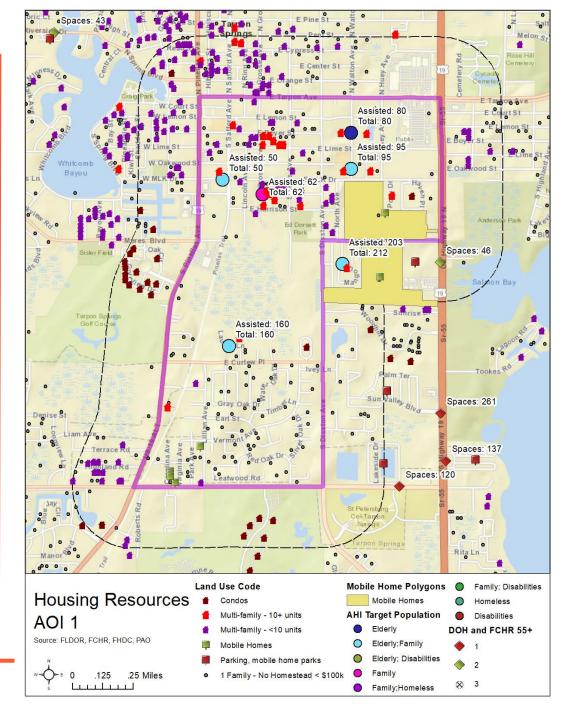


#### Triangulate





### Triangulate<br/>Some More





#### Ground Truth



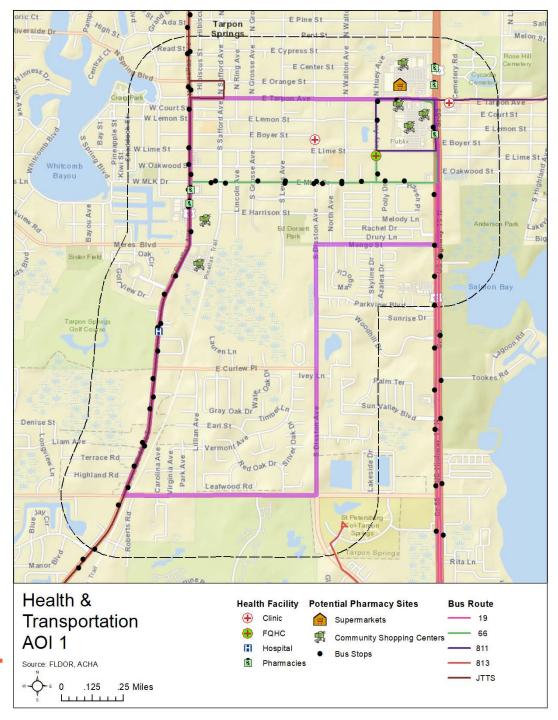


#### GIS Products

- Geodatabase for dynamic visualization
- 25 AOI were created for map book
- Map categories included:
  - 1. Housing Resources
  - 2. Early Education and Child Care
  - 3. Health and Transportation
  - 4. JWB and Other Community Assets
  - 5. Retail and Business
  - 6. Public Safety

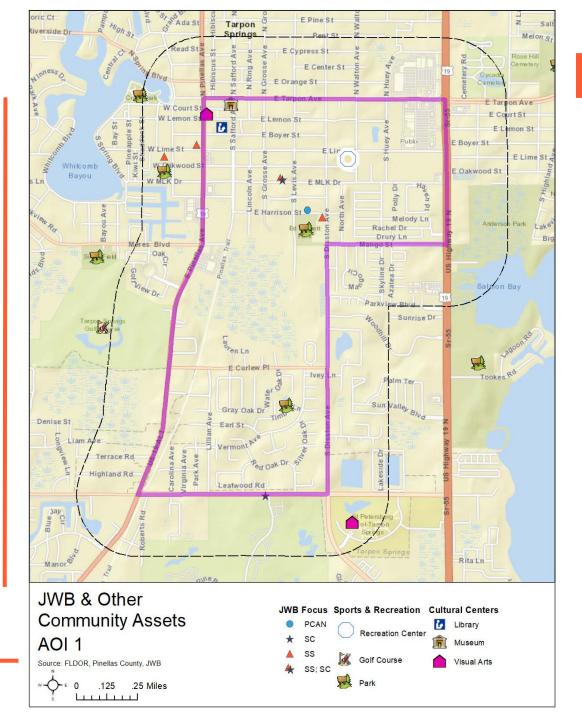


## Health & Transportation





## JWB & Other Community Assets





# Lessons Learned & Challenges

- Dearth of metadata & inconsistencies
- Lack of reporting accountability
- Percentages and densities
- Insufficient sample size for ACS
- Advantages of using parcel-level data



#### **Next Steps**

- Community Conversations
- Targeting Resources
- Creation of a predictive risk index - place-based
- Create a routine for Updating Parcel Data