

Tools and Techniques for Conducting Reliable Point In Time Counts in Large Areas

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Putting It All Together:
Uniting Data, Technology, and People



Challenges with Conducting Counts in Large Areas

- Mix of urban and rural settings
- Requires a significant number of count volunteers
- Massive amounts of paper (if you don't automate)
- Transcription of surveys is time consuming
- Data not used operationally



The Tech



Each Continuum of Care is Set Up

Navigation

CT 503 Fairfield County 2017

Summary

Surveys

Users & Teams

Settings

Sampling Setup

Count Settings

Count ID: 1997020820

Count Name: CT 503 Fairfield County 2017

Setup Key: CTPITFFC

Archived?: ☐

Update Count

Sampling

Disable Sampling

Count Area

Update Count Area



Mobile Tech Used for Surveying





Results are Monitored in Real-Time



Data Cleanup is Performed

User Info

Name:

Plauche, Chris

Phone:

2102748884

Sleeping Location

Where client is sleeping night of count:

Basic Demographics

First Name:

Last Name:

Initials:

b k c

Date of Birth:

Age:

42

Age Range:

Gender:

Male

Ethnicity:

Race:

☐ American Indian/Alaskan

☐ Asian

☐ Black/African-American

☐ Native Hawaiian/PI

☒ White

☐ Other

First Time Homeless:

How long homeless:

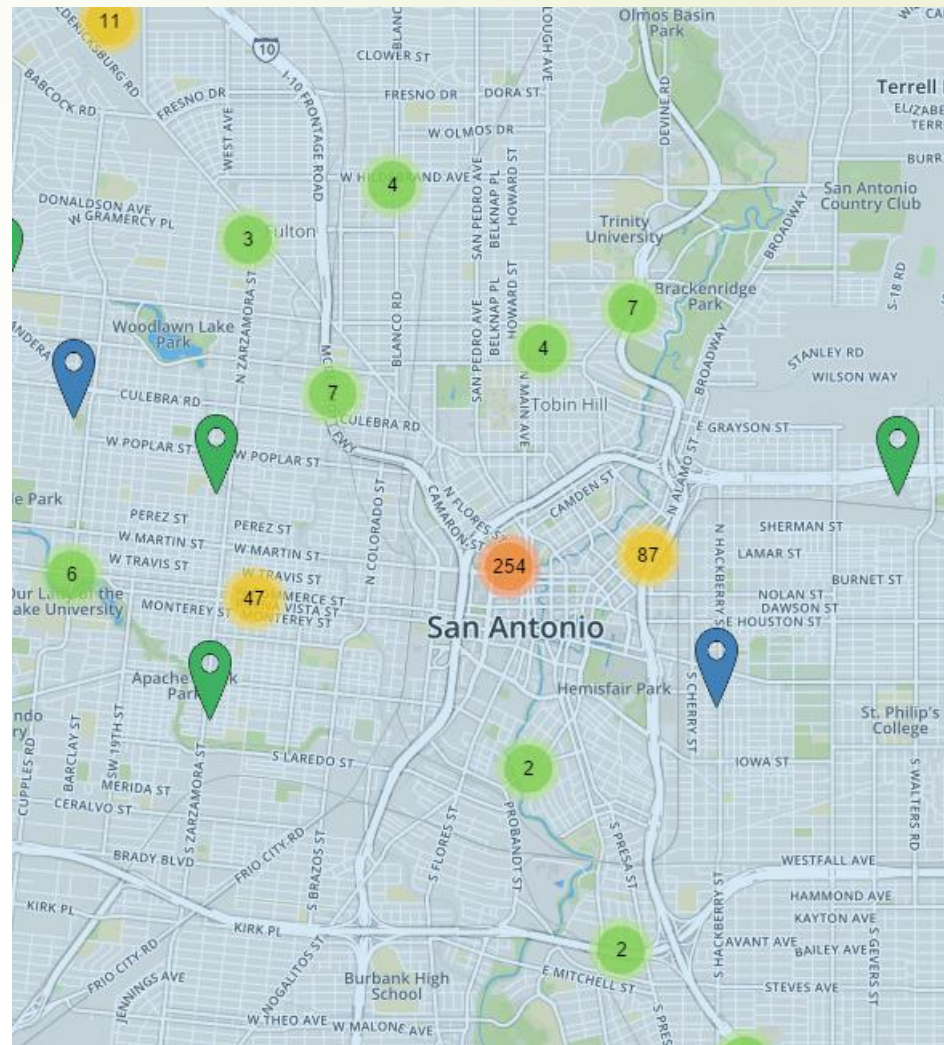
Years:

Months:

Save

Edit Location

Results are Produced





Results are Produced

Households without Children

Total number of Households	185
Total Number of Persons	193
Persons aged 18-24	15
Persons over age 24	178

Gender (adults and children)

Female	46
Male	141
Transgender	2
Don't identify as male, female or transgender	1

Ethnicity (adults and children)

Non-Hispanic/Non-Latino	157
Hispanic/Latino	24

Race

White	132
Black or African American	45
Asian	0
American Indian or Alaska Native	3
Native Hawaiian or Other Pacific Islander	3
Multiple Races	2

Chronically Homeless

Total number of persons	71
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Gender (adults and children)

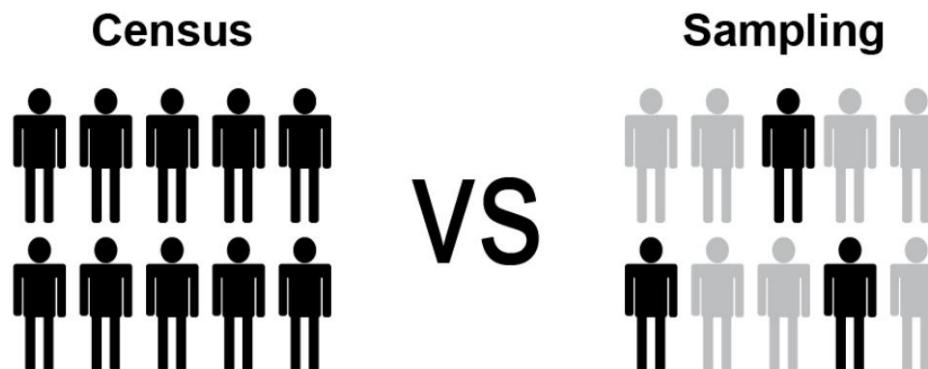


Race





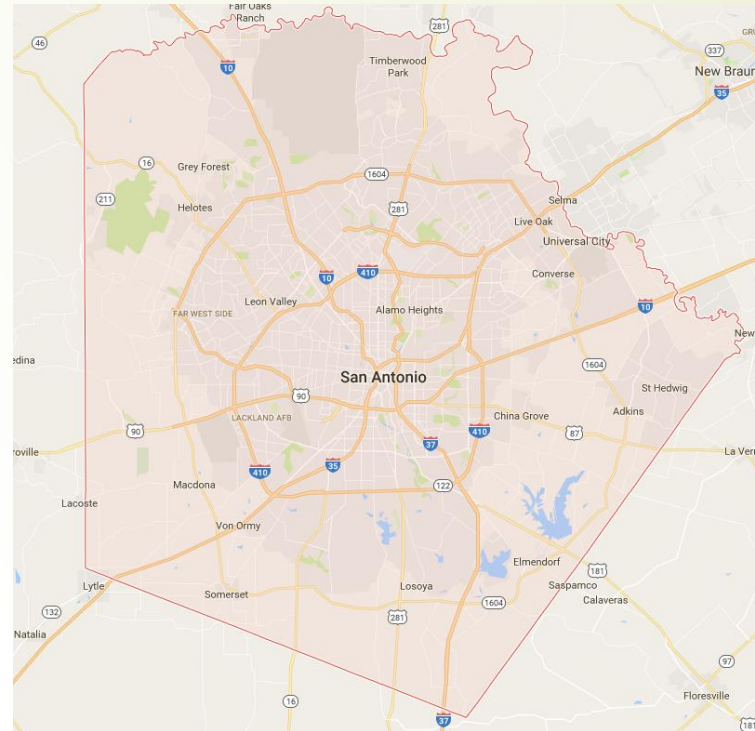
Count Methodologies



- A **census** count is an enumeration of all homeless people or a distinct subset of homeless people (e.g., households with adults and children) in CoCs.
- **Sampling** is a partial enumeration of the entire homeless population (or a subset of the homeless population) and can be more feasible for some CoCs or for certain required data (e.g., substance use disorder)

Source: <https://www.hudexchange.info/resources/documents/PIT-Count-Methodology-Guide.pdf>

Large Region 1: Bexar County, TX



Region Size:

1,256 square miles

Estimated Population:

1.7 million

Total CoCs:

1

Count Approach:

Census Count with No Sampling

Number of Count Teams:

81 Teams (325 total volunteers)

Survey Tools:

Mobile App Only

Bexar County, TX PIT Timeline



Jan 23rd

- 6pm to 10pm - Youth Event Count

Jan 26th

- 6:00am – 5:00pm Encampment Count
- 6:00pm – Street Count
- 10pm – Downtown Count

Jan 28th Morning

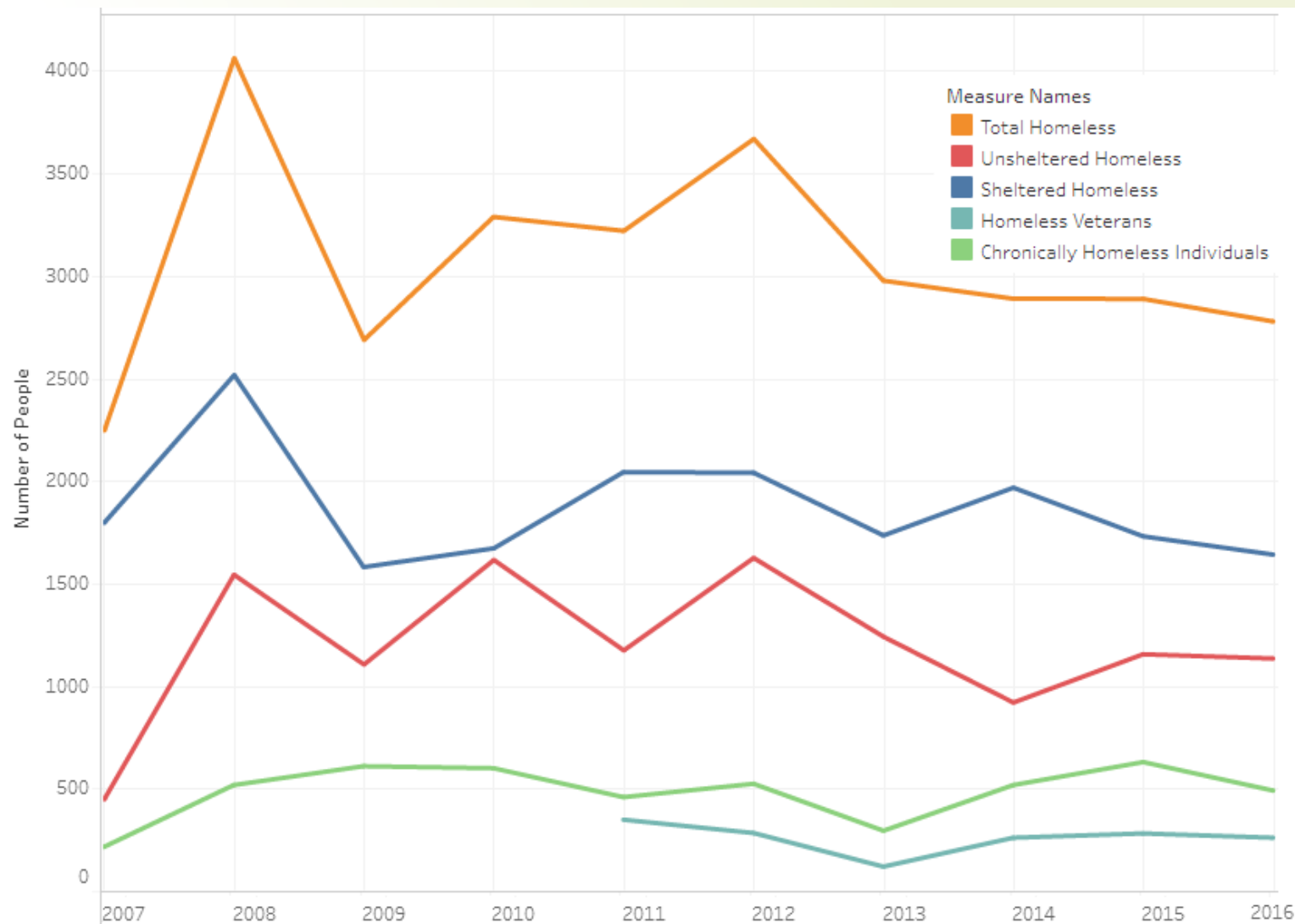
- Unaccompanied Youth (<18 years old) Count



Any duplicates between counts are identified almost in real time using the command center software.



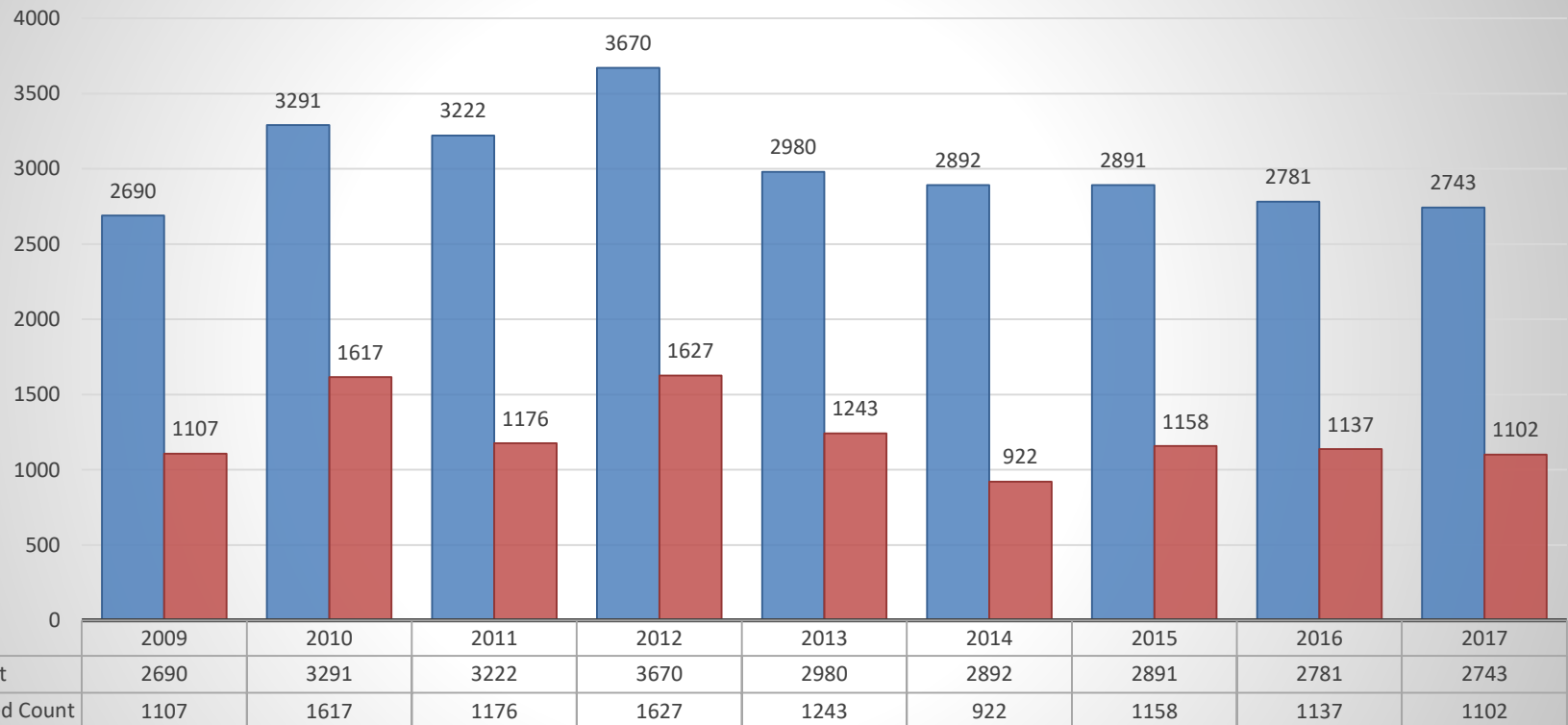
Bexar County PIT Trends 2007 - 2016





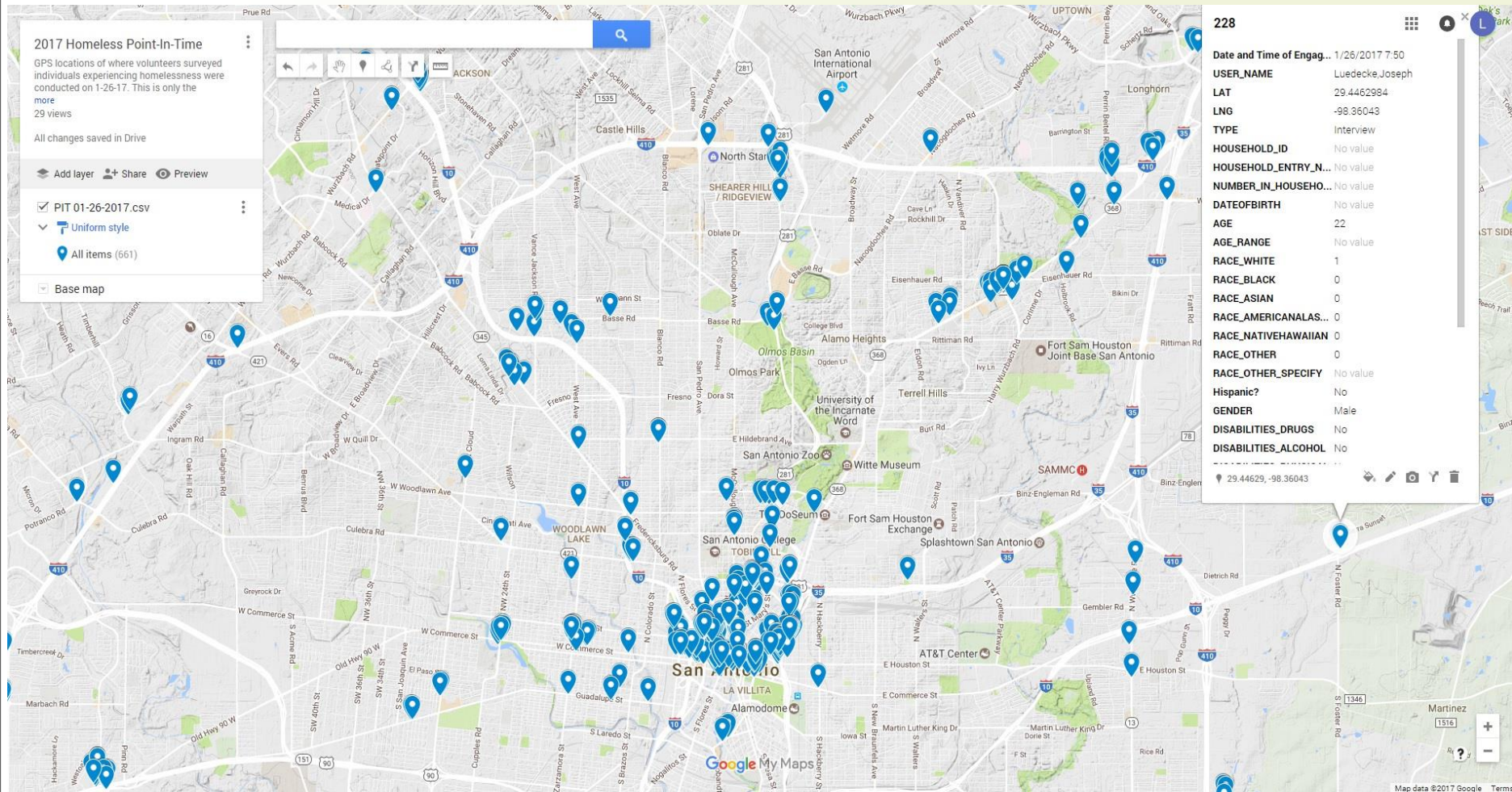
Bexar County PIT Trends 2007 - 2017

Relationship Between Unsheltered and Total PIT Counts



■ Total Count ■ Unsheltered Count

Bexar County Transformed PIT into a Crisis Response Event





CT Point In Time Count 2017:

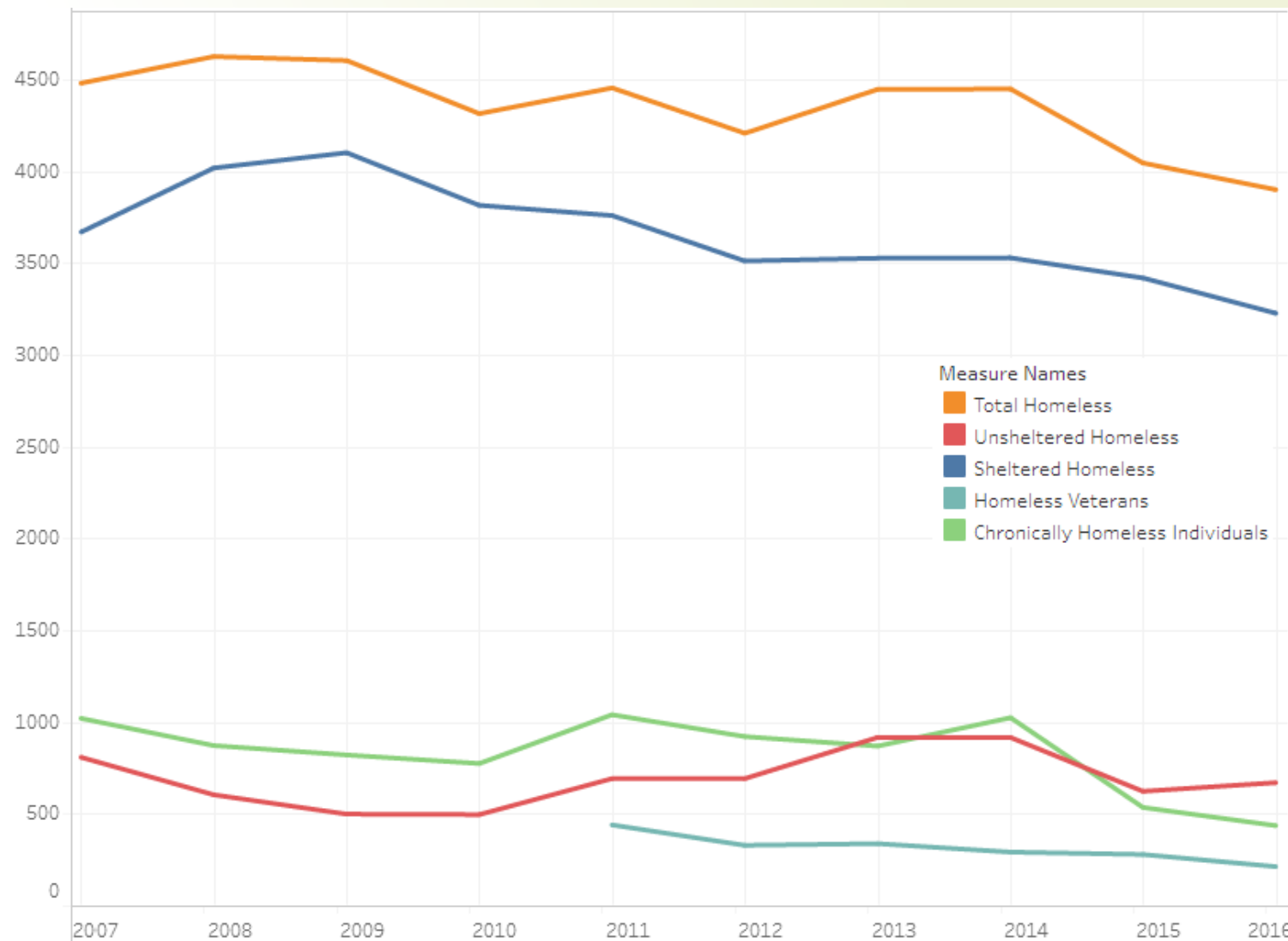
Statistical Models and Methodologies for an Accurate Count

A detailed map of Southern New England, including parts of Massachusetts, Connecticut, and Rhode Island. Major cities like Boston, Springfield, Hartford, New Haven, and Providence are labeled. The map shows a dense network of highways, including Interstates 90, 91, 95, and 495, as well as various state routes. The coastline is clearly visible, with Long Island Sound to the east and Cape Cod to the south. The map uses a color-coded system to distinguish between different types of roads and geographical features like water bodies and parks.

Mobile App and Paper

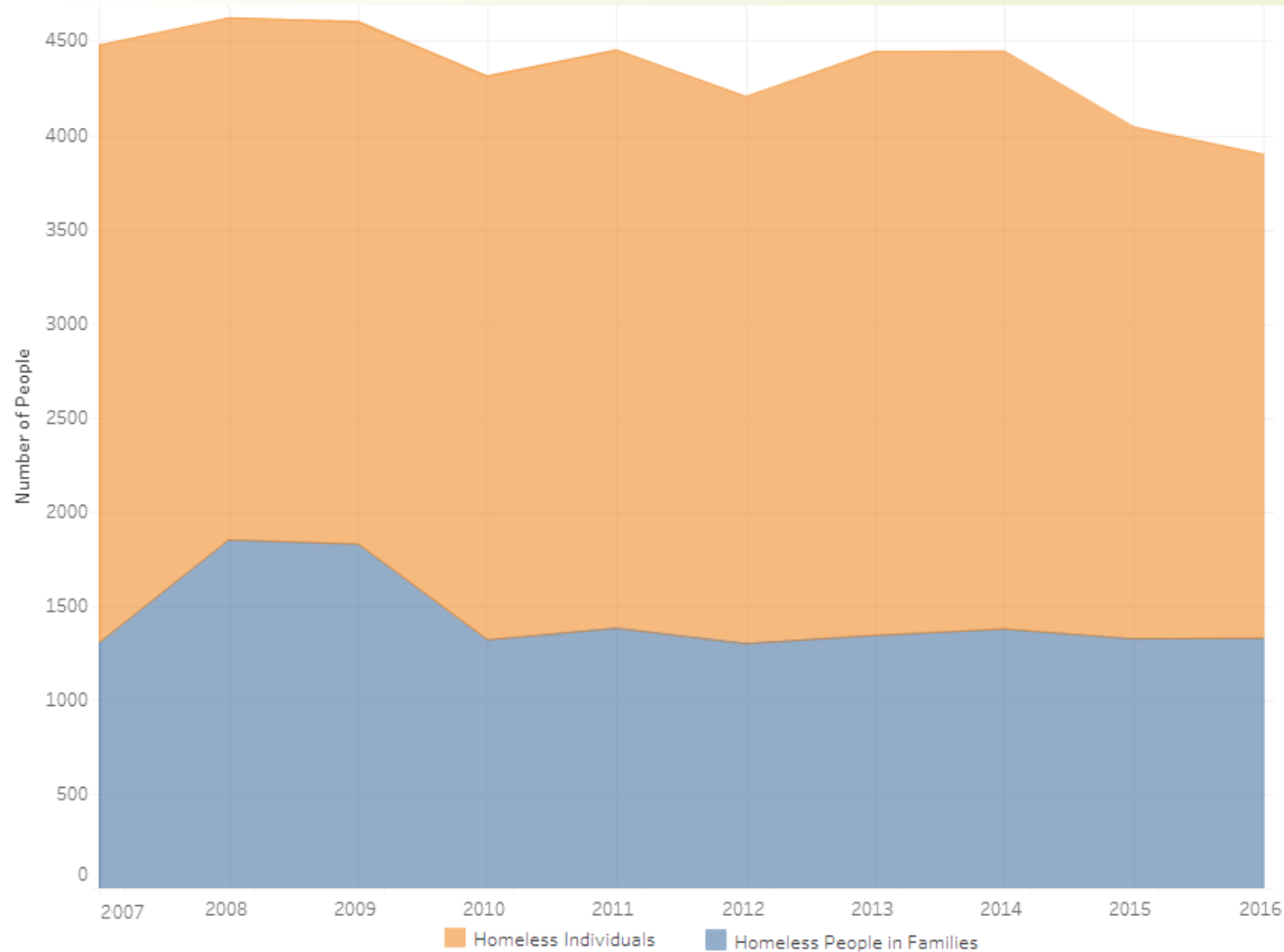


Connecticut PIT Trends 2007 - 2016





Connecticut PIT Trends 2007 - 2016





Coordinating PIT across a State

Statewide coordination of a PIT count takes a large amount of work. Some keys to success include:

- Having a Detailed Timeline
- Collaboration and Communication
- Learn from Previous Counts
- Use technology to your advantage

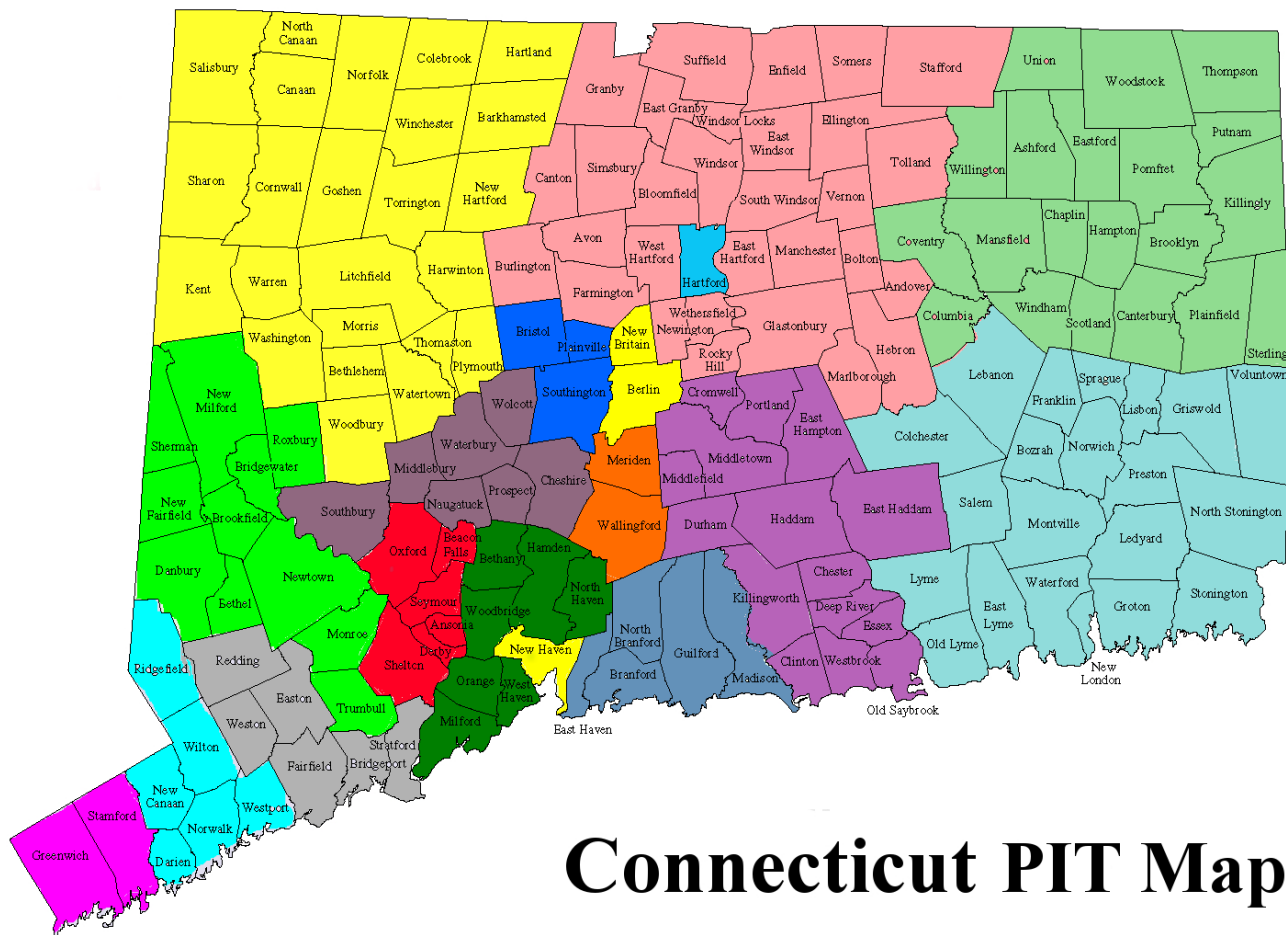


Data Collection

- Make your trainings easier
- Make data collection easier
- Make everyone's life easier



Coordinating PIT across a State





The Statistical Sampling Methodology



Creating the Sample

Connecticut uses a geographically stratified sample to estimate the number of people experiencing homelessness throughout the state.

- Use prior year results to create default designations
- Regional Coordinators receive large maps of their areas and select locations in Census Tract Block Groups likely to have a high probability of encountering a person experiencing homelessness
- Low probability sample areas determined after selection of high probability areas
- Finally, maps of each high probability and low probability sample areas are created and given to Regional Coordinators so they can assign count teams to canvas the areas

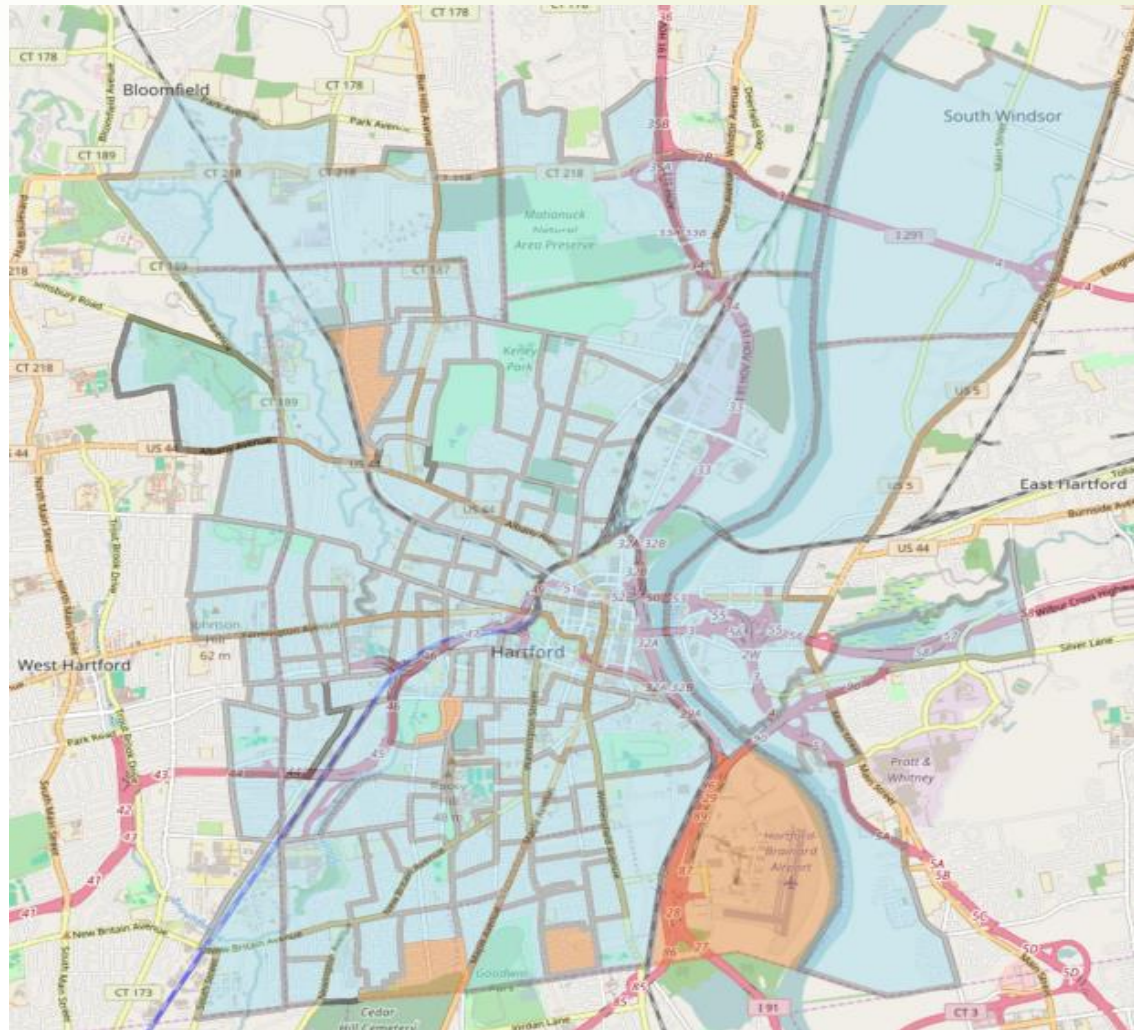


Sampling Methodology: Designating High Probability Block Groups

PIT Region	People Found in 2016	No one Found in 2016	Total
Bristol	7	85	92
Danbury	4	152	156
Greater Bridgeport	12	182	194
Greater Hartford	8	470	478
Hartford	10	86	96
Litchfield County	6	123	129
Meriden Wallingfor	1	80	81
Middletown	4	114	118
New Britain	3	57	60
New Haven	26	81	107
New Haven East	4	124	128
New Haven North So	3	123	126
New Haven West	1	59	60
Northeast	0	120	120
Norwalk Area	6	157	163
Southeast	6	181	187
Stamford Greenwich	15	122	137
Waterbury	11	138	149
Total	127	2454	2581



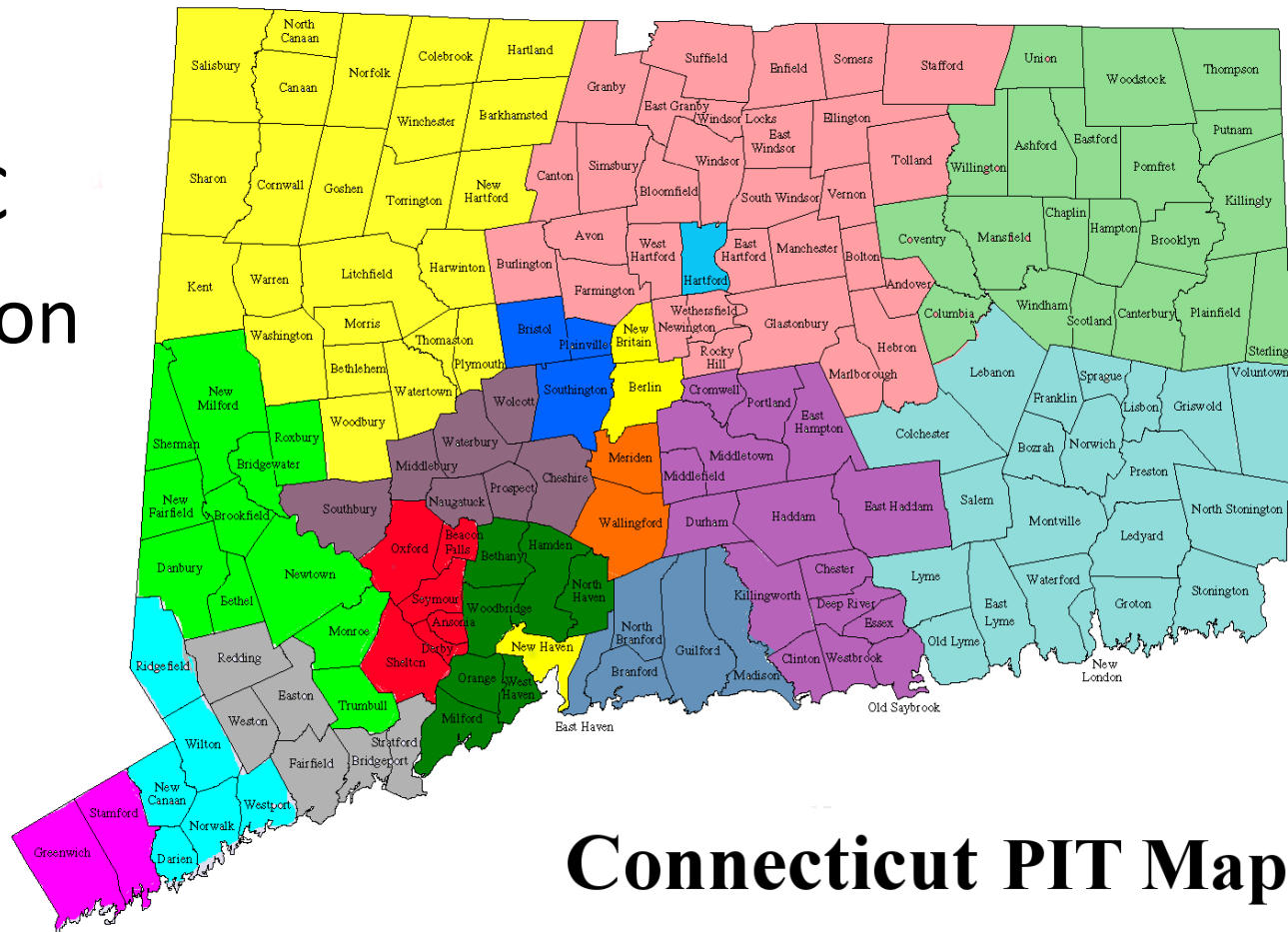
Maps for Regional Coordinators





Sampling Across Sub-CoC's

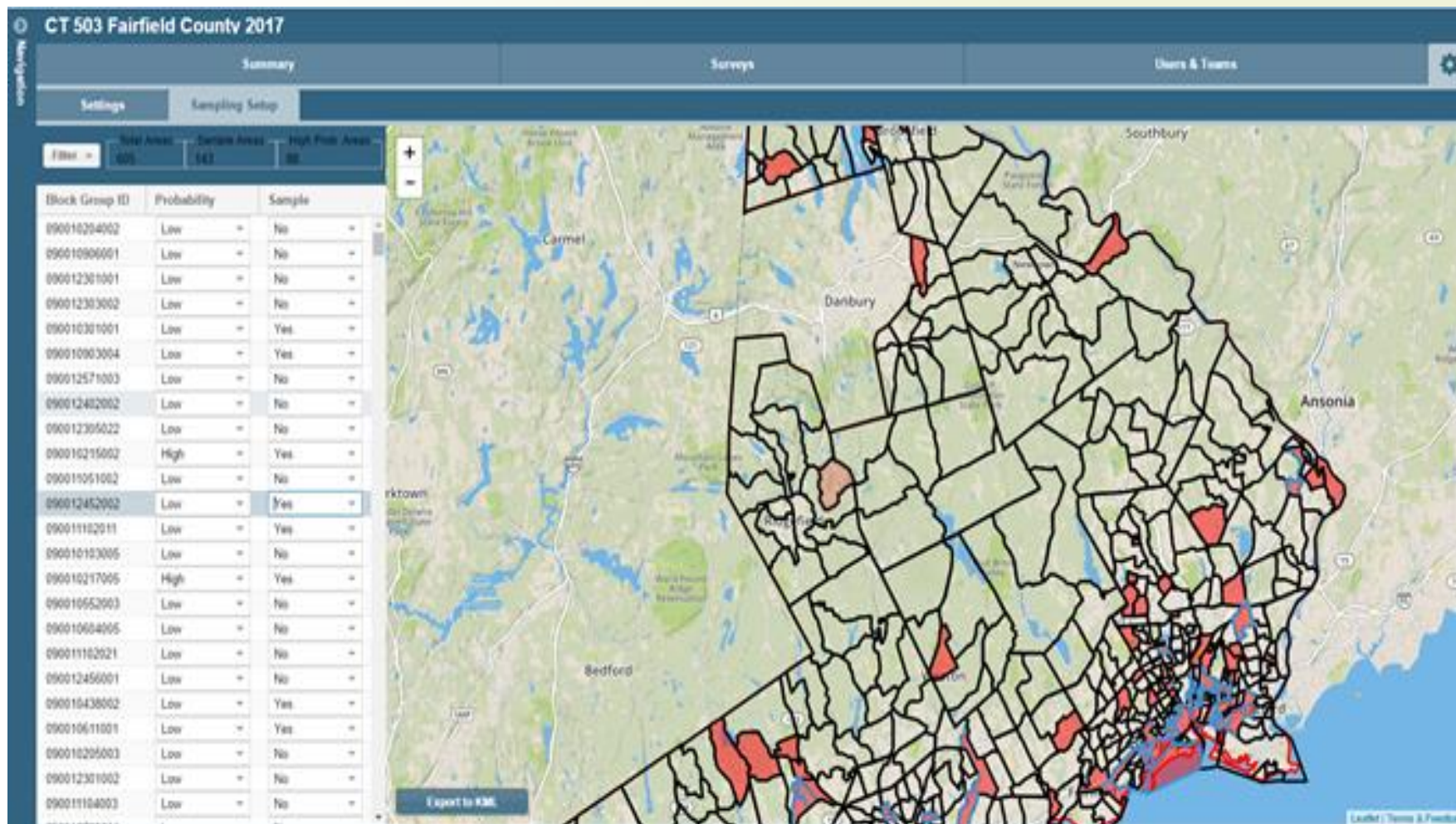
- CAN
- Sub-CoC
- PIT Region



Connecticut PIT Map

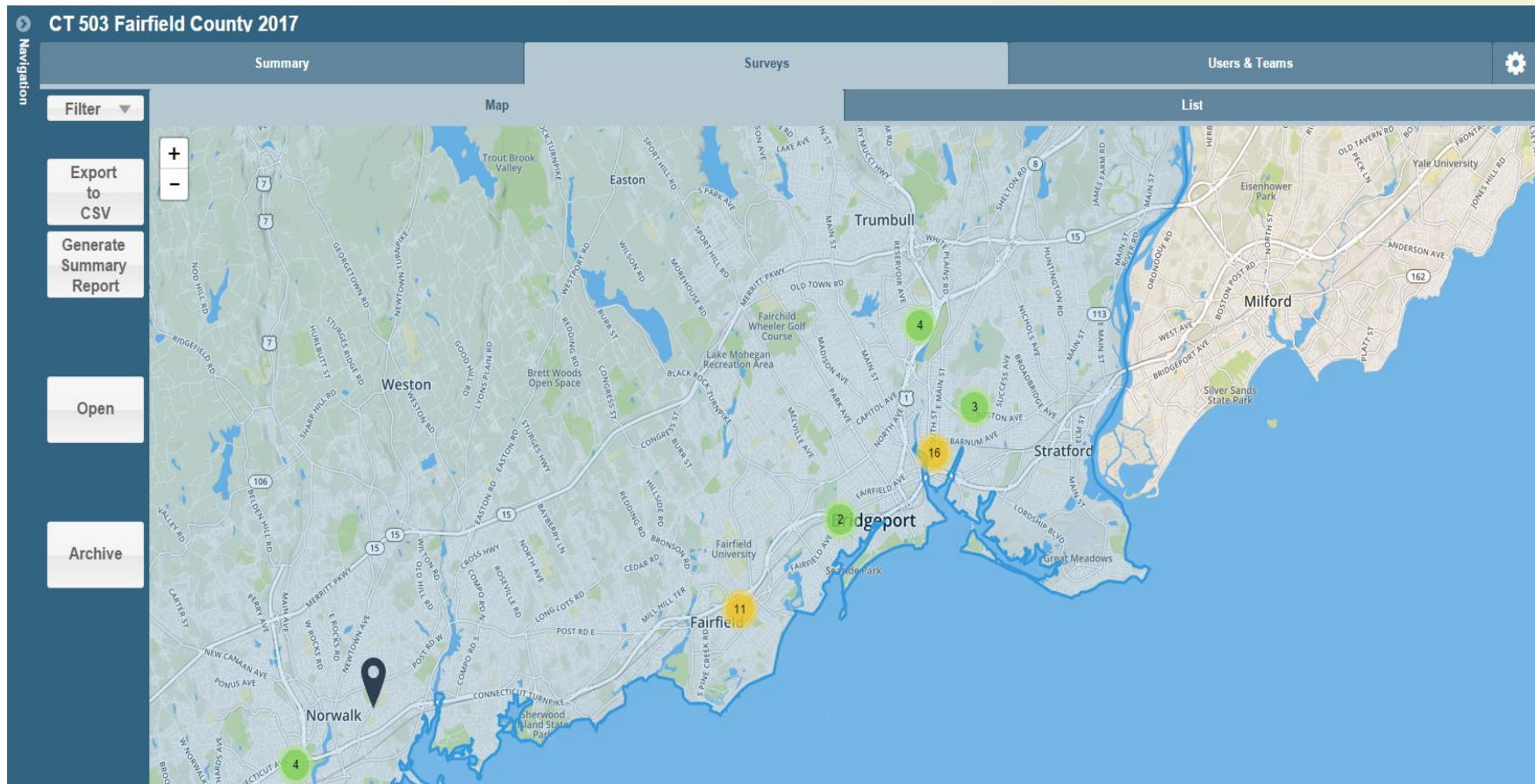


Designating High and Low Probability Areas





The Night of the Count





Deriving the Final Count Estimates

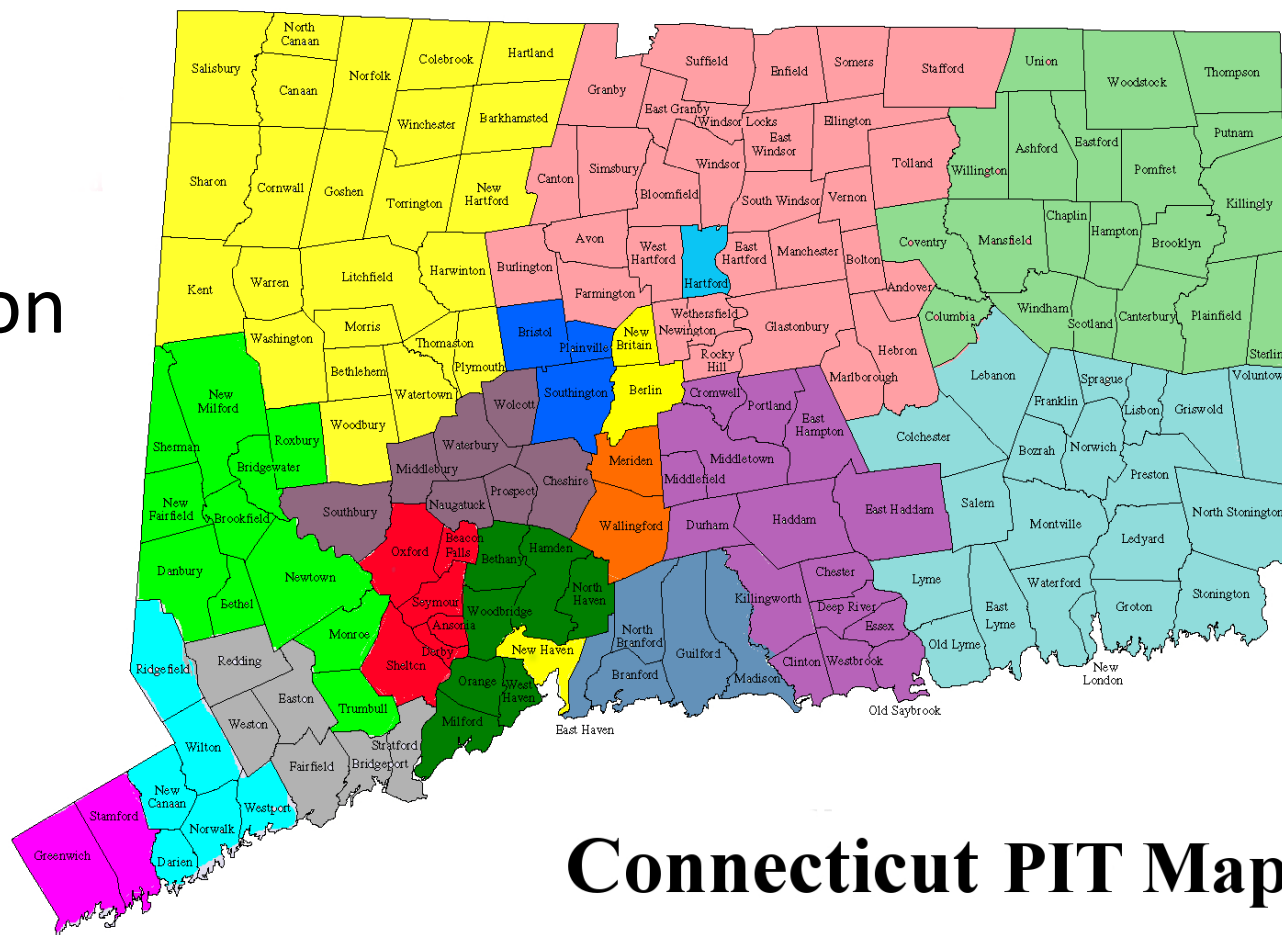
<i>CoC Details</i>	
Total Block Groups:	605
High Probability Block Groups:	88
Low Probability Block Groups:	517
Low Probability Sampled:	55
Low Prob Weighting Factor:	9.400

Households and Age Breakdown	High	Low	Low-Extrap.	CoC Total
Total Number of Households	54	2	19	73
Total Number of Persons (Adults)	54	2	19	73
Number of Persons (age 18-24)	2	1	9	11
Number of Persons (over age 24)	52	1	9	61



Estimates below the CoC Level:

- CAN
- Sub-CoC
- PIT Region



Connecticut PIT Map



Determining the Percentage of Low Probability Block Groups within the Sub-Region

<i>Geographic Information for the Selected Region</i>			
<i>CoC Details</i>		<i>Sub-Region Details</i>	
Total Block Groups:	1880	Total Block Groups:	574
High Probability Block Groups:	231	High Probability Block Groups:	58
Low Probability Block Groups:	1649	Low Probability Block Groups:	516
Low Probability Sampled:	152	Low Probability Sampled:	55
Low Prob Weighting Factor:	10.849	Sub-Region % of CoC Low BGs:	31.29%



Estimated Count Figures for Greater Hartford

Households and Age Breakdown n	High	Low	Low-Extrap.	CoC Total	Sub-Region High	Sub-Region Low	Sub-Region Total
Total Number of Households	154	9	98	252	5	31	36
Total Number of Persons (Adults)	159	11	119	278	5	37	42
Number of Persons (age 18-24)	11	1	11	22	0	3	3
Number of Persons (over age 24)	148	10	108	256	5	34	39



The Count Itself

Using a mobile app with an accompanying command center allows for real time data monitoring. This has a lot of benefits, just a few of which include:

- Updating missing information with a phone call to a volunteer
- GPS level accuracy allows outreach to revisit new encampments
- Monitoring the activity of count teams in the field
- Ability to cross reference PIT data with BNL (By Name List) data to be sure the community has everyone on their prioritized list for housing



Data Cleanup-Lessons Learned

- When using a geographically stratified sampling approach, location of surveys matters!
- Encourage volunteers to collect as much survey data as possible



Feedback from the Field

2016 was the first year for the PIT Mobile App in CT and it was optional. Those who used it loved it.

2017 the PIT Mobile App was required and many parts of the state still used paper forms (they later data entered them directly into the mobile app). The feedback from those who used the app in the field and those who data entered information into it was all positive.

People found that using the mobile app made the survey process faster.

My favorite part? I don't have to data enter 300+ surveys anymore! All of the data related follow up happens with the original data file and I get the results!



Questions?

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