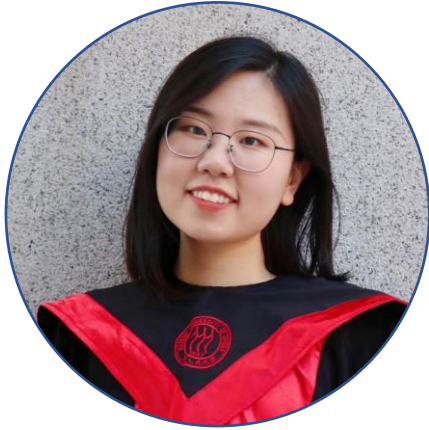


Better Foster Youth to Independence Data Speaks : What can be done?

Gandalf Tech



Team Introduction



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Origin of Gandalf Tech...



In Middle Earth, Gandalf is a wizard who has great power, but works mostly by encouraging and persuading. He devotes his whole life protecting people from losing their homes, especially the four Hobbit youths.

Nowadays, however, there are still thousands of youths enduring homelessness across the country. This should never happen. **Therefore, we aim to be today's Gandalf, who works not only by persuading, but also utilizing business, policy and technology...**

Outline



Problem Framing



Theoretical Framework

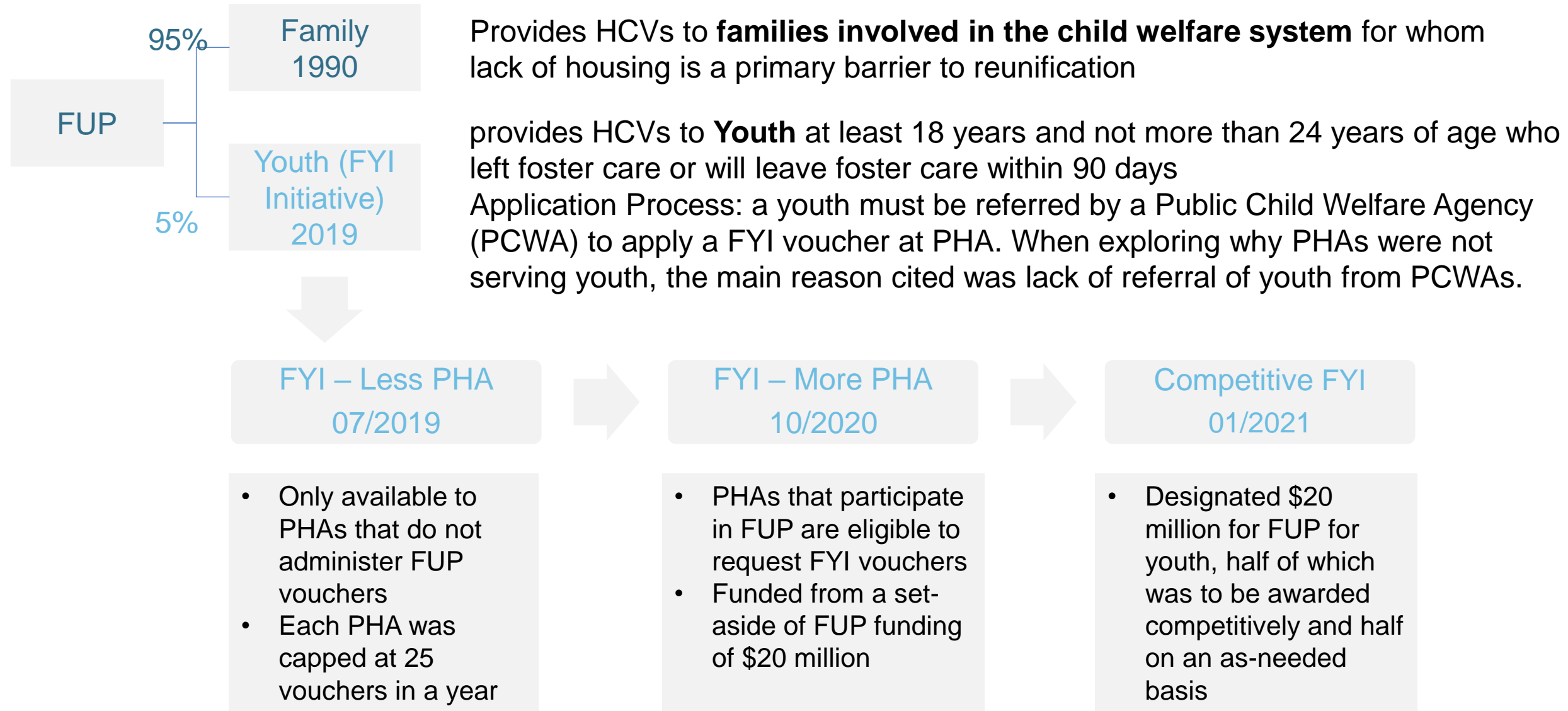


Data Analysis

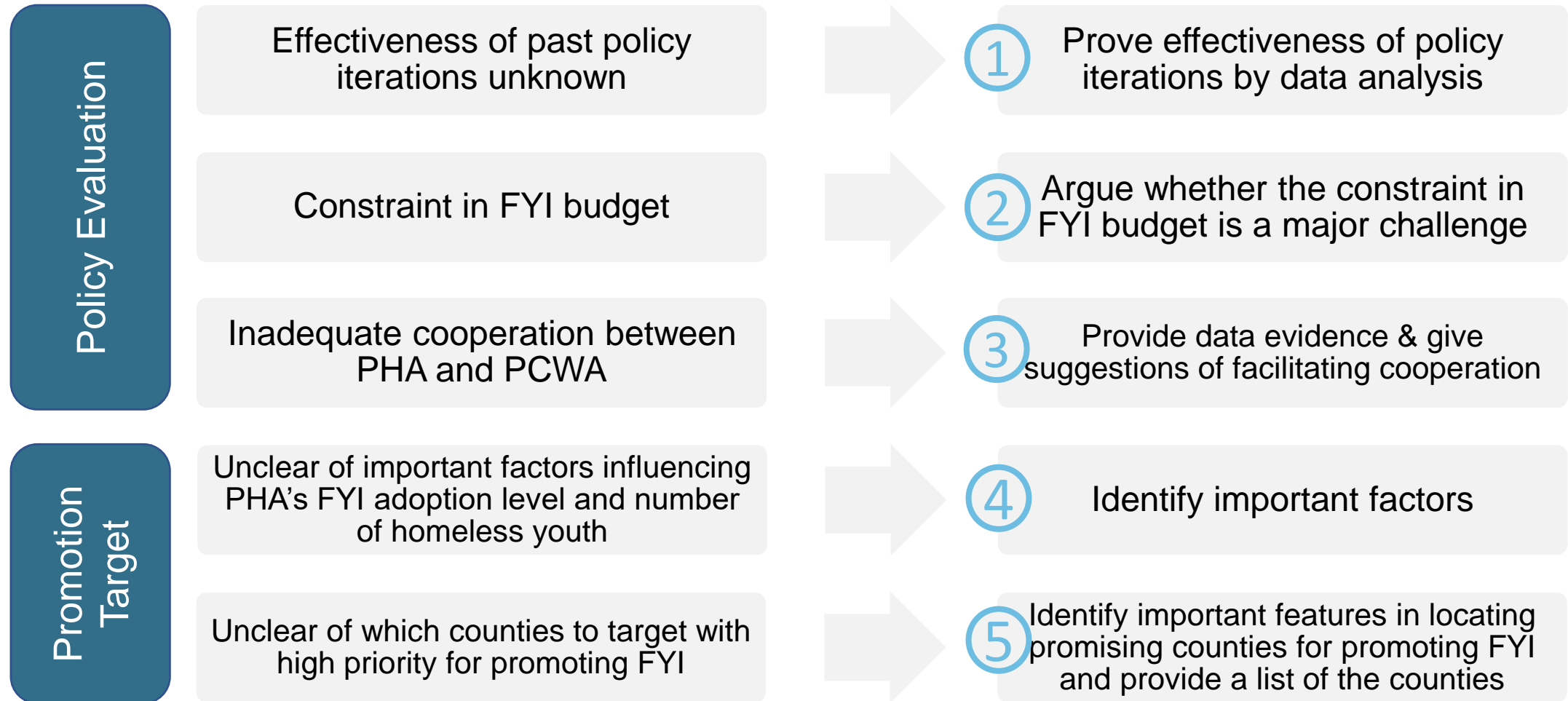


Insights and Discussion

Problem Framing: FYI Initiative and Policy Iterations



Challenges in promoting FYI and corresponding research focus



Outline



Problem Framing



Theoretical Framework

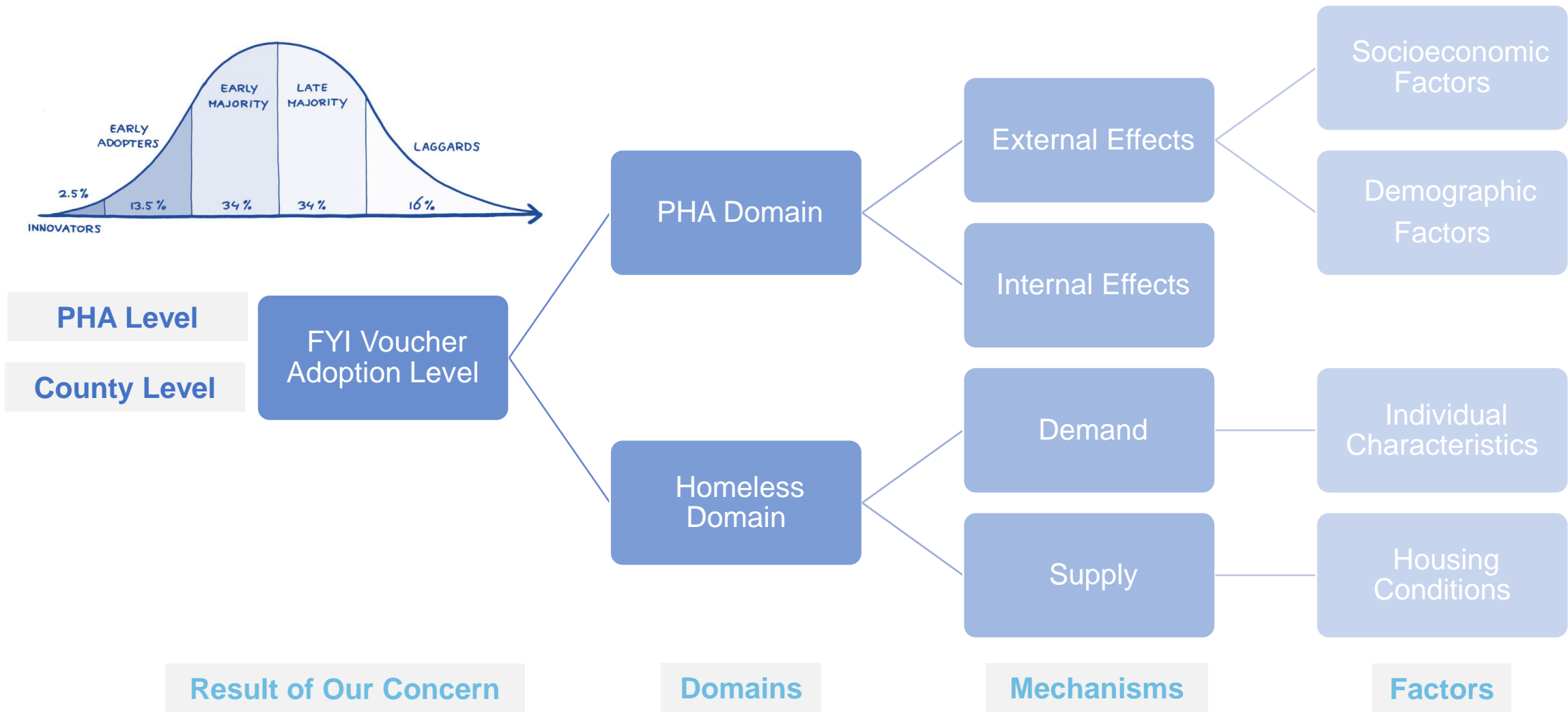


Data Analysis



Insights and Discussion

Theoretical Framework: more than Diffusion of Innovation Theory



Outline



Problem Framing



Theoretical Framework



Data Analysis

Data Acquisition

Exploratory Data Analysis

Modeling



Insights and Discussion

Data acquisition of PHA domain variables

| Factor | Variable | Source | Factor | Variable | Source |
|------------------|-----------------------------|--------------------------------|------------------------------------|--------------------------|--|
| Internal Effects | PHA Code | MMC data | External Effects- Socioeconomic | State # Homeless Youth | <u>Adoption & Foster Care Statistics</u> |
| | PHA City | | | | |
| | PHA County | | | | |
| | PHA State | | | | |
| | PHA FYI Funding | | | | |
| | PHA First FYI Adoption Date | | | | |
| | PHA FYI Application Count | | | | |
| | PHA # Housing Inventory | <u>Housing Inventory Count</u> | External Effects- Demographic | City Population | Census |
| | PHA Annual Budget | <u>HUD Dashboard</u> | | County Race Percentage | |
| | PHA Per Unit Per Month Cost | | | County Age Percentage | |
| | PHA # Total Vouchers | | | County Gender Percentage | |

Data acquisition of Homeless domain variables

| Factor | Variable | Source |
|--|--|--|
| Demand (Homeless Individual Characteristics aggregated to county level) | Homeless Race/Ethnicity Distribution | Adoption and Foster Care Analysis and Reporting (AFCARS) Foster Care Annual File (2021) Note: the county FIPS code is unified as “8” if there are fewer than 1000 homeless cases in the County. Our analysis therefore focuses only on 125 counties with 1000+ homeless cases. |
| | Removal Reasons | |
| | Length Since Latest Removal | |
| | Average Rural/Urban Level | |
| | The Number of Places the Youth Has Lived | |
| | Foster Caretaker Race/Ethnicity Distribution | |
| | Social Security Act Benefits | |
| | Physical Condition | |
| | Mental Condition | |
| | Caretaker Characteristics | |
| | Others (see Appendix 1) | |
| Supply (Housing Supply Conditions) | County Housing Density | ACS 1-Year |
| | County Housing Price Index | ACS 1-Year |

Outline



Problem Framing



Theoretical Framework



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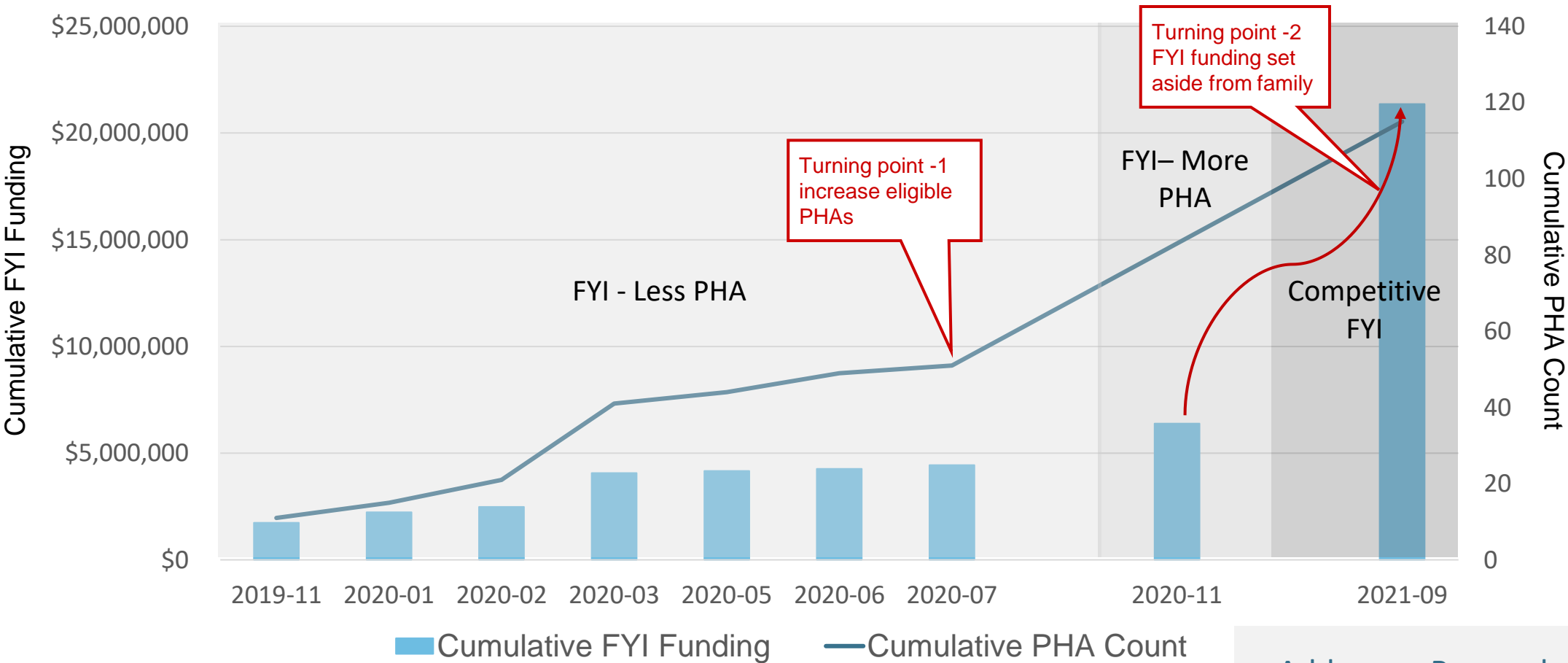


Insights and Discussion

FYI Policy Revisions are proving effective as FYI Funding boost and more PHAs adopt in recent past

BUDGET / PHA

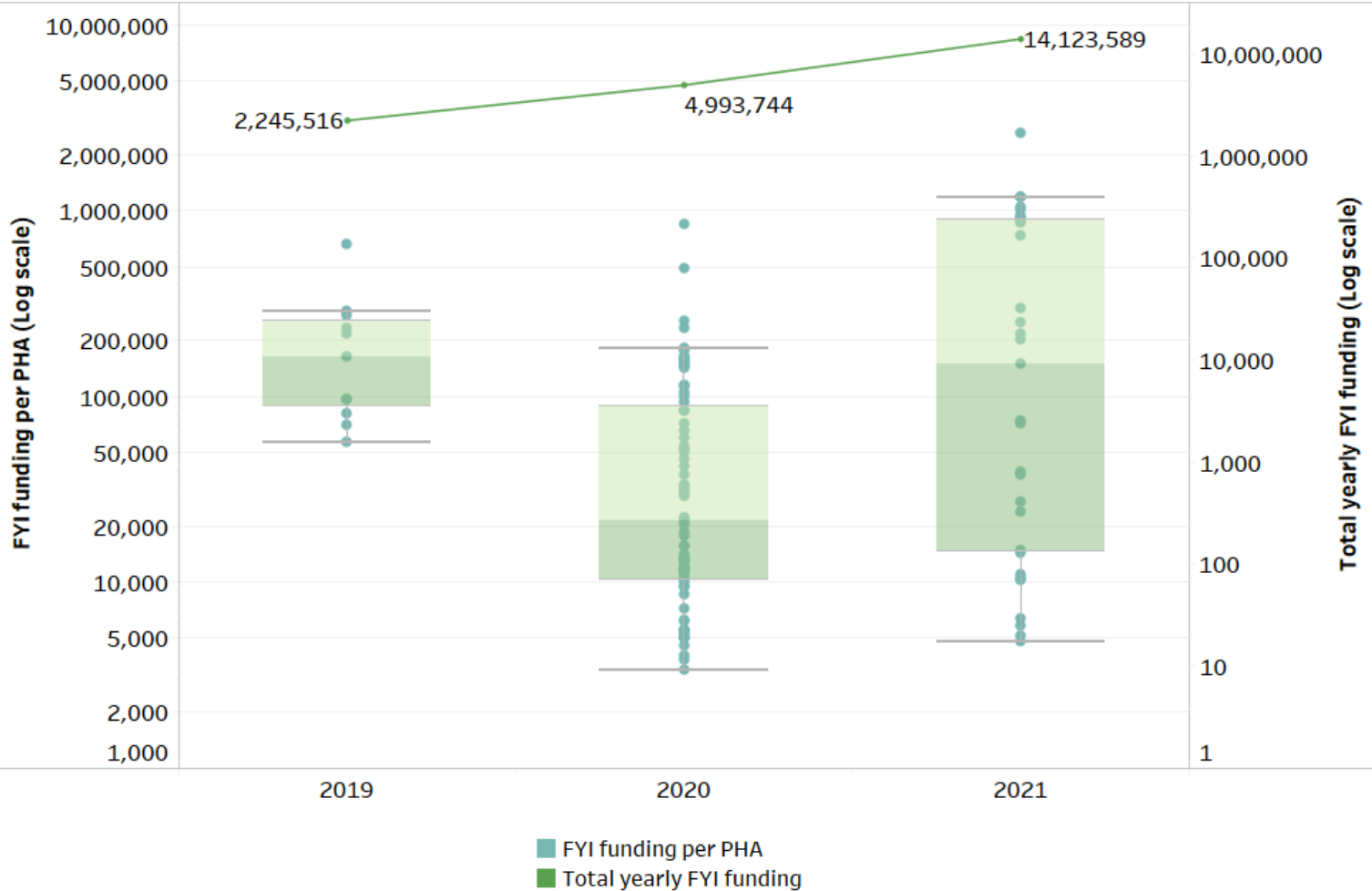
Cumulative FYI Funding & PHA Count vs Date



Despite the positive effect of budget separation on FYI adoption, the total available funding of \$20M is still under utilized by about ~30%

BUDGET / PHA

Distribution of each PHA FYI budget in the year of adoption



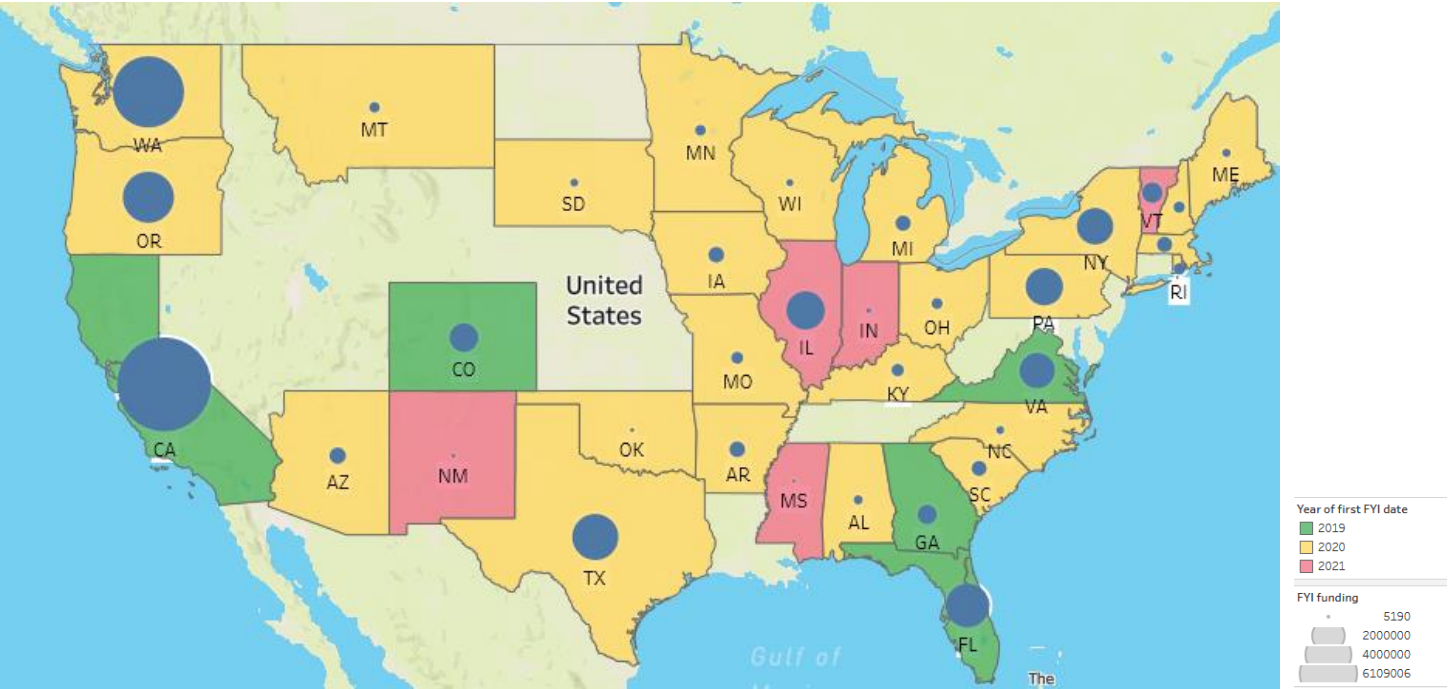
Observations

- PHA FYI spending has gone up significantly in 2021 to ~\$14MM
- Despite increased PHA spend on FYI related activities, still the FYI budget is under utilized by ~30% for FY2021 (available total \$20MM)
- There is a significant variation in FYI funding across different PHAs in 2021, indicating that recently varied size PHAs are also adopting the program

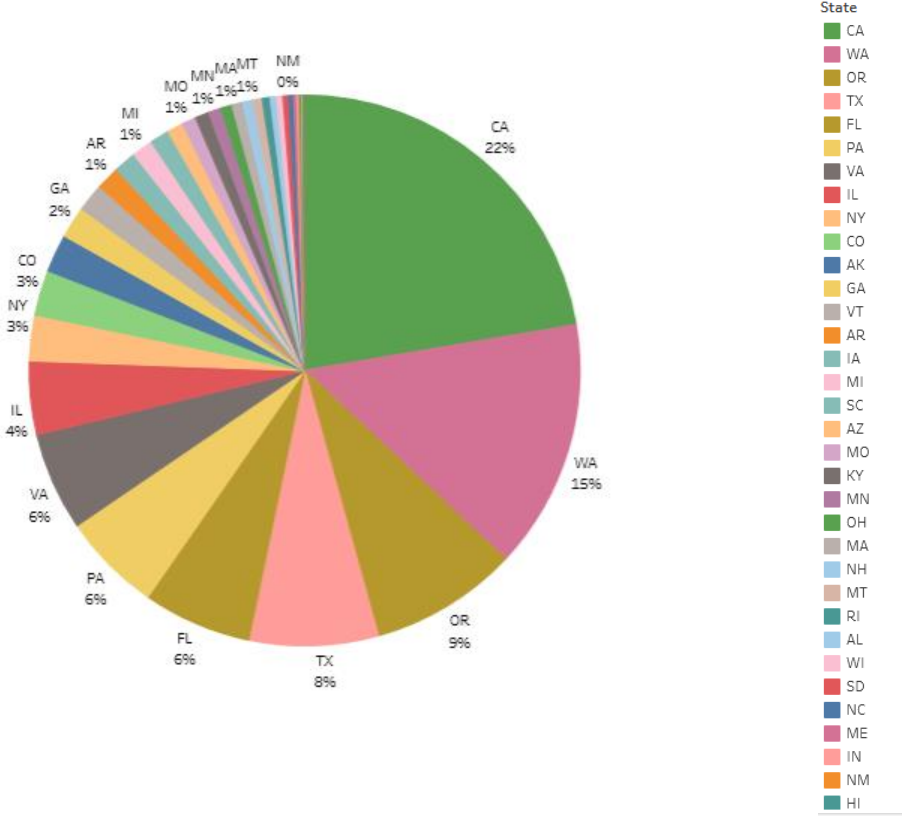
80% FYI spending is constituted by top 8 states that contribute to ~73% of FYI voucher unit counts

STATE

State level representation of earliest FYI adoption and funding observed



State level share of FYI voucher units count



FYI voucher units count** = $\frac{\text{FYI Funding (\$)}}{12 * \text{per unit per month cost (\$)}}$

**It's a directional KPI, absolute values may slightly differ

Cities like Seattle, Chicago, Santa Ana have high FYI voucher units count

PHA - CITY

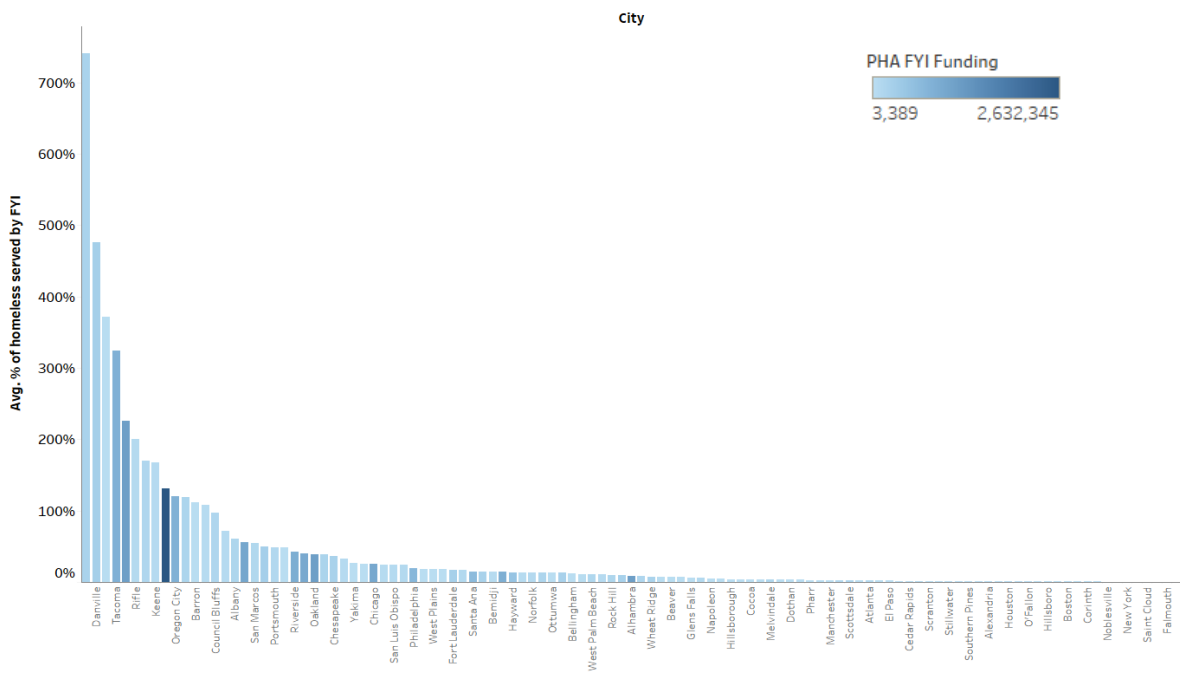
Map of cities with adopted PHAs showcasing FYI voucher units count



~70% of PHA-cities with more than average FYI spending are struggling to meet even 50% of estimated homeless youth demand

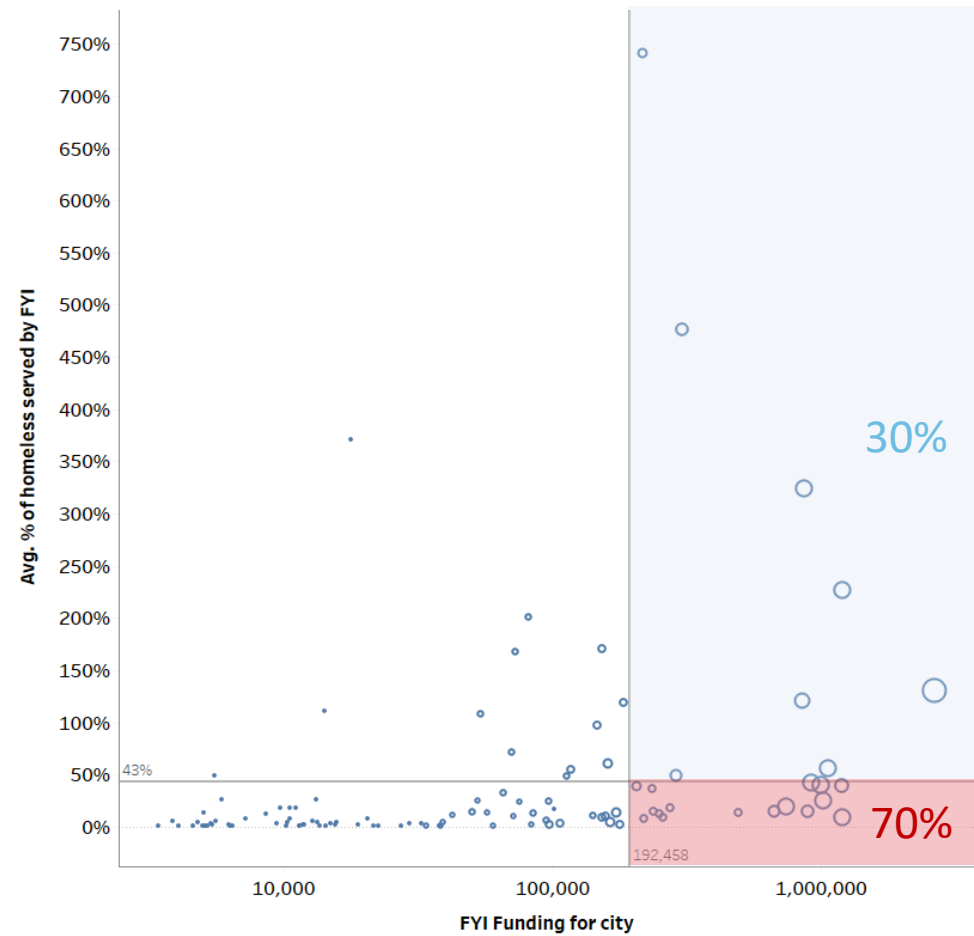
PHA - CITY

Est. avg. homeless youth count served by FYI voucher units per city**



$$\text{Avg. \% of homeless youth demand served by PHA} = \left(\frac{\text{\# FYI voucher units count}}{\text{\#est. avg. homeless youth count}} \right)$$

PHA demand serving standing against FYI funding



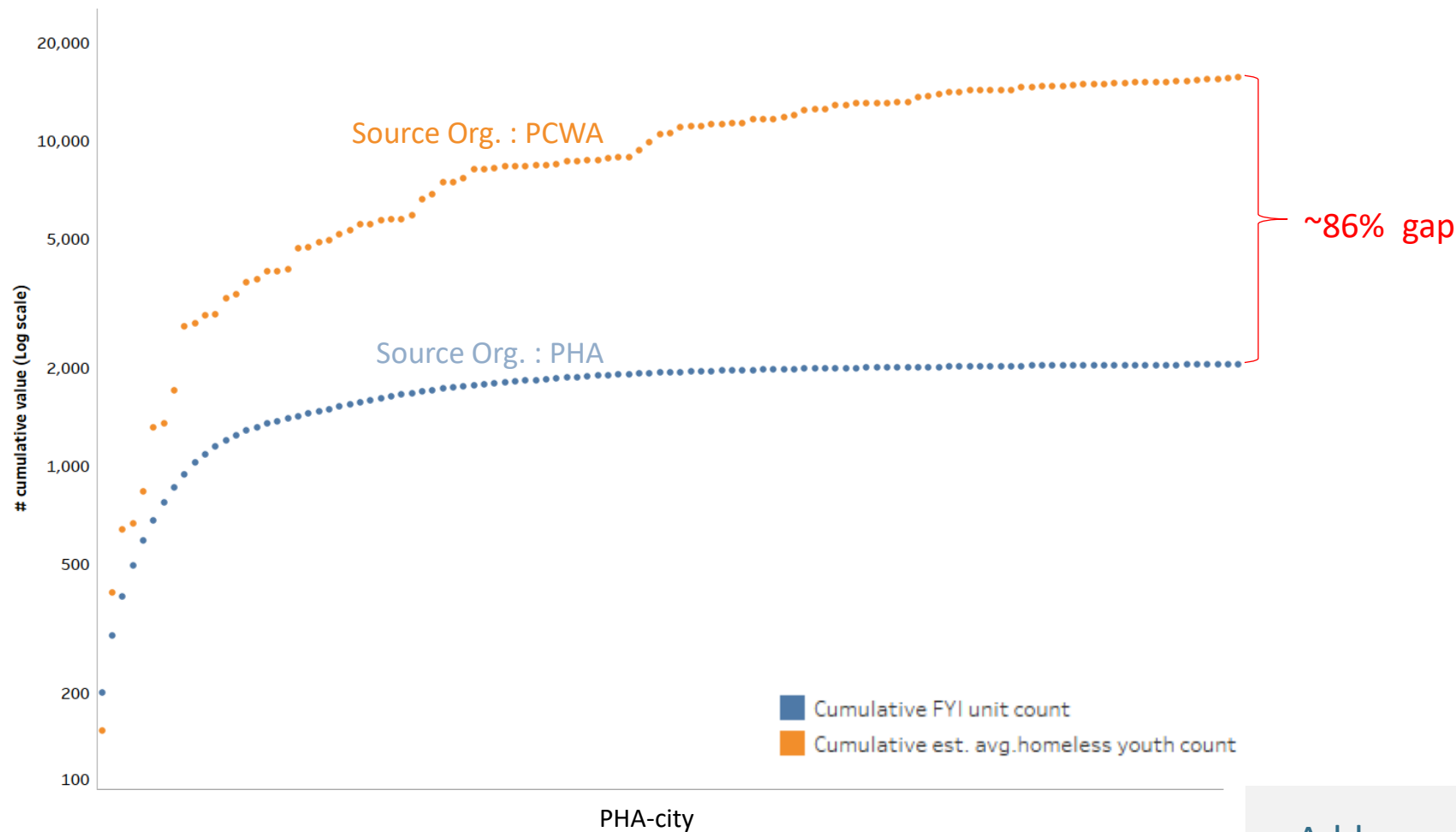
Est. Avg. homeless youth = # of state total homeless youth × $\frac{\text{city population}}{\text{state population}}$

Note : **Estimated avg. homeless youth number is obtained at State level (adoption agency DB) and further distributed using city population w.r.t. state as weight

Overall FYI-adopted PHAs are underserving their homeless youth demand by 86%, indicating a potential friction between PHA and PCWA

PHA - CITY

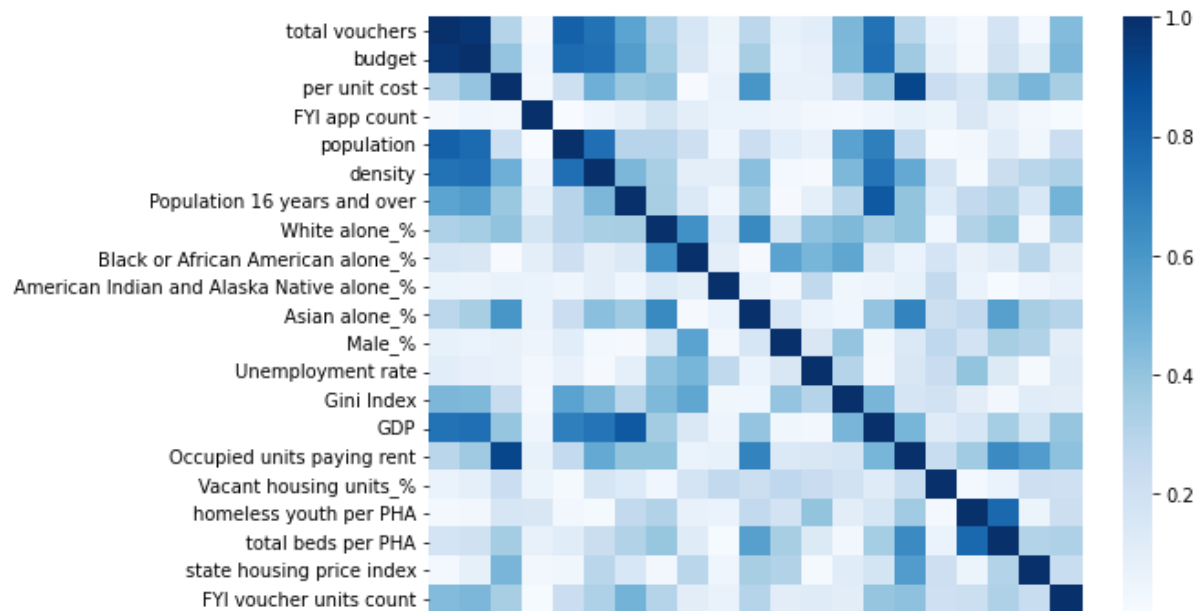
Cum. log-scale values for each PHA, Est. avg. homeless youth count & FYI voucher units counts



Weak correlation between FYI voucher units count (Y1) and est. homeless youth (Y2) further emphasizes on friction in communication between PHA and PCWA

PHA - CITY

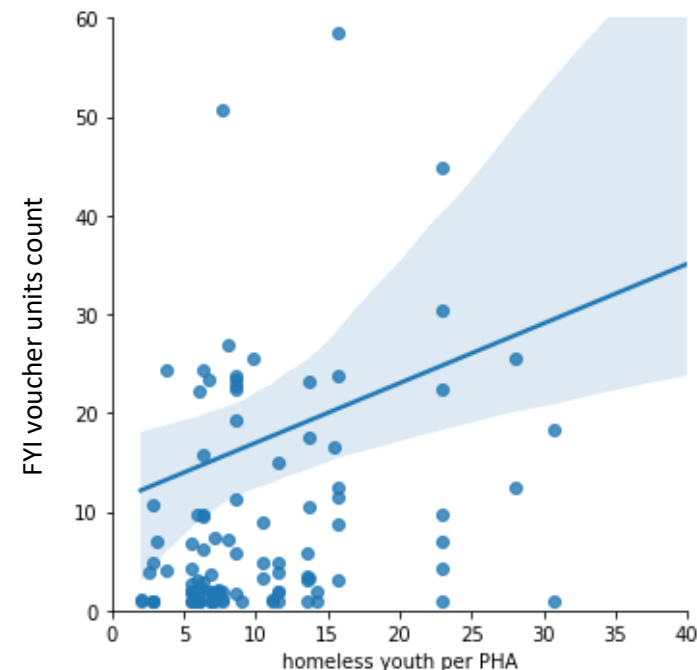
Correlation chart of FYI voucher units count where coef. > 0.01



Observations

- FYI voucher units count is highly correlated (>0.4) with city population, PHA budget, All kind voucher count, Median rent, GDP
- Possibility of multicollinearity is observed across several features and apt treatment should be chosen

Weak correlation is observed between Y

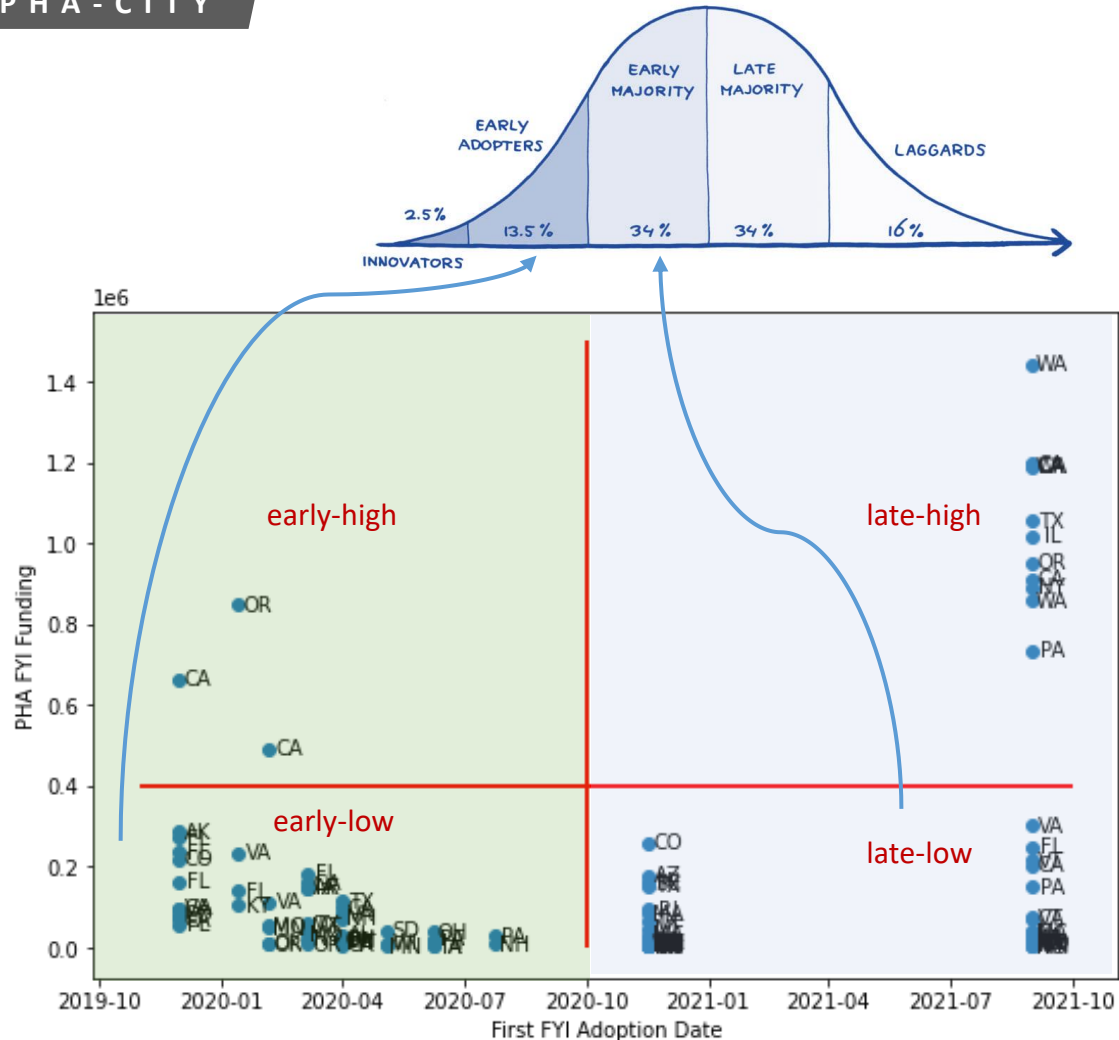


Observations

- Estimated avg. homeless youth count is weakly correlated (0.22) with FYI voucher units count

Diffusion theory can be used to explain the FYI policy penetration among PHAs

PHA - CITY



| PHA label | FYI funding | Count |
|------------|-------------|-------|
| early-high | 2,003,919 | 3 |
| early-low | 3,798,784 | 48 |
| late-high | 12,640,418 | 12 |
| late-low | 2,919,727 | 52 |

Observations

- Early adopters and early majority have a varied intensity of adoption (FYI funding \$)
- About 94% Early adopters with low intensity of FYI contribute to 65% of early FYI total spending
- Important to investigate the factors that contribute to this difference of intensity

Outline



Problem Framing



Theoretical Framework



Data Analysis

Data Acquisition

Exploratory Data Analysis

Modeling



Insights and Discussion

Models on PHA and counties using machine learning and statistical methods

Methods

PHA Prediction



Regression

Variants of multiple regression will be used to investigate linear dependency of internal and external factors on FYI voucher units count and Est. avg. homeless youth



Ensemble

Models such as **Random Forest** and **Gradient Boosting** are used to best predict the cases where non-linear relationship exists between X & Y



Unsupervised

To identify promising counties that can adopt FYI, unsupervised methods based on similarities such as **Spectral Clustering** and **PCA** will be used



Statistical

Statistical methods including **hypothesis testing** and **PSM** will be used to find promising counties on homeless characteristics

Tech Stack



PHA prediction: after feature engineering, 15 features are finalized to train the model

Data Combination:

Acquired data is filtered, cleaned (JSON extract), restructured, combined and validated

Missing Value Treatment:

Selected niche of dataset is enriched using techniques like MICE, Statistical descriptors

Multicollinearity Check and Treatment:

Conducted VIF test to identify and remove high multicollinearity features

Encoding & Feature development:

Integrate Agency adoption rate related variables using imputed dataset that will help improve statistical inferencing & model prediction

Normalize & Scale:

Experiment with normalization features and scaling to improve model fit

Final Features

PHA Budget

PHA FYI Application Count

PHA # Housing Inventory

PHA # Homeless Youth

City Population

City Density

White Race Percentage

Black or African American Race Percentage

American Indian and Alaska Native Race Percentage

Asian Race Percentage

Unemployment Rate

GDP

Median Rent

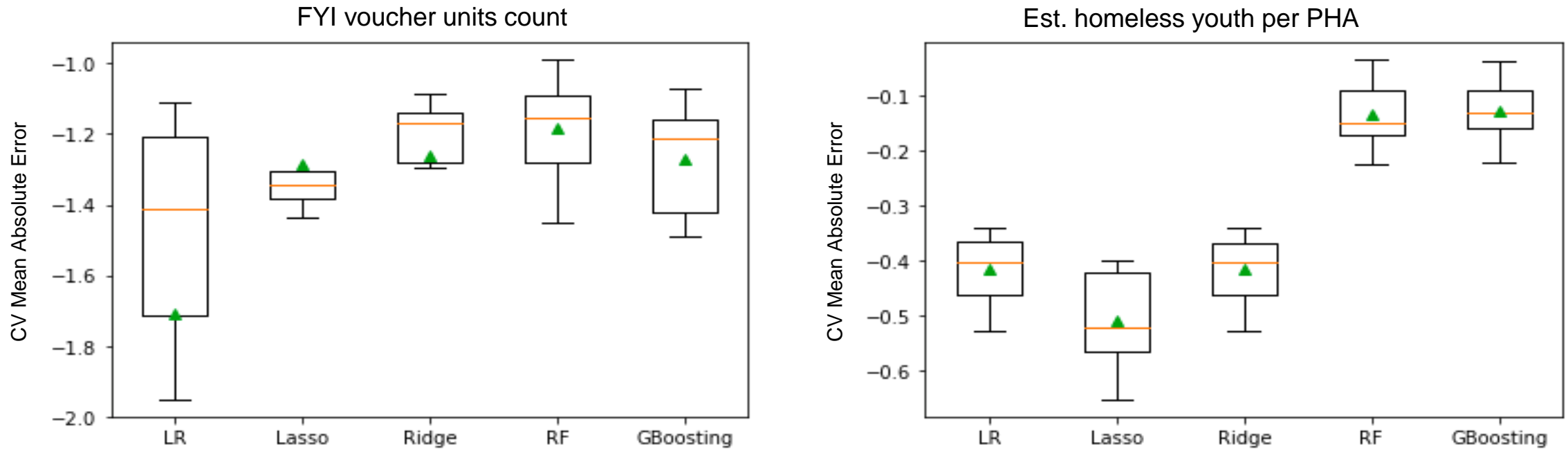
Vacant Housing Percentage

Housing Price Index

Random Forest achieves smallest MAE in predicting FYI voucher units count and est. homeless youth per PHA

P H A

Performance of models predicting FYI voucher units count and Est. homeless youth per PHA



Observations

- A Stratified K-fold cross validation of Random Forest model and Gradient Boosting resulted in lowest MAE with 5 features selected using Recursive Feature Elimination method
- Random forest model outperforms as :
 - it works well with non-linearly related feature set
 - it takes advantage of bagging (variance reduction) and boosting (bias reduction)

Important factors and interpretation of Random Forest model

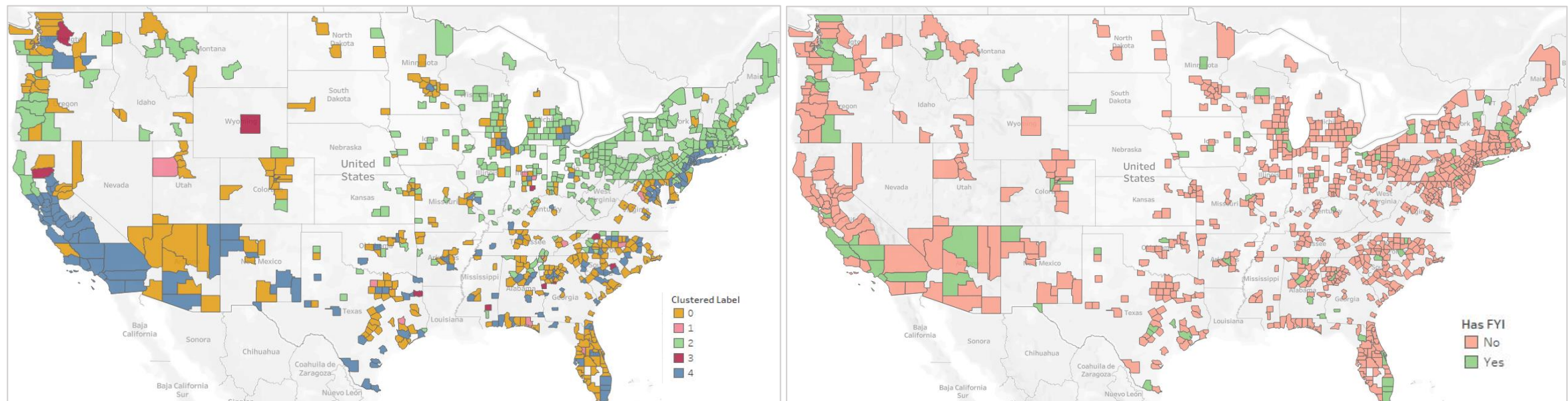
PHA

| Y | Top 5 Important Features | Interpretation |
|--------------------------------------|--|--|
| FYI Voucher Units Count | PHA Budget | <ul style="list-style-type: none">FYI adoption level is highly associated with community economic levels: PHA Budget, County GDP, City Density and County MedianInadequate cooperation between PHA and PCWA: # Homeless Youth Per PHA, the data from PCWA, however, is expected to rank higher but only ranks 4 |
| | County GDP | |
| | City Density | |
| | Est. Homeless Youth per PHA | |
| | County Median Rent | |
| Est. Homeless Youth per PHA | PHA # Housing Inventory | <ul style="list-style-type: none">PHA housing supply is highly related with its Est. homeless youthSocioeconomic factors including Housing price, urbanicity (density) and unemployment rate are good predictors for homelessRace structure also impacts homeless condition |
| | State Housing Price Index | |
| | County Unemployment Rate | |
| | City Density | |
| | County American Indian and Alaska Native alone % | |

Potential county target: counties clustered in 5 groups based on 34 unique socioeconomic factors

COUNTY

Performance of models predicting FYI vouchers unit count and Est. homeless youth



| Clustered Label | Count of County | County with FYI | Adoption % |
|-----------------|-----------------|-----------------|------------|
| 0 | 309 | 23 | 7% |
| 1 | 12 | 0 | 0% |
| 2 | 297 | 28 | 9% |
| 3 | 10 | 0 | 0% |
| 4 | 184 | 34 | 18% |

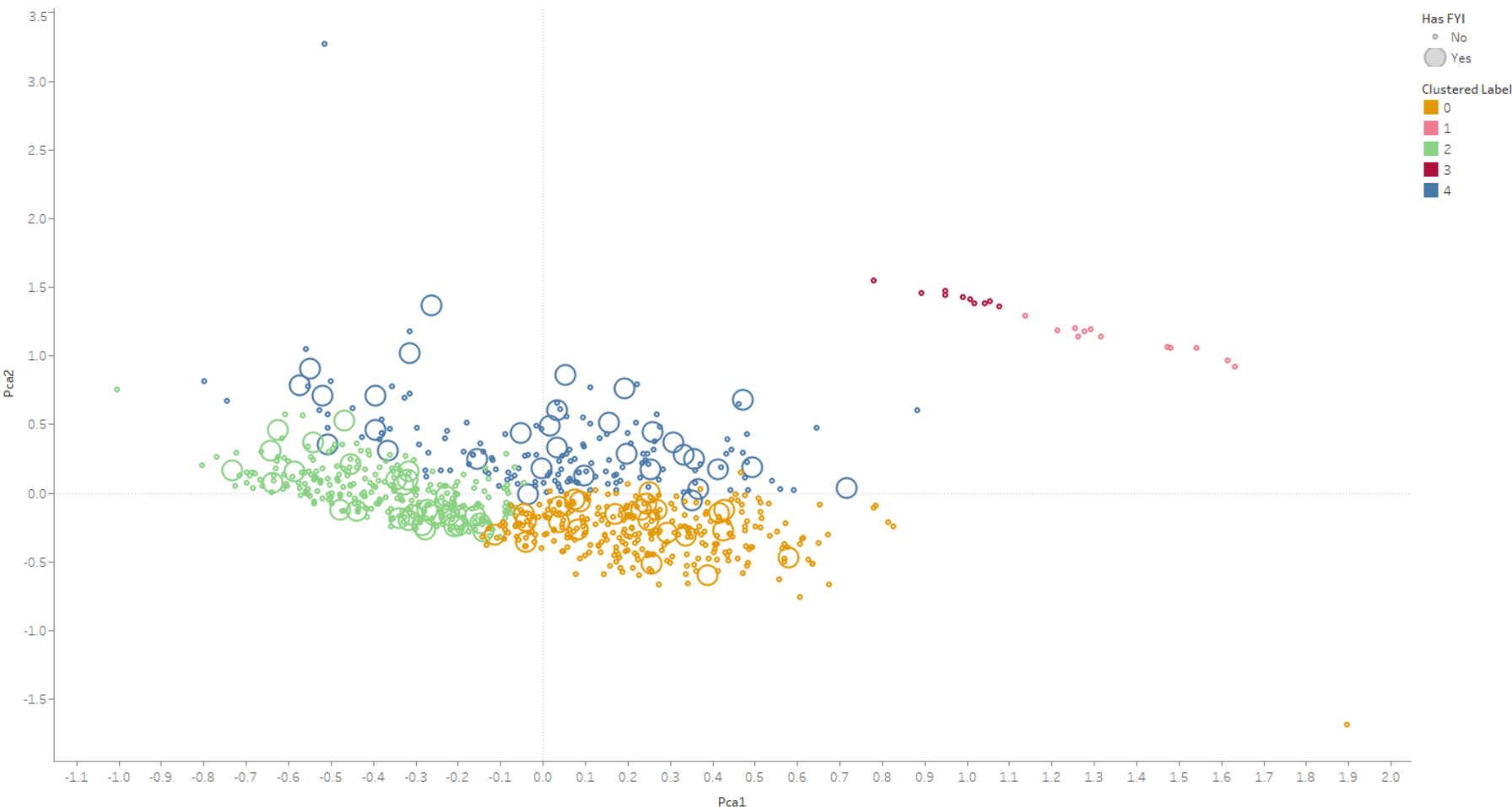
Observations

- Clustering based on Socioeconomic factors result in 5 groups
- Cluster 4 counties have highest adoption rate
- Cluster 4 counties are highly developed areas or metro cities
- Since Cluster 4 has highest adoption rate the member counties of this cluster can be the next potential adopters

Visualizing next potential adopter counties: Cluster 4 (Blue)

COUNTY

Principle Component Analysis to visualize clusters



Important characteristics of homeless influence decisions in adopting FYI

COUNTY

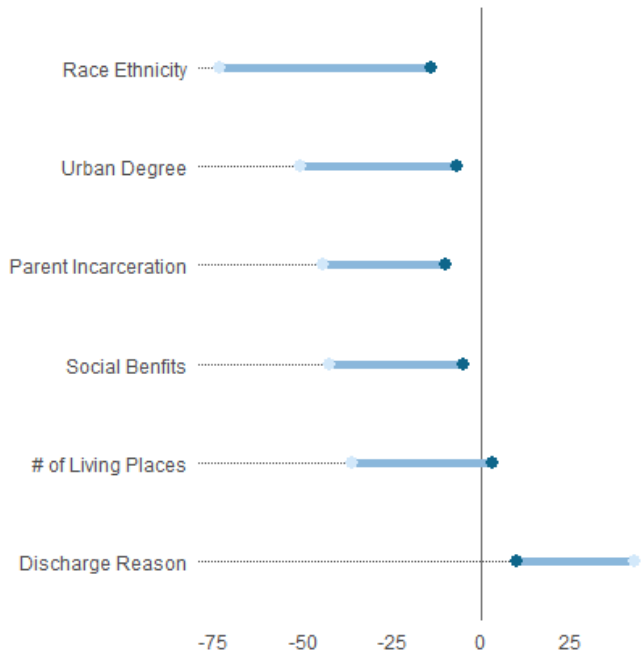
Using dataset AFCARS, and comparing 33 counties that have adopted FYI and 92 counties that do not have adopted FYI, we found these two groups of counties are **SIMILAR** except:

| Variables | Mean of 33 counties (1) | Mean of 92 counties (0) | P-value |
|---|-------------------------|-------------------------|----------|
| Avg. rate of homeless youth's race being white | 0.44 | 0.54 | 0.0373 |
| Average rate of homeless youth being white and non-Hispanic | 0.25 | 0.37 | 0.000418 |
| Avg. rate of homeless youth being in Metro areas | 0.53 | 0.73 | 0.0108 |
| Avg. rate of homeless youth receiving support under Title XVI or other Social Security Act titles | 0.038 | 0.052 | 0.0343 |
| Avg. number of no case plan goal has yet been established other than the care and protection of the youth | 65.39 | 52.93 | 0.0433 |
| Avg. rate of removal reason as parent incarceration | 0.048 | 0.069 | 0.0131 |
| The number of places the youth has lived, including the current setting, during the current removal episode | 55 | 59 | 0.0346 |
| Avg. rate of homeless youth reaching majority according to the law by virtue of age, marriage | 0.04 | 0.03 | 0.0405 |

Use propensity score matching (PSM) to identify potential counties adopting FYI

COUNTY

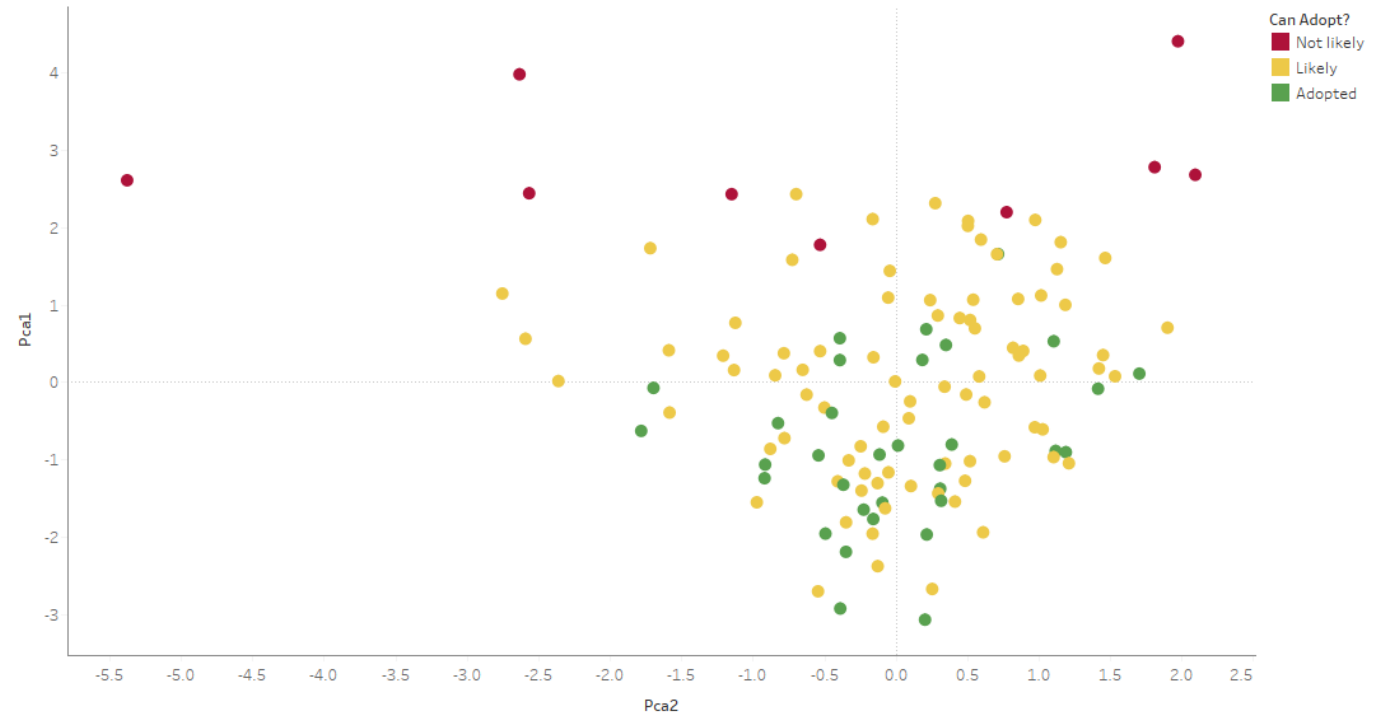
Bias reduction in variables that distinguish groups



Observations

- The selection bias is largely reduced after propensity score matching
- Based on that, three groups of counties are effectively identified: 33 counties that have already adopted FYI vouchers, 83 that are likely to adopt, and 9 who are not likely to adop.

Three groups of counties based on the likelihood of FYI adoption



Outline



Problem Framing



Theoretical Framework



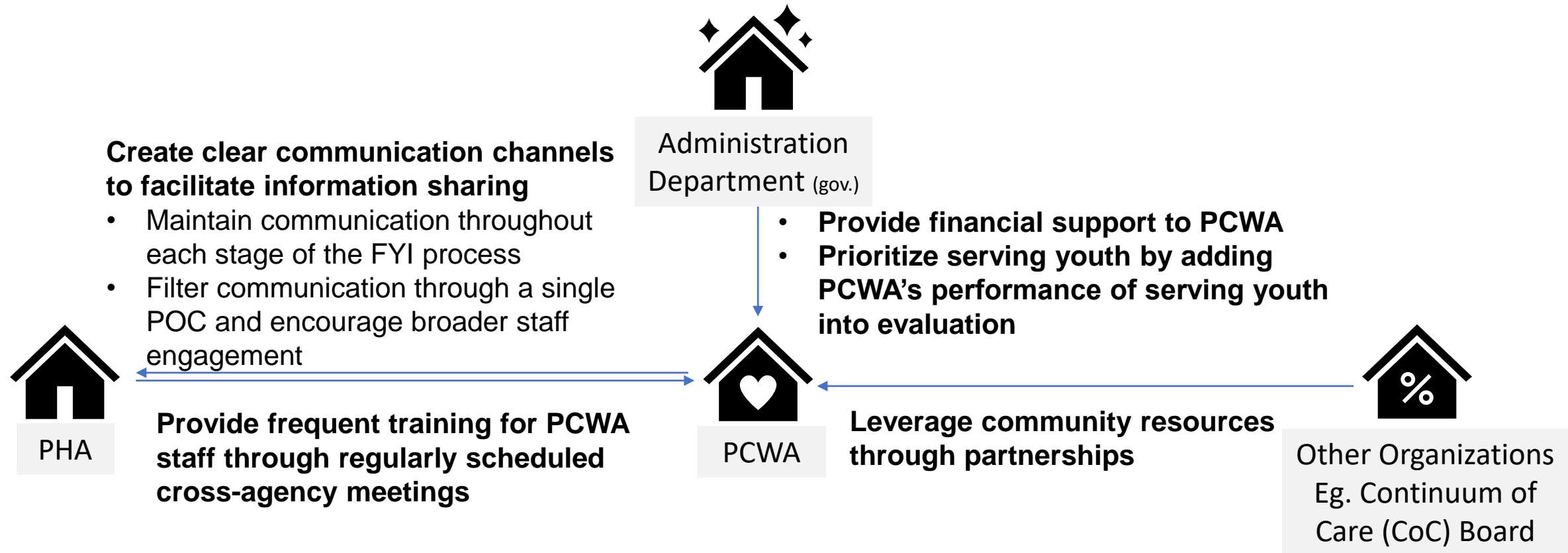
Data Analysis



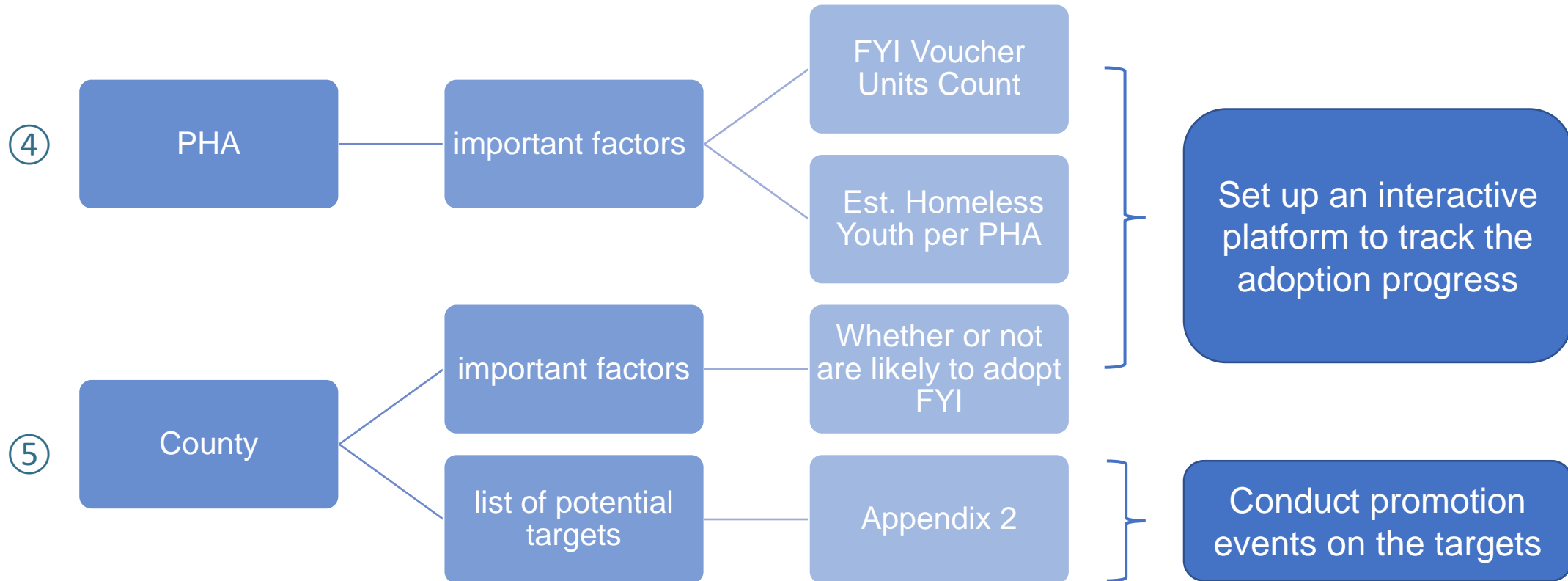
Insights and Discussion

Policy Evaluation: effectiveness proved, and suggestions provided

- ① FYI Policy iterations are proving effective as FYI Funding boost and more PHAs adopt in recent past
- ② The utilization of FYI budget is only ~70%, indicating FYI budget is not a major limit
- ③ Multiple data evidences indicate inadequate cooperation between PHA and PCWA. Suggestions:



Promotion Target: Put more effort on PHAs and counties with addressed features



Future Mission of Gandalf Tech...

- Conduct surveys and informational interviews in local agencies to identify important factors related to internal administrative and organizational behaviors;
- Employ natural language processing and sentiment analysis on stakeholders' comments to evaluate the performance of FYI program;
- Explore the further evaluation of FYI program in a broader way, focusing not only the voucher adoption level of local agencies but also the final changes in homeless youth as the end-user of the policy.
- Gandalf Tech will always be devoted at **Tech for Social Good**



THANK YOU! 😊

Appendix 1: all county-level variable names from AFCARS

| | | | | | |
|--|--|-----|--|-----|---|
| #9 | Child's Date of Birth | #15 | Child Race White | #47 | Removal Reason-Relinquishment |
| #10 | Child Sex | #16 | Child Race Unable to Determine | #48 | Removal Reason-Inadequate Housing |
| #11 | Child Race American Indian or Alaska Native | #17 | Child Hispanic or Latino Ethnicity | #49 | Current Placement Setting |
| #12 | Child Race Asian | #18 | Child Has Been Clinically Diagnosed with Disability | #50 | The Current Placement Setting is Outside the State |
| #13 | Child Race Black or African American | #19 | Mental Retardation | #51 | Most Recent Case Plan Goal |
| #14 | Child Race Native Hawaiian or Other Pacific Islander | #20 | Visually or Hearing Impaired | #52 | Caretaker Family Structure |
| #79 | Title IV-E Adoption Assistance | #21 | Physically Disabled | #53 | 1st Principal Caretaker Year of Birth |
| #80 | Title IV-A TANF Payment | #22 | Emotionally Disturbed | #54 | 2nd Principal Caretaker Year of Birth |
| #81 | Title IV-D Child Support Funds | #23 | Other Medically Diagnosed Condition Requiring Special Care | #55 | Termination Date of Parental Rights-Mom |
| #82 | Title XIX Medicaid | #24 | Child Has Previously Been Adopted | #56 | Termination Date of Parental Rights-Dad |
| #83 | SSI or Social Security Act Benefits | #25 | Age on Date of Legal Adoption | #57 | Date of Parents Loss of Parental Rights |
| #84 | Only State or Other Support | #26 | Date of First Removal | #58 | Foster Family Structure |
| #85 | Monthly Foster Care Payment | #27 | Total Number of Removals from Home | #59 | 1st Foster Caretaker Year of Birth |
| #86 | Length (Days) Since Latest Removal | #28 | Discharge Date for Previous Removal | #60 | 2nd Foster Caretaker Year of Birth |
| #87 | Length (Days) in Current Placement Setting | #29 | Date of Latest Removal from Home | #61 | 1st Foster Caretaker Race American Indian or Alaska Native |
| #88 | Length (Days) of Previous FC Stay | #30 | Removal Transaction Date | #62 | 1st Foster Caretaker Race Asian |
| #89 | Total Days Stay in FC, All Episodes | #31 | Begin Date for Current Placement Setting | #63 | 1st Foster Caretaker Race Black or African American |
| #90 | Age on the First Day of the Fiscal Year | #32 | Number of Placement Settings in Current FC Episode | #64 | 1st Foster Caretaker Race Native Hawaiian or Other Pacific Islander |
| #91 | Age at Most Recent Removal/Entry into Foster Care | #33 | Removal Manner | #65 | 1st Foster Caretaker Race White |
| #92 | Age of Child at the End of FFY, or at Exit | #34 | Removal Reason-Physical Abuse | #66 | 1st Foster Caretaker Race Unable to Determine |
| #93 | Child was in FC at the Beginning of the FFY | #35 | Removal Reason-Sexual Abuse | #67 | 1st Foster Caretaker Hispanic or Latino Ethnicity |
| #94 | Child was in FC at the End of the Fiscal Year | #36 | Removal Reason-Neglect | #68 | 2nd Foster Caretaker Race American Indian or Alaska Native |
| #95 | Entered Foster Care During the Fiscal Year | #37 | Removal Reason-Alcohol Abuse Parent | #69 | 2nd Foster Caretaker Race Asian |
| #96 | Child was Discharged from Foster Care During the Fiscal Year | #38 | Removal Reason-Drug Abuse Parent | #70 | 2nd Foster Caretaker Race Black or African American |
| #97 | Child was in at Start or Entered FC During the FY | #39 | Removal Reason-Alcohol Abuse Child | #71 | 2nd Foster Caretaker Race Native Hawaiian or Other Pacific Islander |
| #98 | Child is Waiting for Adoption | #40 | Removal Reason-Drug Abuse Child | #72 | 2nd Foster Caretaker Race White |
| #99 | Parents Rights Have Been Terminated | #41 | Removal Reason-Child Disability | #73 | 2nd Foster Caretaker Race Unable to Determine |
| #100 | Youth is No Longer Eligible for Foster Care Due to Age | #42 | Removal Reason-Child Behavior Problem | #74 | 2nd Foster Caretaker Hispanic or Latino Ethnicity |
| #101 | Derived Child Race and Ethnicity | #43 | Removal Reason-Parent Death | #75 | Date of Discharge from Foster Care |
| This variable is derived from the five variables | | #44 | Removal Reason-Parent Incarceration | #76 | Date that the Discharge Was Recorded |
| #102 | Derived Race | #45 | Removal Reason-Caretaker Inability Cope | #77 | Discharge Reason |
| This variable is derived using the five variables for the child's race | | #46 | Removal Reason-Abandonment | #78 | Title IV-E Foster Care Payments |
| #103 | Rural Urban Continuum Code | | | | |
| #104 | State Foster Care ID | | | | |

Appendix 2: list of counties in three groups

| FIPSCode | county | state | label | |
|----------|------------------------|-------|-------|--|
| 1073 | Jefferson | AL | 2 | |
| 2020 | Anchorage Municipality | AK | 2 | |
| 4013 | Maricopa | AZ | 2 | |
| 6001 | Alameda | CA | 2 | |
| 6029 | Kern | CA | 2 | |
| 6037 | Los Angeles | CA | 2 | |
| 6059 | Orange | CA | 2 | |
| 6065 | Riverside | CA | 2 | |
| 8059 | Jefferson | CO | 2 | |
| 12009 | Brevard | FL | 2 | |
| 12011 | Broward | FL | 2 | |
| 12086 | Miami-Dade | FL | 2 | |
| 12099 | Palm Beach | FL | 2 | |
| 13121 | Fulton | GA | 2 | |
| 15003 | Honolulu | HI | 2 | |
| 17031 | Cook | IL | 2 | |
| 19153 | Polk | IA | 2 | |
| 21067 | Fayette | KY | 2 | |
| 25017 | Middlesex | MA | 2 | |
| 25025 | Suffolk | MA | 2 | |
| 26163 | Wayne | MI | 2 | |
| 27007 | Beltrami | MN | 2 | |
| 30111 | Yellowstone | MT | 2 | |
| 36029 | Erie | NY | 2 | |
| 36061 | New York | NY | 2 | |
| 41051 | Multnomah | OR | 2 | |
| 42101 | Philadelphia | PA | 2 | |
| 44007 | Providence | RI | 2 | |
| 48201 | Harris | TX | 2 | |
| 48215 | Hidalgo | TX | 2 | |
| 48453 | Travis | TX | 2 | |
| 53033 | King | WA | 2 | |
| 53053 | Pierce | WA | 2 | |

| FIPSCode | county | state | label | |
|----------|----------------------|-------|-------|--|
| 4019 | Pima | AZ | 1 | |
| 4021 | Pinal | AZ | 1 | |
| 6013 | Contra Costa | CA | 1 | |
| 6019 | Fresno | CA | 1 | |
| 6067 | Sacramento | CA | 1 | |
| 6071 | San Bernardino | CA | 1 | |
| 6073 | San Diego | CA | 1 | |
| 6075 | San Francisco | CA | 1 | |
| 6077 | San Joaquin | CA | 1 | |
| 6085 | Santa Clara | CA | 1 | |
| 6099 | Stanislaus | CA | 1 | |
| 6107 | Tulare | CA | 1 | |
| 6111 | Ventura | CA | 1 | |
| 8001 | Adams | CO | 1 | |
| 8031 | Denver | CO | 1 | |
| 8041 | El Paso | CO | 1 | |
| 9003 | Hartford | CT | 1 | |
| 9009 | New Haven | CT | 1 | |
| 11001 | District of Columbia | DC | 1 | |
| 12033 | Escambia | FL | 1 | |
| 12057 | Hillsborough | FL | 1 | |
| 12081 | Manatee | FL | 1 | |
| 12083 | Marion | FL | 1 | |
| 12095 | Orange | FL | 1 | |
| 12103 | Pinellas | FL | 1 | |
| 12127 | Volusia | FL | 1 | |
| 13089 | DeKalb | GA | 1 | |
| 17143 | Peoria | IL | 1 | |
| 17163 | St. Clair | IL | 1 | |
| 17167 | Sangamon | IL | 1 | |
| 17201 | Winnebago | IL | 1 | |
| 18003 | Allen | IN | 1 | |
| 18089 | Lake | IN | 1 | |
| 18095 | Madison | IN | 1 | |
| 18097 | Marion | IN | 1 | |
| 21111 | Jefferson | KY | 1 | |

| | | | | |
|-------|----------------|----|---|--|
| 24510 | Baltimore city | MD | 1 | |
| 25005 | Bristol | MA | 1 | |
| 25009 | Essex | MA | 1 | |
| 25013 | Hampden | MA | 1 | |
| 25023 | Plymouth | MA | 1 | |
| 25027 | Worcester | MA | 1 | |
| 26081 | Kent | MI | 1 | |
| 26125 | Oakland | MI | 1 | |
| 27053 | Hennepin | MN | 1 | |
| 27123 | Ramsey | MN | 1 | |
| 27137 | St. Louis | MN | 1 | |
| 28047 | Harrison | MS | 1 | |
| 29095 | Jackson | MO | 1 | |
| 29189 | St. Louis | MO | 1 | |
| 31055 | Douglas | NE | 1 | |
| 32003 | Clark | NV | 1 | |
| 34007 | Camden | NJ | 1 | |
| 34013 | Essex | NJ | 1 | |
| 35001 | Bernalillo | NM | 1 | |
| 37051 | Cumberland | NC | 1 | |
| 39035 | Cuyahoga | OH | 1 | |
| 39049 | Franklin | OH | 1 | |
| 39061 | Hamilton | OH | 1 | |
| 39095 | Lucas | OH | 1 | |
| 39113 | Montgomery | OH | 1 | |
| 39153 | Summit | OH | 1 | |
| 40109 | Oklahoma | OK | 1 | |
| 40143 | Tulsa | OK | 1 | |
| 42003 | Allegheny | PA | 1 | |
| 42011 | Berks | PA | 1 | |
| 45045 | Greenville | SC | 1 | |
| 47037 | Davidson | TN | 1 | |
| 47093 | Knox | TN | 1 | |
| 47157 | Shelby | TN | 1 | |
| 48027 | Bell | TX | 1 | |
| 48029 | Bexar | TX | 1 | |
| 48113 | Dallas | TX | 1 | |
| 48121 | Denton | TX | 1 | |
| 48303 | Lubbock | TX | 1 | |
| 48309 | McLennan | TX | 1 | |
| 48439 | Tarrant | TX | 1 | |
| 49035 | Salt Lake | UT | 1 | |
| 53011 | Clark | WA | 1 | |
| 53061 | Snohomish | WA | 1 | |
| 53063 | Spokane | WA | 1 | |
| 54039 | Kanawha | WV | 1 | |
| 55079 | Milwaukee | WI | 1 | |

| FIPSCode | county | state | label | |
|----------|-------------|-------|-------|--|
| 5131 | Sebastian | AR | 0 | |
| 12031 | Duval | FL | 0 | |
| 12071 | Lee | FL | 0 | |
| 12101 | Pasco | FL | 0 | |
| 12105 | Polk | FL | 0 | |
| 18163 | Vanderburgh | IN | 0 | |
| 20173 | Sedgwick | KS | 0 | |
| 32031 | Washoe | NV | 0 | |
| 41039 | Lane | OR | 0 | |

Reference

- [HUD announced FYI](#)
- [FYI introduction](#)
- [Market Predictors of Homelessness](#)
- [FYI initiative webinar series data analytics](#)