

# Hudson River Housing 2023 Data

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# Hudson River Housing

“Hudson River Housing improves lives and communities through housing with compassion and development with vision.”

- Affordable housing
  - Emergency housing
  - Transitional housing (affordable rent, intended 24 months or less)
  - Permanent supportive housing
- Support services
- Community building/development

**Hudson River**  
**Housing, Inc.**

# Introduction

Data Source:

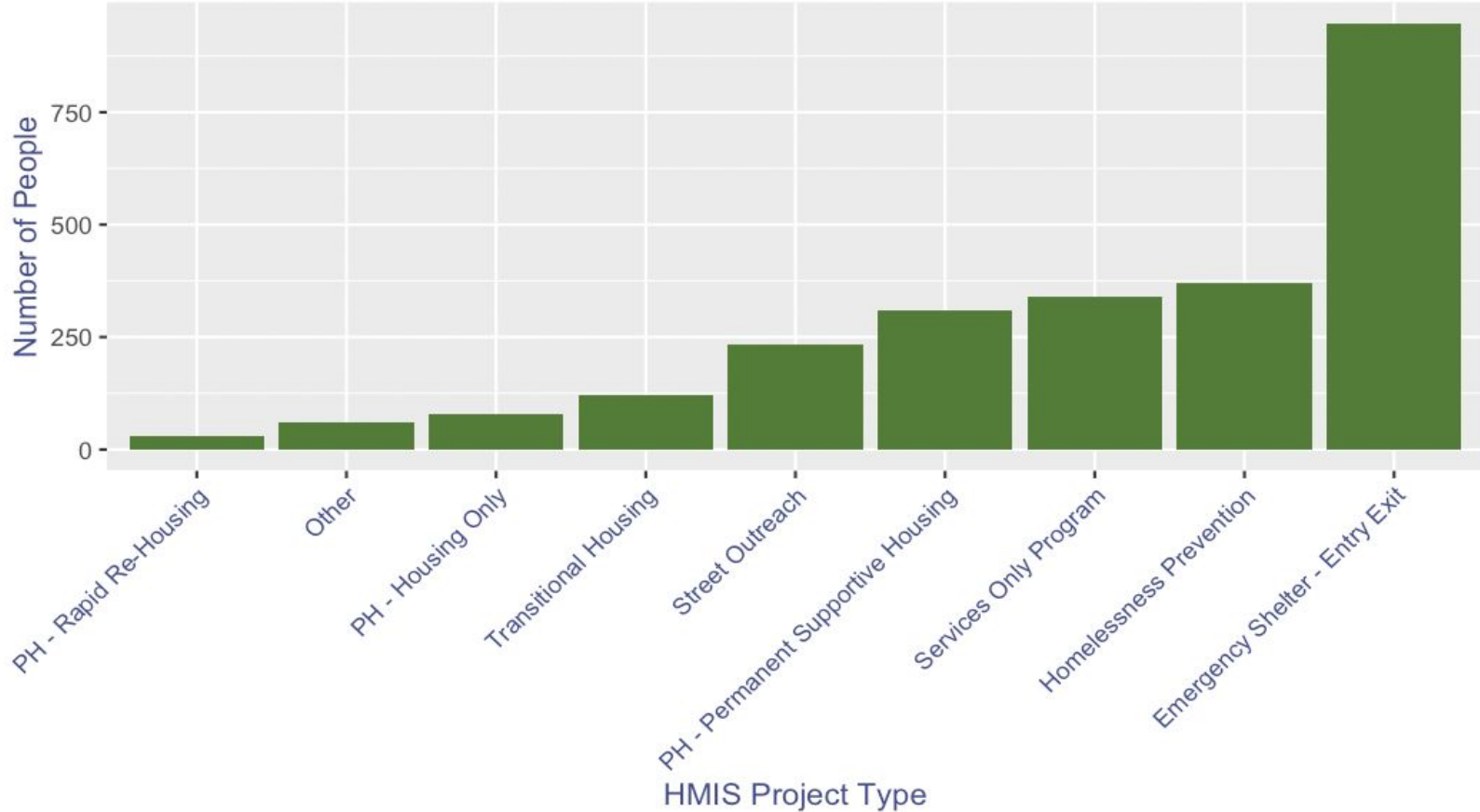
- HMIS (Homeless Management Information System)
- Data for all individuals in system in 2023

Goals:

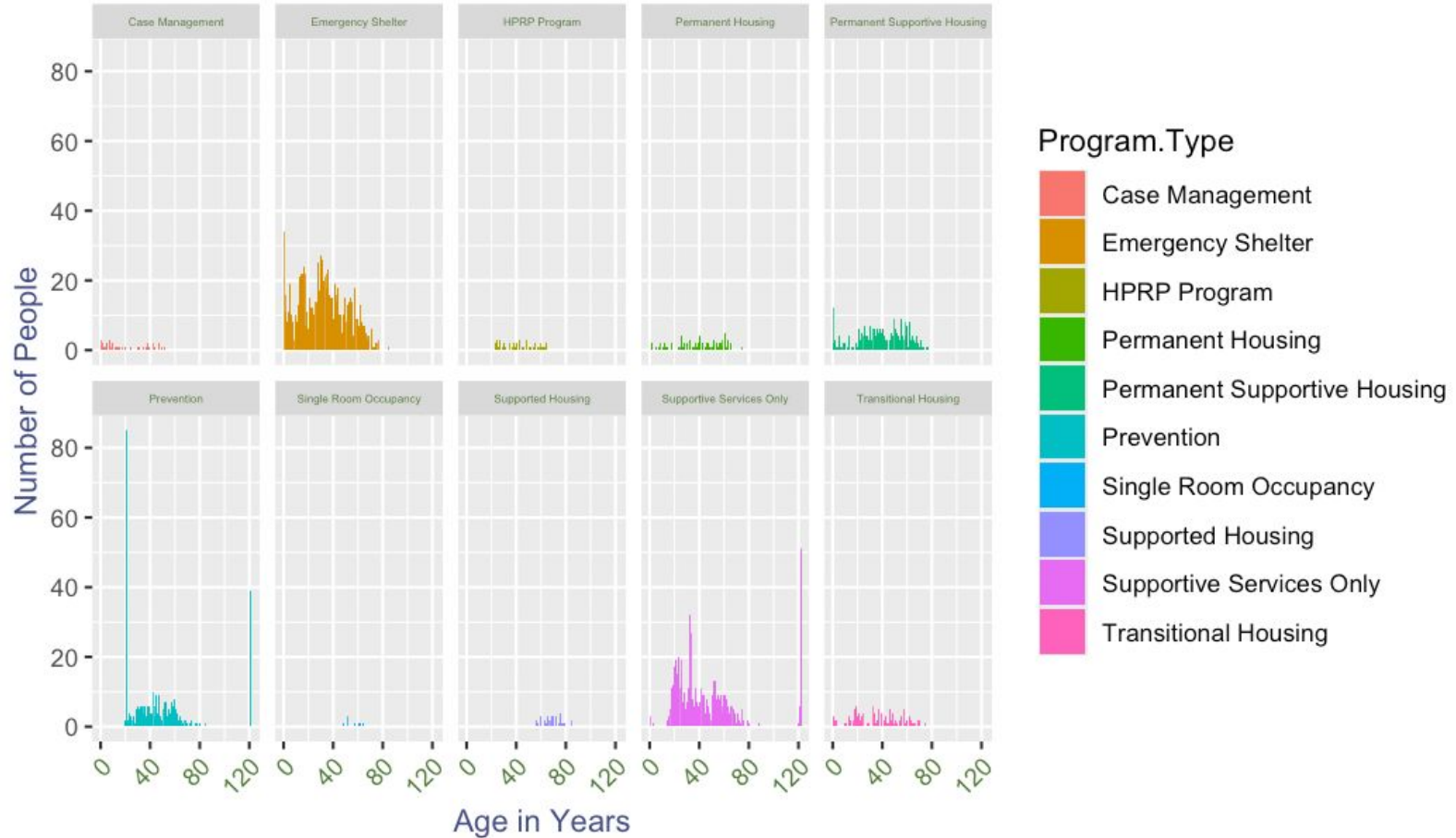
- Visualize demographics of guests/residents served by HRH
- Look at length of program stay across programs and identify factors that are associated with longer/shorter stays
- Explore where data is more and less complete

# Demographic Data

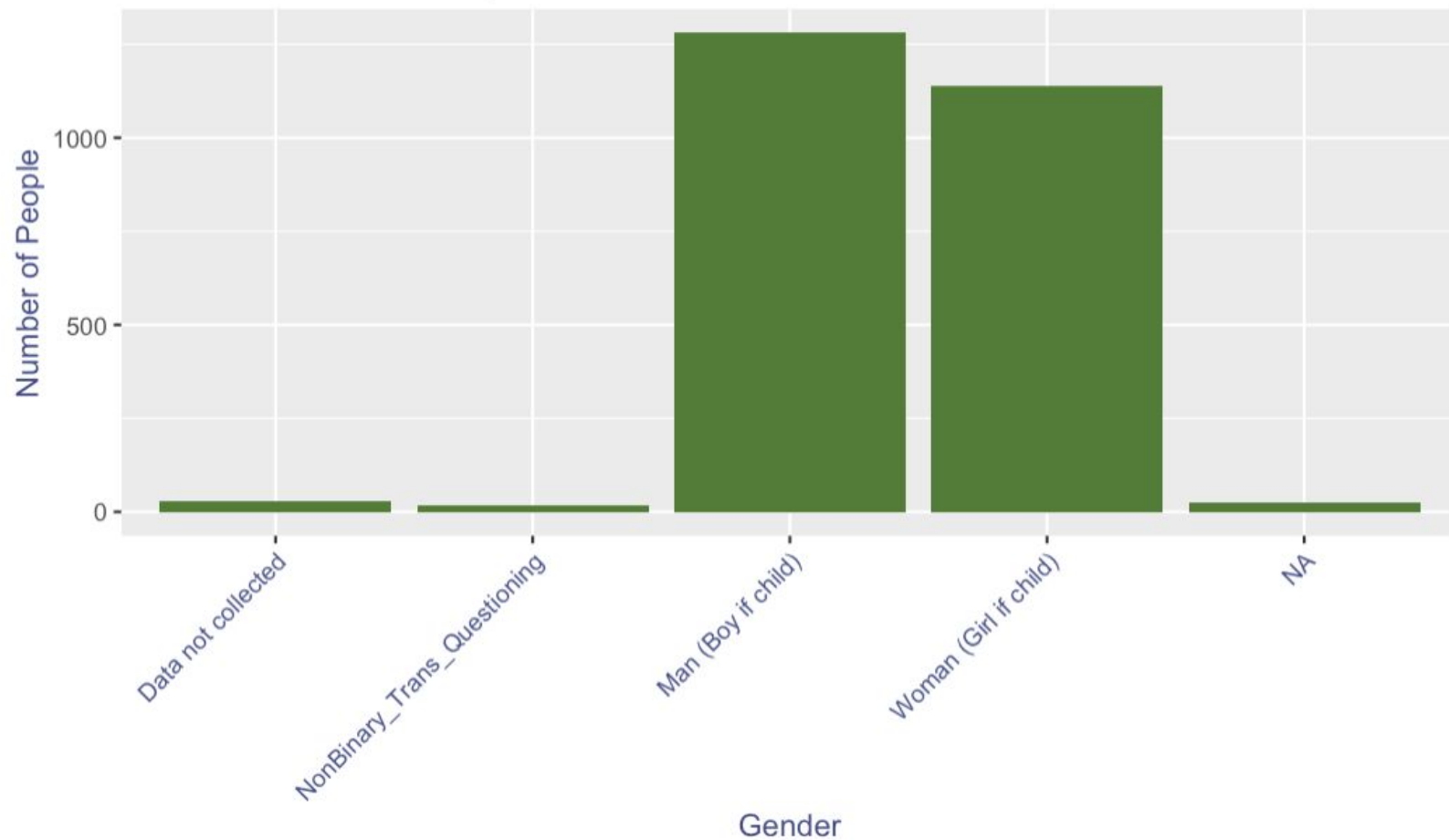
Number of Individuals by Project Type



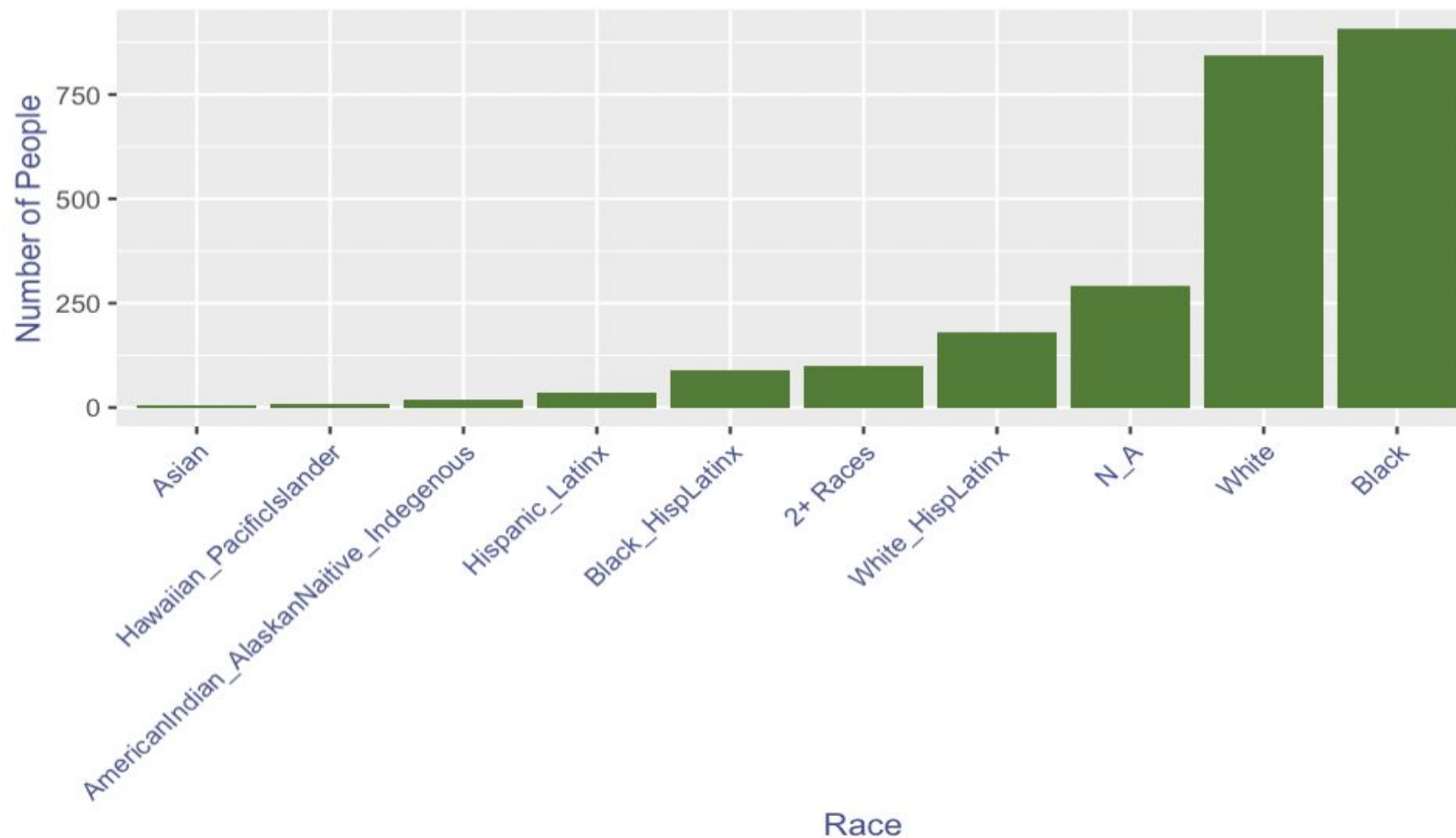
## Age of Residents by Program Type



Gender of Clients in System

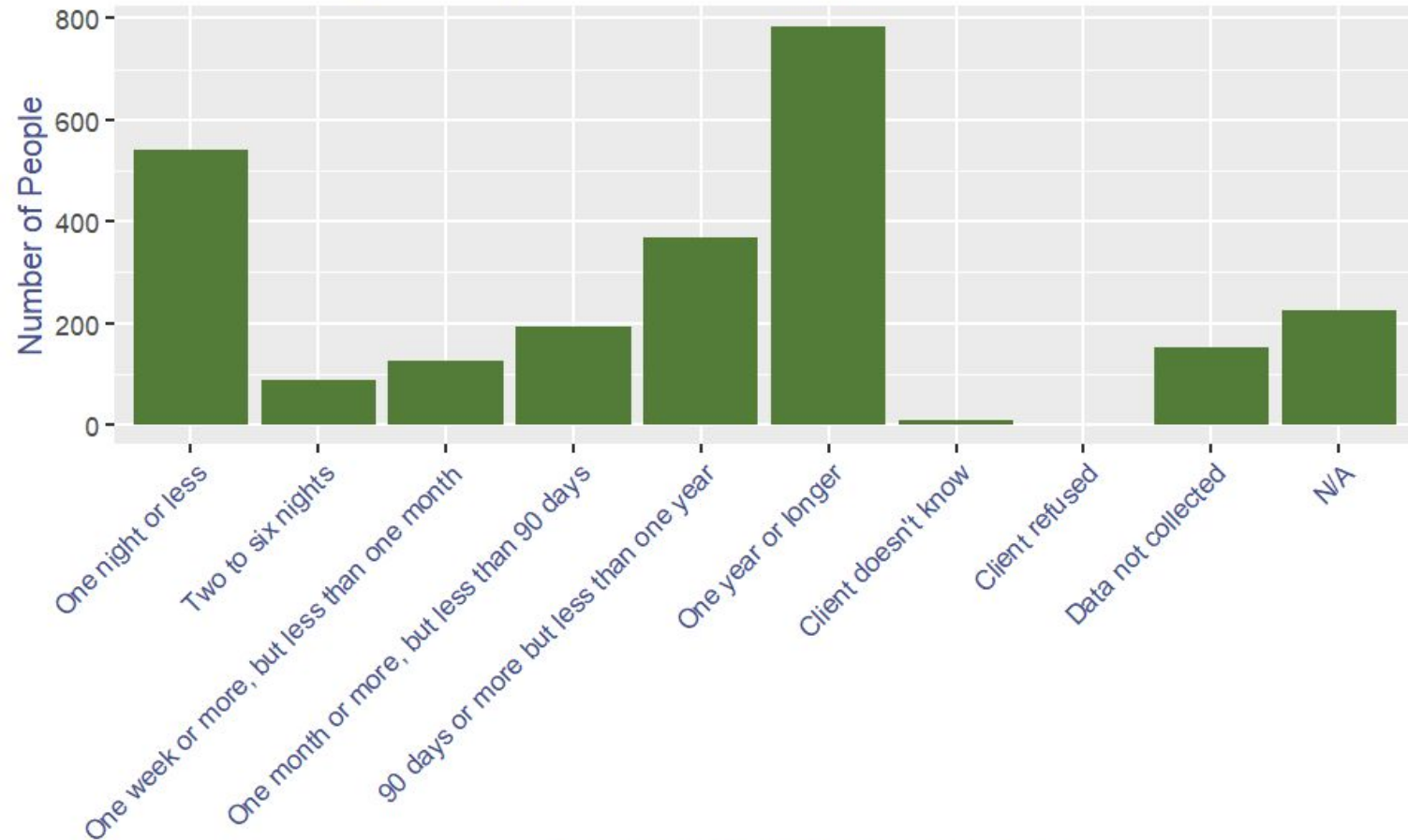


# Race of Residents in HMIS





Resident Length of Stay in their Prior Living Situation

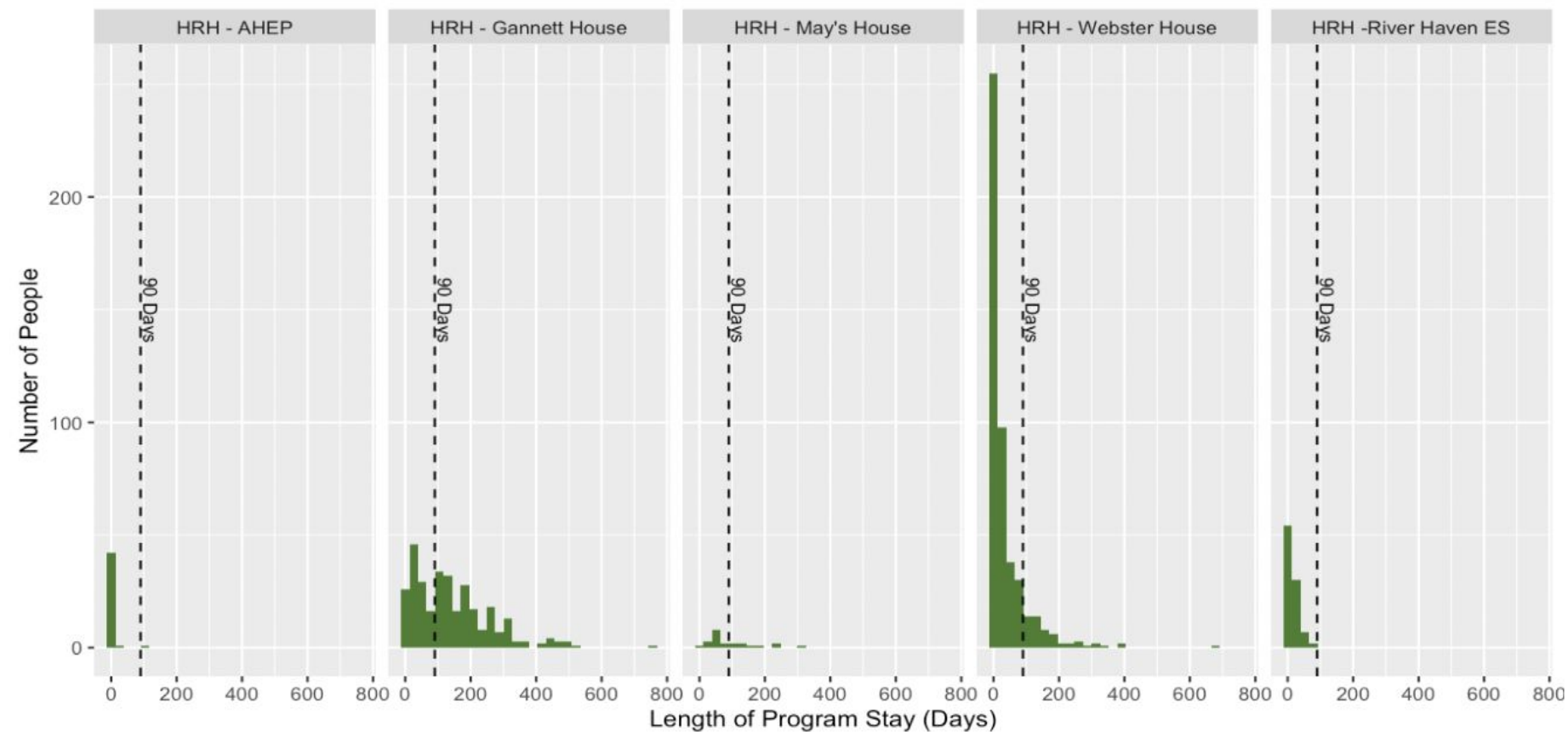


Length of Stay in Prior Living Situation

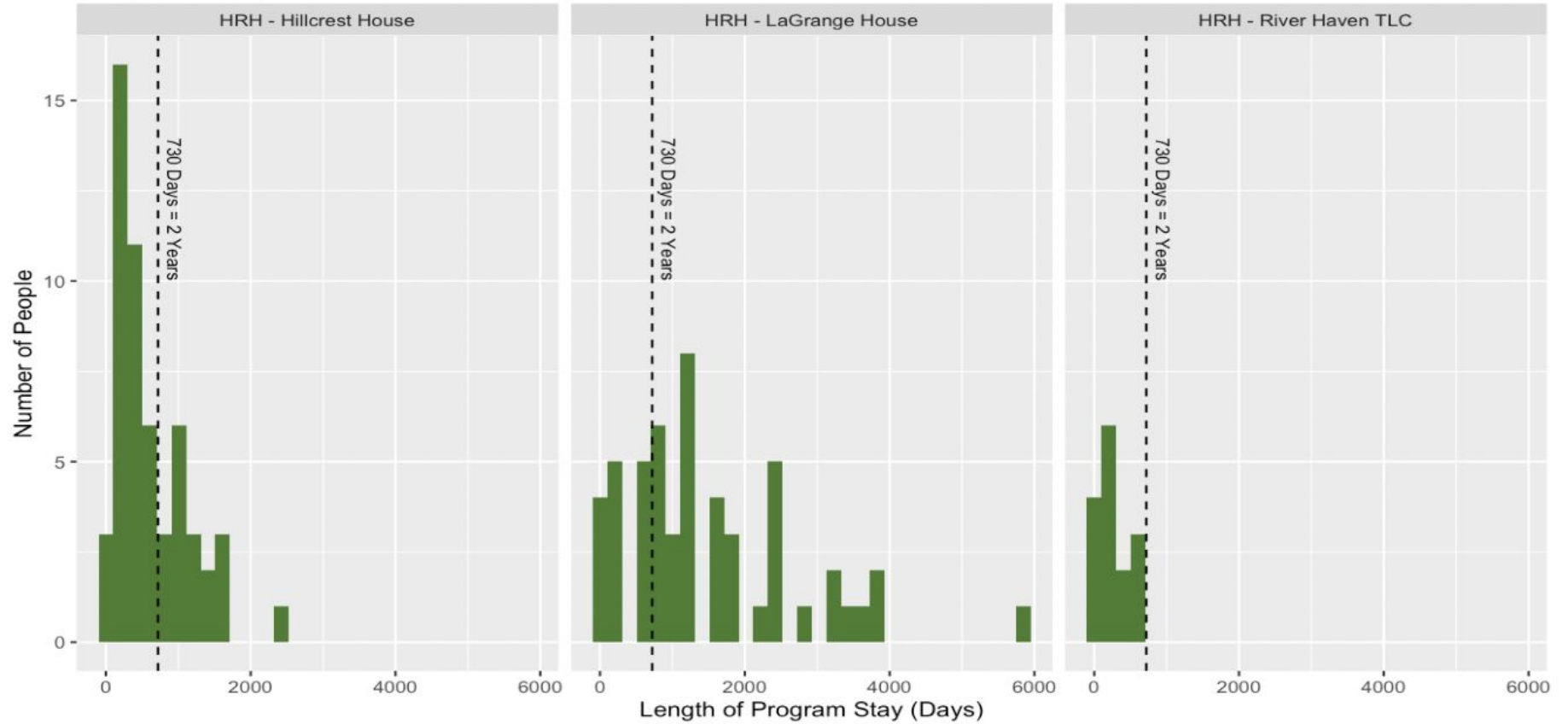
# Length of stay by program type

Program.Type	Number of Clients	Mean Length of Stay (Days)	Median Length of Stay (Days)
Emergency Shelter	947	69.75	23.0
Supportive Services Only	594	476.15	396.0
Prevention	350	908.55	911.5
Permanent Supportive Housing	264	1273.89	932.5
Transitional Housing	121	939.40	646.0
Permanent Housing	78	2473.15	2304.0
HPRP Program	48	883.29	937.5
Case Management	40	701.20	582.0
Supported Housing	37	2965.54	2901.0
Single Room Occupancy	8	3289.38	3426.5

## Length of Stay in Emergency Housing



## Length of Stay in Transitional Housing



# Modeling Length of Stay

# Modeling Length of Program Stay

Length of Program Stay: how long client has been in current program (how long living in emergency, transitional or permanent housing)

Are there factors associated with people staying longer/shorter than programs intend?

Hypotheses:

- Transience: Length of stay in prior living situation
- Chronic homelessness
  - more difficulty finding/maintaining housing?
  - reflected in length of stay?

# Modeling Length of Program Stay: Linear Regression Model

	Model Estimate by Housing Type		
	Emergency	Transitional	Permanent Supportive
Expected Stay (Days): Non-chronically-homeless, prior living situation > 1 year	12.05	741.11	1016.52
Times Longer for Prior Living Situation 1 month-1 year	1.72	0.64	0.91
Times Longer for Prior Living Situation 1 week-1 month	1.08	0.31	1.13
Times Longer for Prior Living Situation less than 1 week	1.25	0.42	1.33
Times Longer for Chronically Homeless	0.77	1.21	0.46

- Missing values excluded
- Length of stay skewed → log transformation
- Lines 2-5: greater than 1 = longer length of stay compared to an individual who is non-chronically homeless with length of stay in prior living situation > 1 year
  - Less than one: shorter relative length of stay
- More transient → shorter term stays in current program within transitional housing
- Chronic homelessness → shorter lengths of stay in permanent housing

# Data Completeness



# Intake Form And Universal Data Elements

## UNIVERSAL DATA ELEMENTS

Questions below are required for: All Clients & Household Members

<b>*Project Entry Date</b>	<b>*First Name</b>	<b>*Last Name</b>	
Click or tap to enter a date.	Click or tap here to enter text.	Click or tap here to enter text.	
<b>*Name Data Quality</b>			
Choose an item.			
<b>*Social Security Number – If Unknown or Client Prefers Not to Answer enter 999-99-9999</b>	<b>*Social Security Number Data Quality</b>		
Click or tap here to enter text.	Choose an item.		
<b>*Which gender or genders do you identify with? (Select all that apply)</b>			
<input type="checkbox"/> Woman (Girl if child)	<input type="checkbox"/> Man (Boy if child)	<input type="checkbox"/> Culturally Specific	<input type="checkbox"/> Doesn't Know
<input type="checkbox"/> Transgender	<input type="checkbox"/> Non-binary	Identity (e.g., Two-Spirit)	<input type="checkbox"/> Prefers Not to Answer
<input type="checkbox"/> Different Identity	Click or tap here to enter text.	<input type="checkbox"/> Questioning	<input type="checkbox"/> Not Collected
<b>*What is your Date of Birth?</b>	<b>*Birthdate Data Quality</b>		
Click or tap to enter a date.	Choose an item.		
<b>*Which races and ethnicities do you identify as? (Select all that apply)</b>			
<input type="checkbox"/> American Indian, Native Alaskan, or Indigenous	<input type="checkbox"/> Asian or Asian American	<input type="checkbox"/> Doesn't Know	
<input type="checkbox"/> Black, African American, African	<input type="checkbox"/> Hispanic/Latina/e/o	<input type="checkbox"/> Prefers Not to Answer	
<input type="checkbox"/> Middle Eastern or North African	<input type="checkbox"/> Native Hawaiian or Pacific Islander	<input type="checkbox"/> Not Collected	
<input type="checkbox"/> White			
<b>Would you like to add any additional information regarding your race/ethnic identity?</b>			
Additional Information Click or tap here to enter text.			
<b>*Have you ever served in the United States Military?</b>			
Choose an item.			

(Continue on Next Page)

# Missing Data: Universal Data Elements

variable	No_Data_Inputted	Data_Not_Collected	Total_Missing
Gender..HMIS.	24	27	51
Disabling.Condition	0	447	447
Race..HMIS.	3	0	3
Veteran.Status	0	370	370
Enrollment.CoC..Admission.	508	0	508

## What are Universal Data Elements (UDEs)?

- HMIS Universal Data Elements are elements required to be collected during intake, mandated by H.U.D.
- Includes SSN, birthday, and other identifying information as well as questions surrounding demographics and living history

# Recommendations for Prioritization of Variables

Variable	Percent.Missing
On.the.night.before.did.you.stay.on.the.streets..ES.or.SH. . . Admission.	95.90
Total.number.of.months.homeless.on.the.street..in.ES..or.SH.in.the.past.three.years..Admission.	50.74
Sexual.Orientation	91.64
Mental.Health.Disorder..Admission	23.04

## Additional Recommendations:

- Standardization of entry of missing variable for age and other UDEs
- Additional variable to measure success of outcome at discharge

# Conclusions

# Takeaways

- Data analysis can provide quantitative support for observations and experience of those who work in the system on a daily basis
- Data and data visualization can serve as tools to communicate with the general public
- Standardization of data collection going forward can help guide the transition towards being more data driven

# Acknowledgements

We would like to thank Hudson River Housing for giving us the opportunity to work with them this semester and for trusting us with this project.

Special thanks to Javier and Vinny for lending their expertise and taking the time to answer all of our questions.

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Thank you!

# Questions?