

Data & Real World Impact



North Carolina Coalition to End Homelessness

securing resources | encouraging public dialogue | advocating for public policy change

919.755.4393

www.ncceh.org

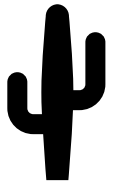
We work at NCCEH



Jasmin Volkel – HMIS System Administrator



Ben Bradley – Project Specialist



Tia Sanders-Rice – Data Analyst

Goals for Today's Talk

1. Discuss the importance of using data in project evaluation and decision making processes
2. Introduce metrics/measures to consider
3. Provide actionable recommendations you can apply

This presentation was developed for different data interest/levels.



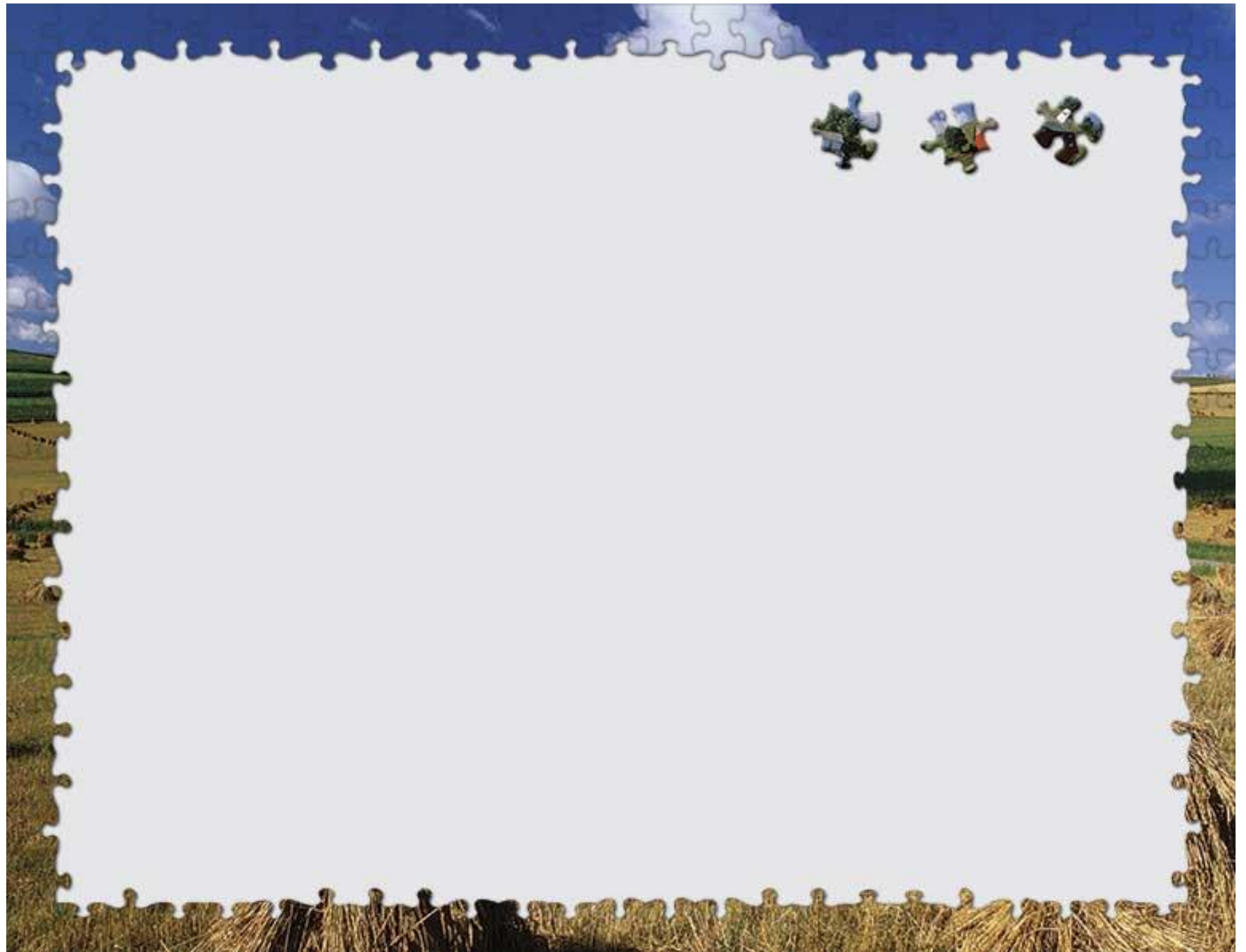
Putting the Pieces Together

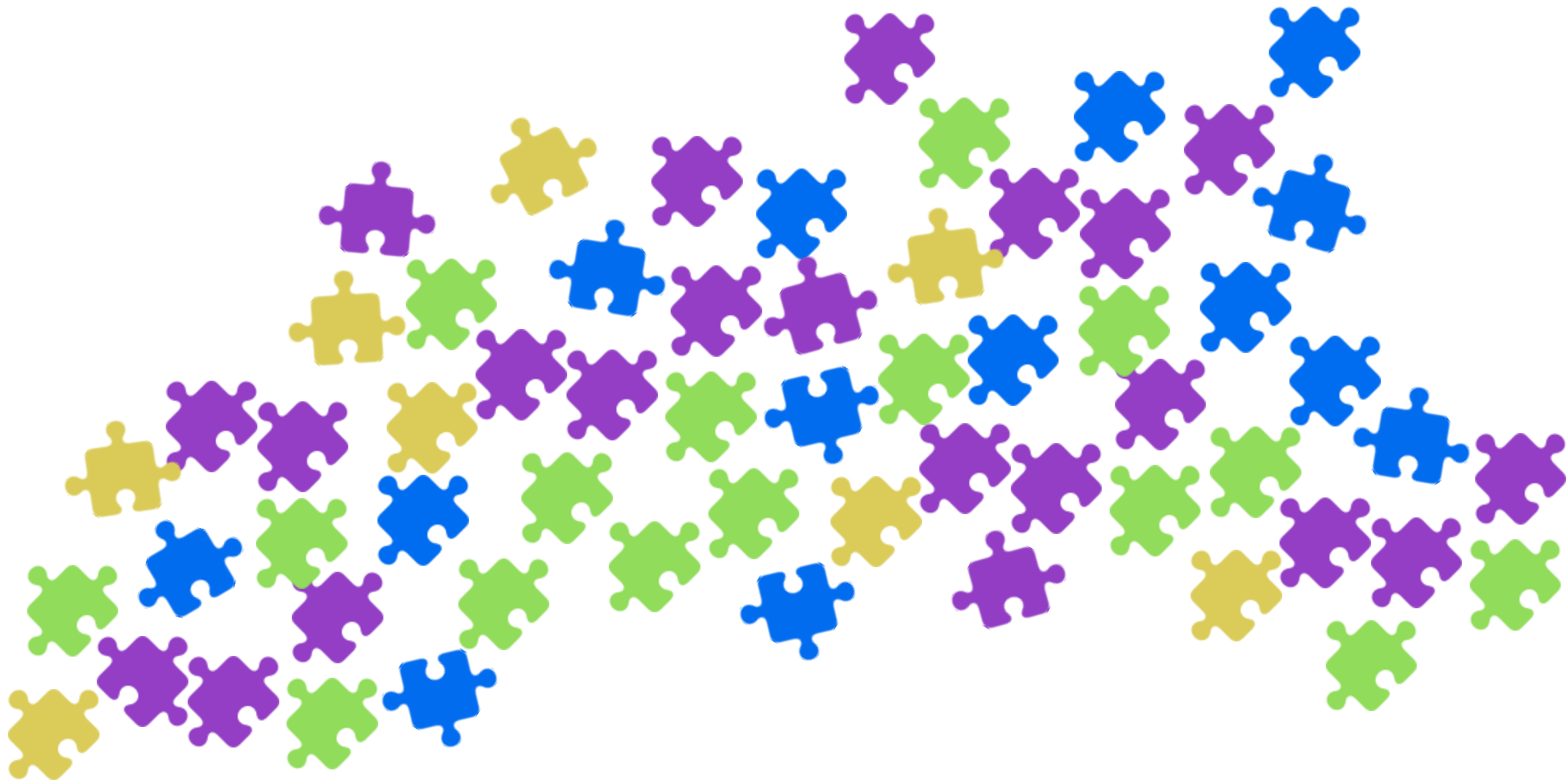
Think about constructing a puzzle

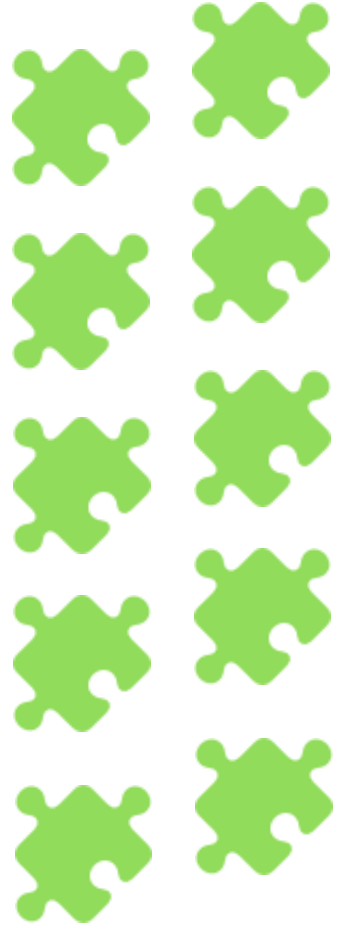
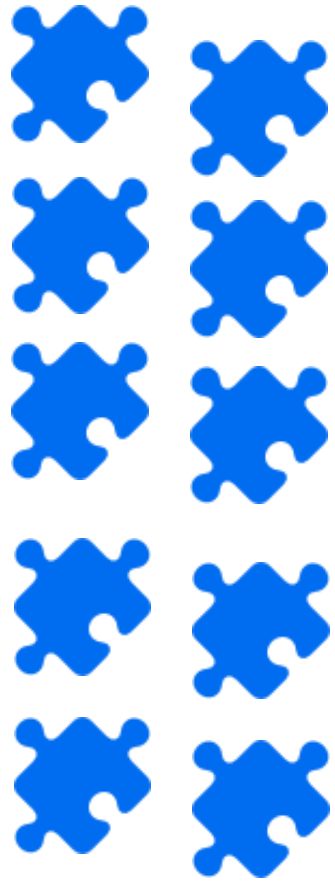
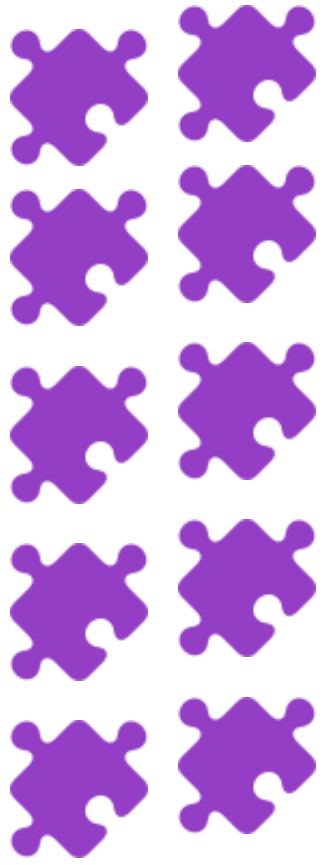




We generally start with the edges →











We need all the pieces



Homeless
Management
Information
System



It's overwhelming

Reports



← Client Information

Data Quality

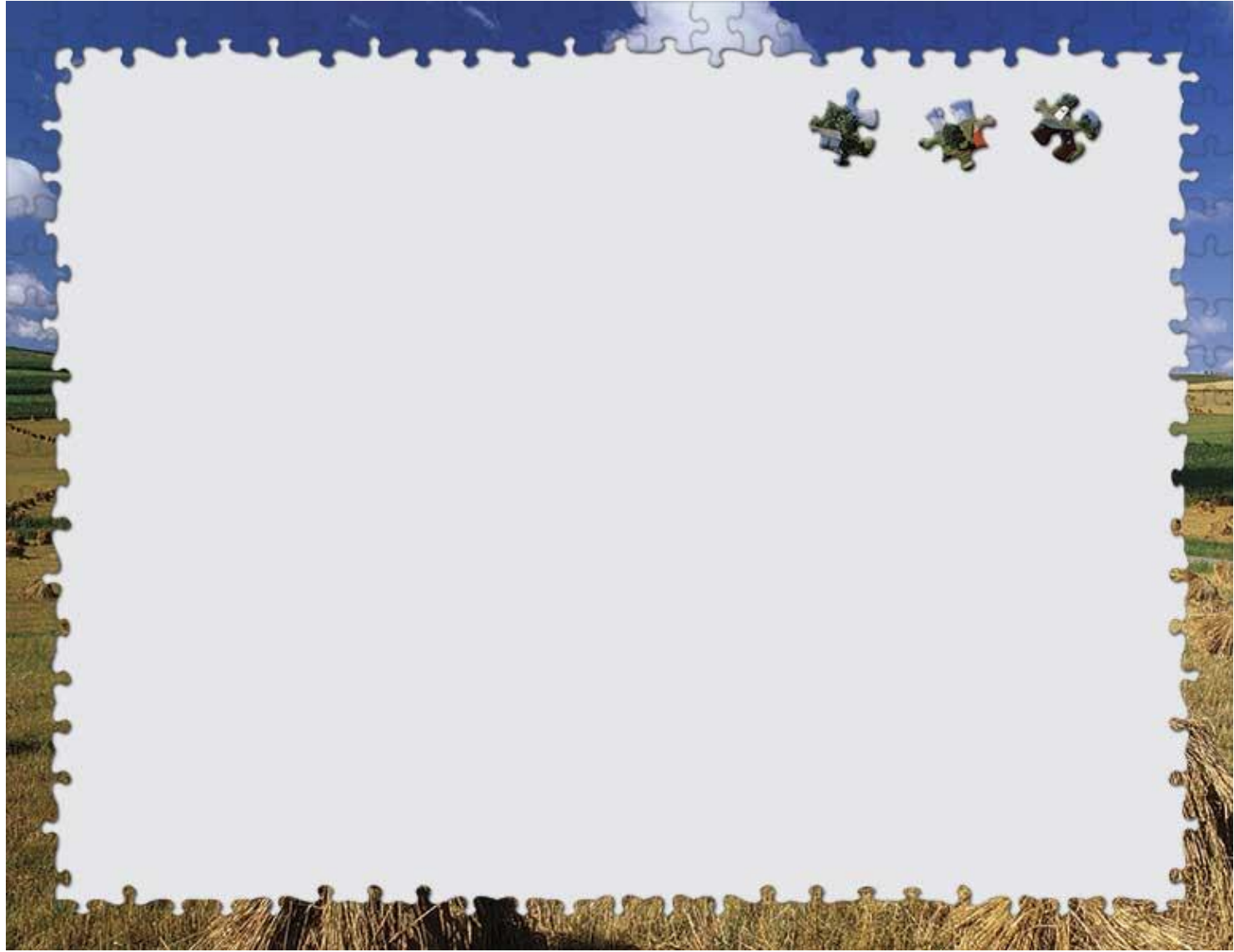


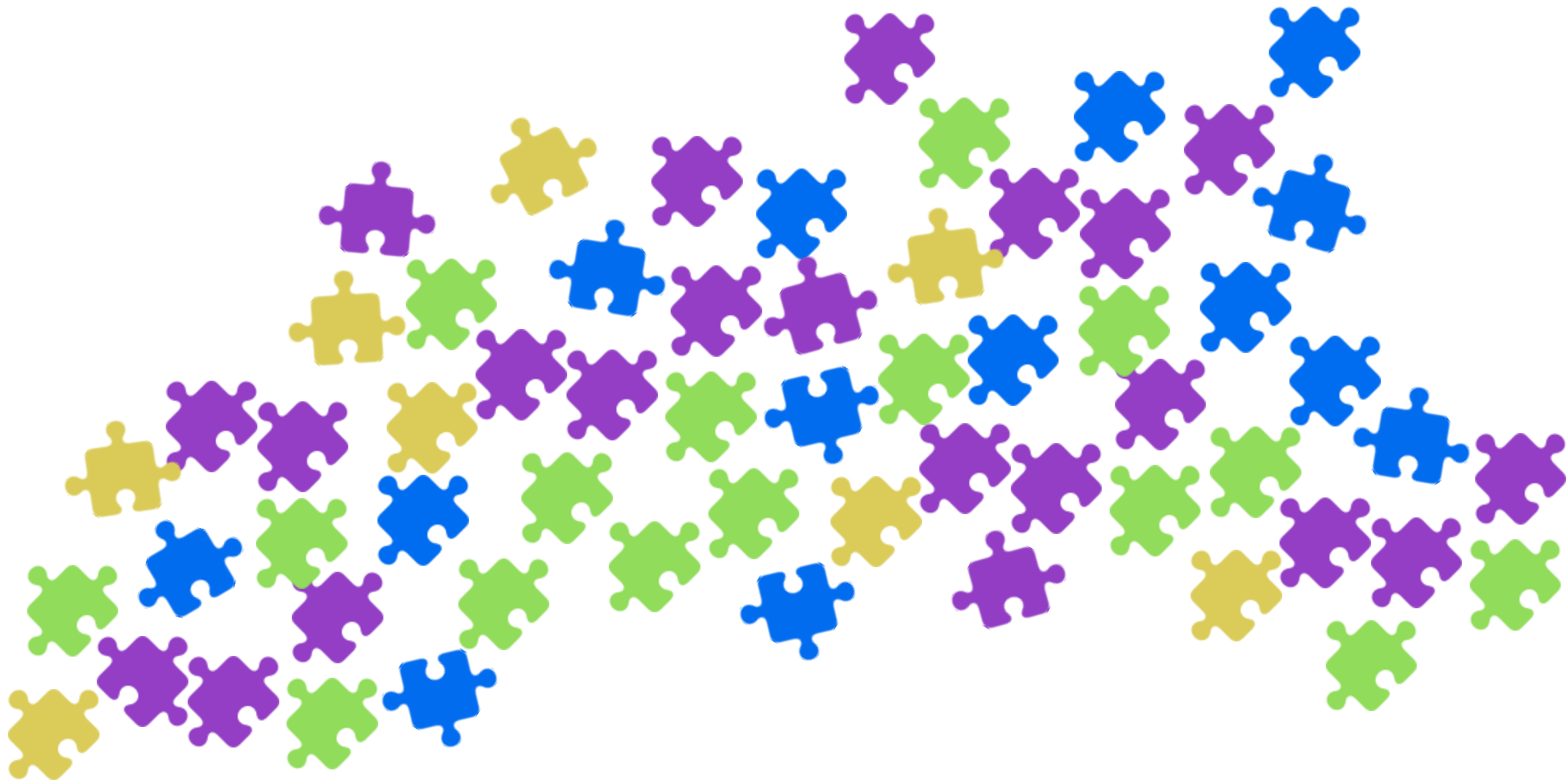
← Data Points

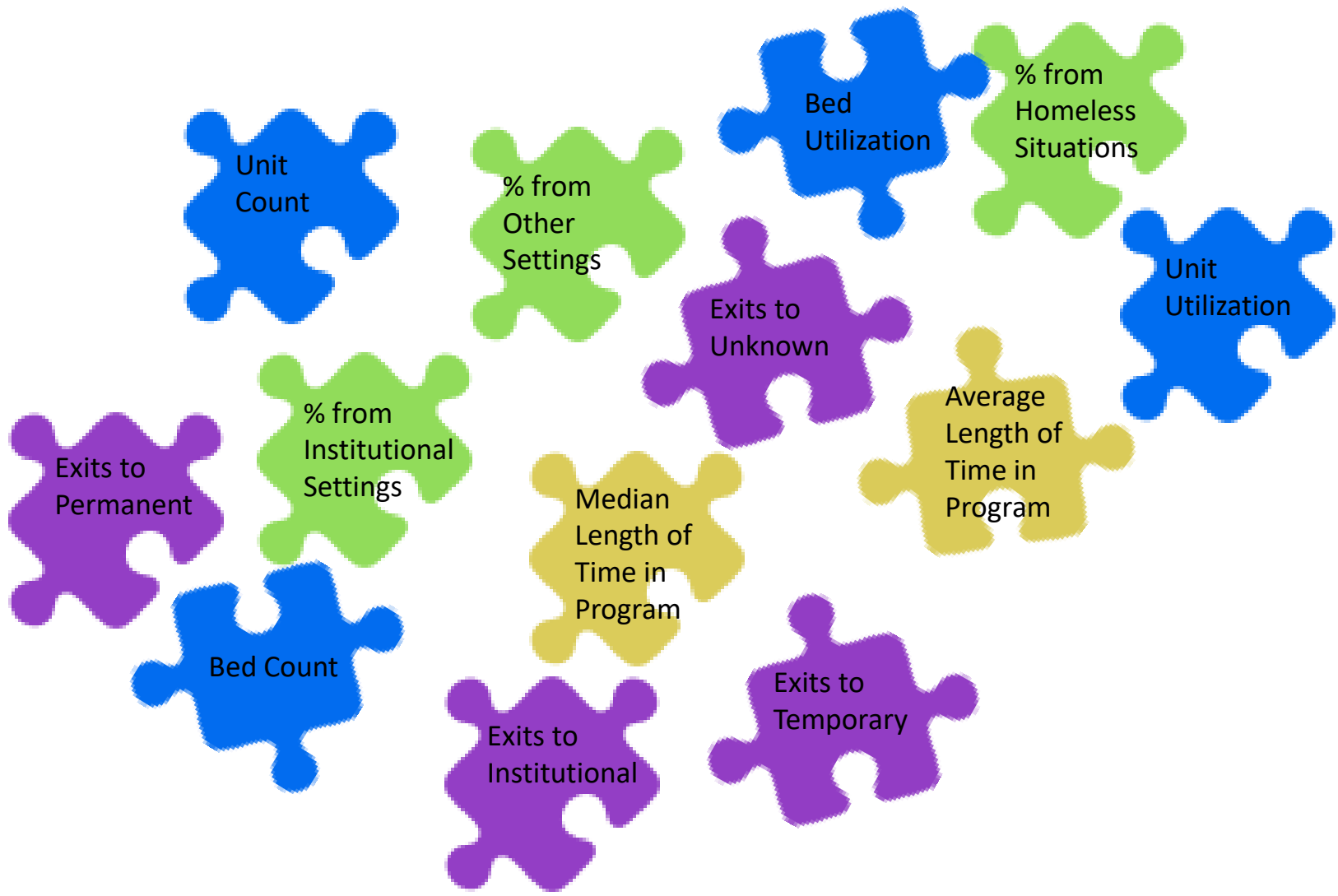
Program Information



← Metrics







Unit
Count

% from
Other
Settings

Bed
Utilization

% from
Homeless
Situations

Unit
Utilization

Exits to
Unknown

Average
Length of
Time in
Program

% from
Institutional
Settings

Median
Length of
Time in
Program

Exits to
Permanent

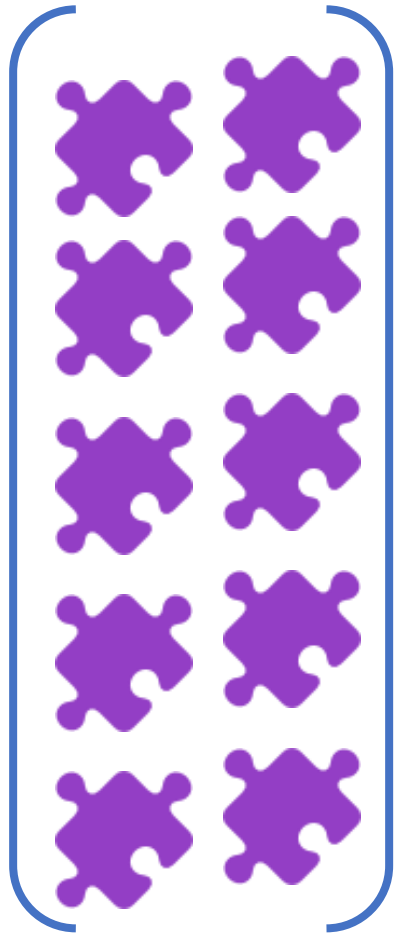
Bed
Count

Exits to
Institutional

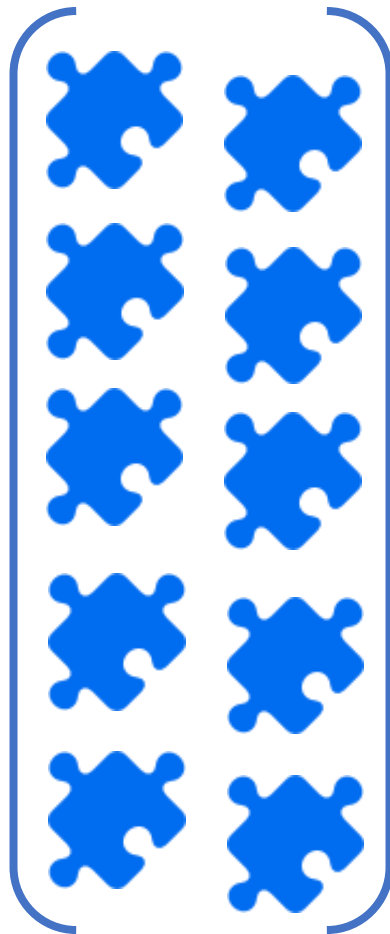
Exits to
Temporary

Let's Talk About Data

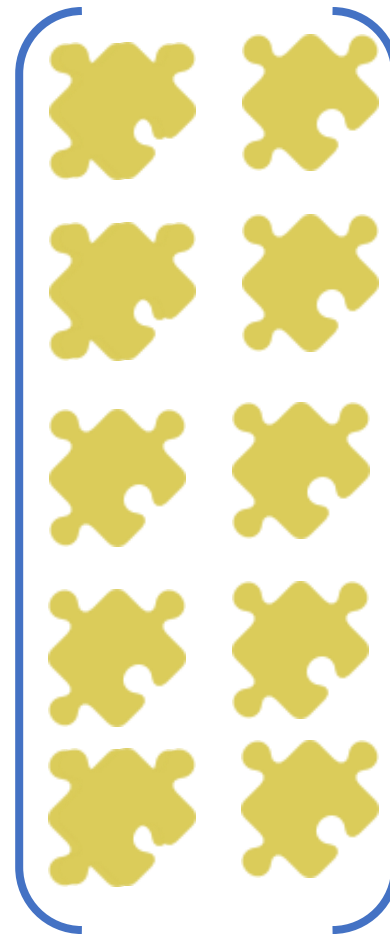
Exits



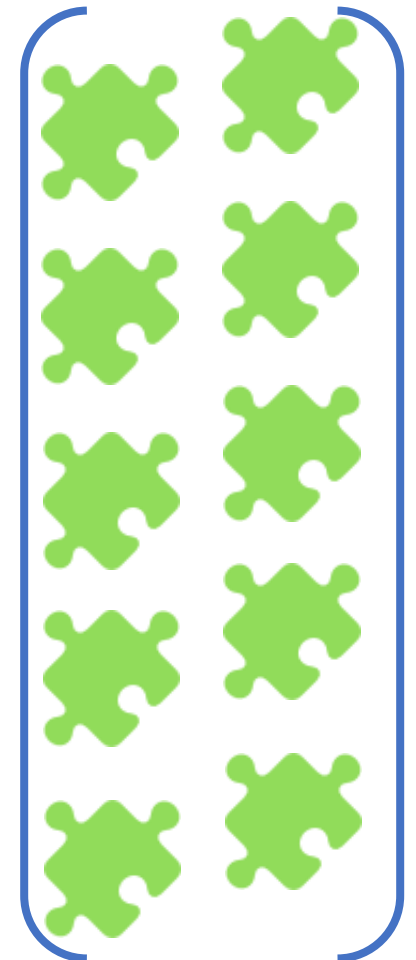
Shelter Statistics



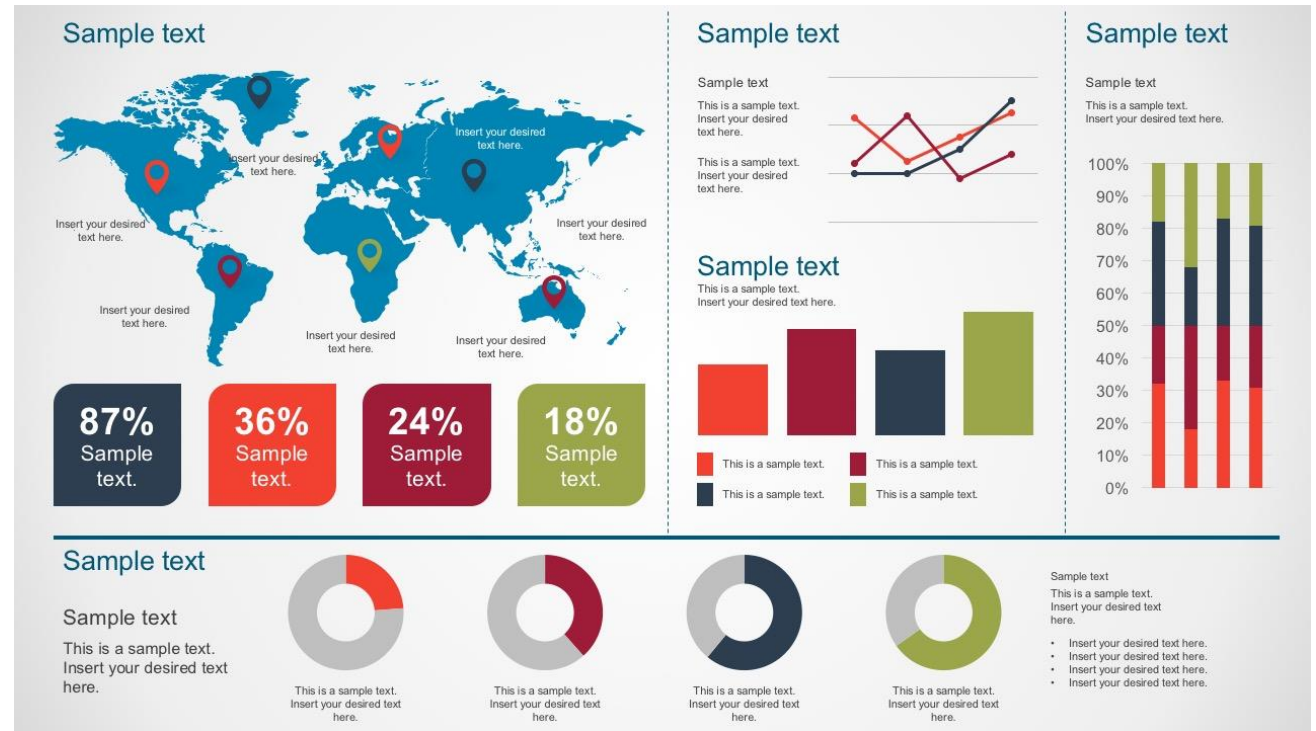
Length of Time
in Program



Prior Living
Situation



Let's talk about Data



But then comes the hard part



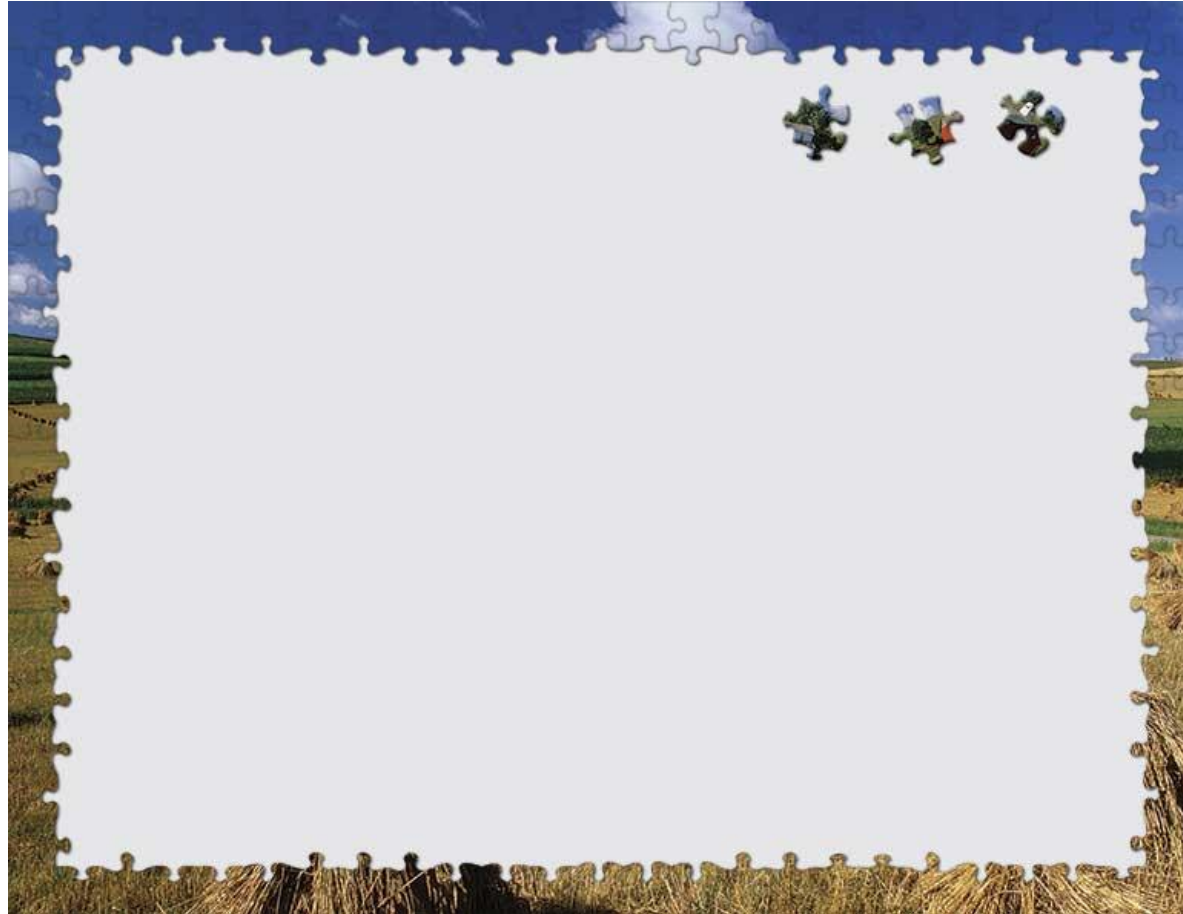
Using Data to Evaluate & Make Decisions

1. Is this project's data of good quality?
2. What key metrics should I use?
3. What questions do I have after looking at the metrics?
4. How can I answer these questions?
5. How can I make decisions based on these data?



Data Quality

DQ – Restating the puzzle metaphor





Good Data Quality is Important

Starting with the edge pieces provides a good starting point for completing the puzzle (i.e., getting the rest of the story)

Same is true with data: knowing that a client was served by your agency over a specific date range (i.e., the foundational edge pieces) is helpful, but without those other pieces it create a complete picture

For HMIS entry this means completing entry assessments, annual assessments, updates, VI-SPDATs, etc. as accurately as possible

How Reliable is This Data?

Quality of
your Data

=

Quality of
your decisions



Recommended Metrics

About Metrics



Quantifiable measure used to track, monitor and assess



Inform key programmatic, funding, and policy decisions to drive better outcomes for people experiencing homelessness.



Supports a performance-focused approach



They are often inter-related; we can't just look at 1 to make a decision

What are the key metrics I should use?



Length of Time in Project

The number of days clients/households receive services in a project.

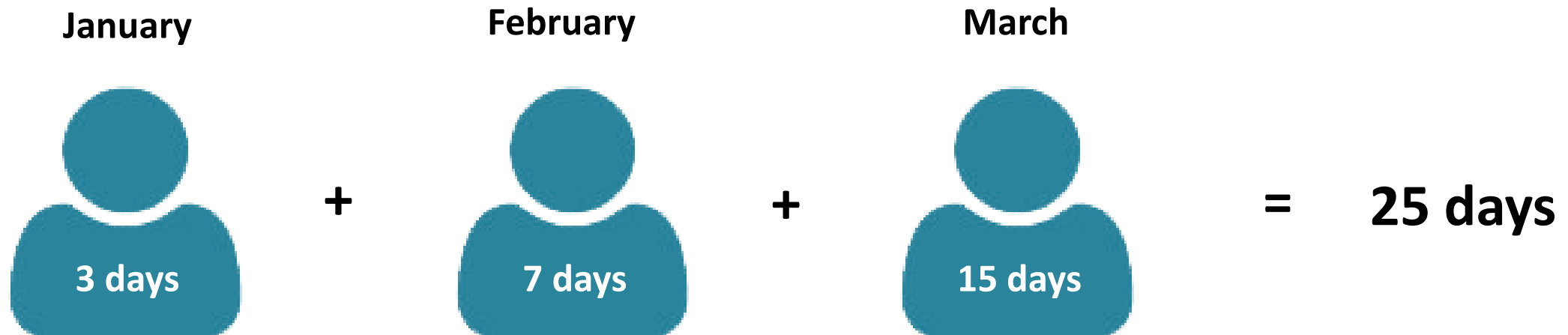
Indicates program's success at delivering services efficiently and moving households into permanent housing quickly. Programs with fewer days from intake to exit can serve more households, helping to meet demand.

This metric is particularly relevant for emergency shelters.

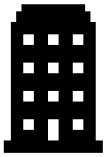
How is Length of Time in Project Measured?

Sum total days of project participation

For each entry, this is measured from project start date to project exit date



Shelter Example



Small emergency shelter



10 beds



All clients are single males and females

Let's Review Mean & Median

Mean Length of Time in Project	168 days
Median Length of Time in Project	30 days



What do you think this means?

Let's Review Detailed Client Data



Mean	168 days
Median	30 days

What stands out to you here?



Several long-term stayers

Mean	168 days
-------------	-----------------

Median	30 days
---------------	----------------

What's going on with the mean?



Mean	168 days
-------------	-----------------

Median	30 days
---------------	----------------

UNPACK IT: Don't just rely on the mean & median



Mean	168 days
Median	30 days



Mean	17 days
Median	30 days

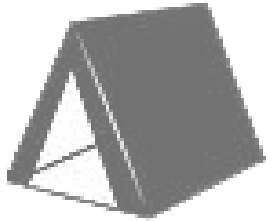
Exits to Permanent Housing

The number of clients/households exiting services to a permanent housing placement.

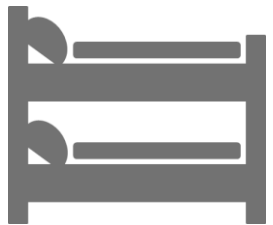
Indicates success in achieving the ultimate goal for the homeless population – securing permanent housing.

This metric is particularly relevant for all project types.

Example 1- 100 clients exited a large ES



25 clients exited to a place not fit for human habitation



50 clients exited to emergency shelter



25 clients exited to permanent housing



Where are the clients going?

Exits to Permanent Housing

Look at the overall number and the percentage of exits to permanent housing destinations

100 Exits

25 Exits to Permanent Housing Destinations

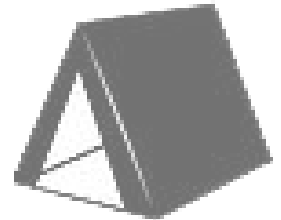
75 Exits to Homeless Destinations

Rate of Exits to Permanent Housing = 25%

Example 2- 100 clients exited a large ES



50 clients are missing exit destination data



25 clients exited to a place not fit for human habitation



25 clients exited to permanent housing



Where are the clients going?

Exits to Permanent Housing- Missing Data

Half of the data is missing; we don't know where our clients are going when they leave our project.

Missing Destinations are Negative Destinations.

100 Exits

50 Exits to Unknown Destinations

25 Exits to Homeless Destinations

25 Permanent Housing Destinations

Rate of Exits to Permanent Housing = 25%

Improving Exits to Permanent Housing

What steps can we take to increase the rate of permanent housing exits?

How can we improve data collection/entry of exit destination information?

Length of Time Until Move-In

The number of days clients/households between project start date and housing move-in date (permanent housing placement).

Indicates the success of projects in swiftly permanently housing clients/households. Shorter wait times mean clients/households spend fewer days homeless.

This metric is particularly relevant for PH project types.

Housing Move-in Date MINUS Project Start Date



2/14/18

Project Start Date

PH project staff determine Henrietta is eligible for project and admit her to provide services



4/1/18

Housing Move-in Date

Henrietta Moved into PH unit

46 days

Let's Review Mean & Median

Mean Length of Time until Move-In	168 days
Median Length of Time in Move-In	30 days



What do you think this means?

Let's Review Detailed Client Data



Mean	168 days
Median	30 days

What stands out to you here?



It took 1 year to house 4 clients

Mean	168 days
-------------	-----------------

Median	30 days
---------------	----------------

What do you notice about the Length of Time Until Housed mean?



Mean	168 days
-------------	-----------------

Median	30 days
---------------	----------------

Other Recommended Metrics

Utilization Rate

Rate of Long-term Stayers (180+ days)

Rate of Maintenance or Increase of Income and/or Benefits

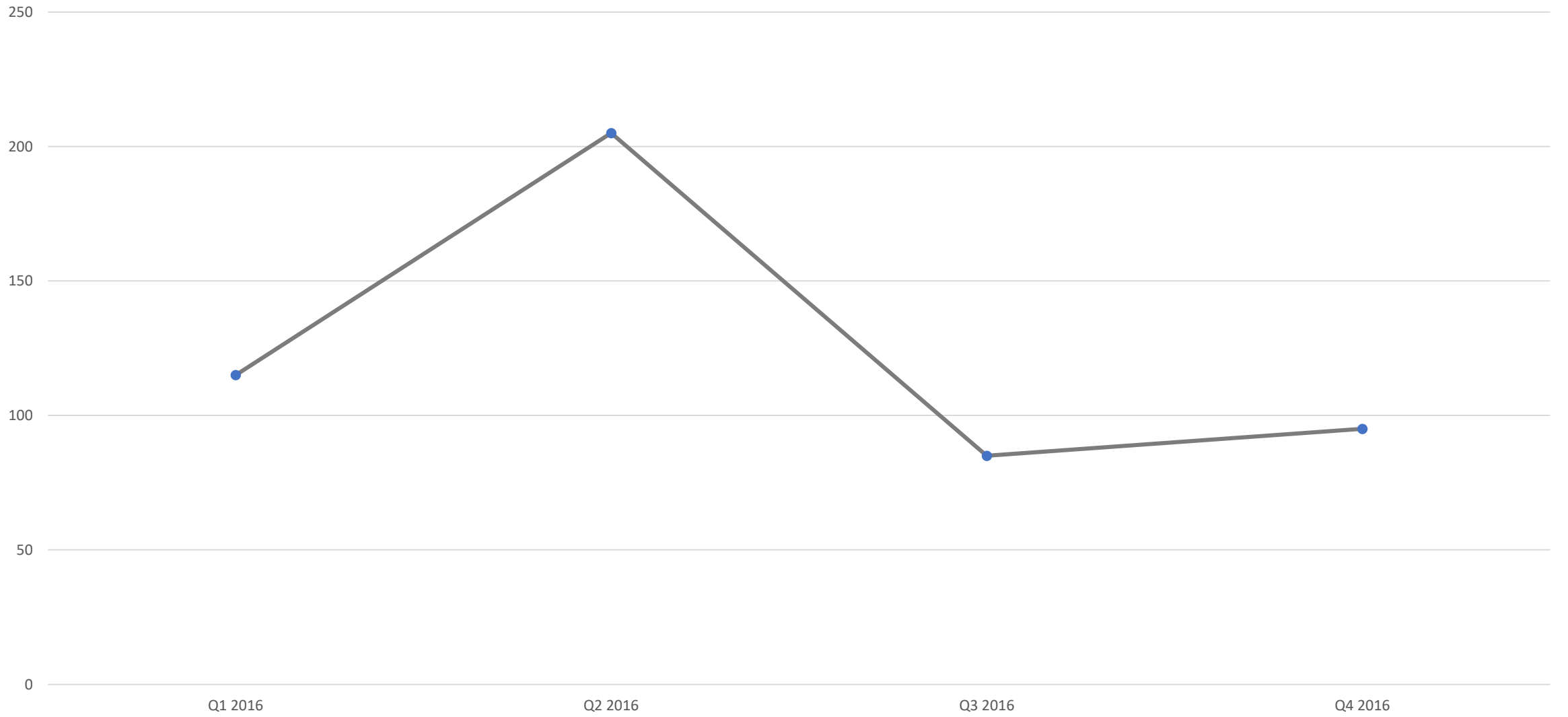
Housing Stability (After 3 months)

Time between coordinated entry and PH placement



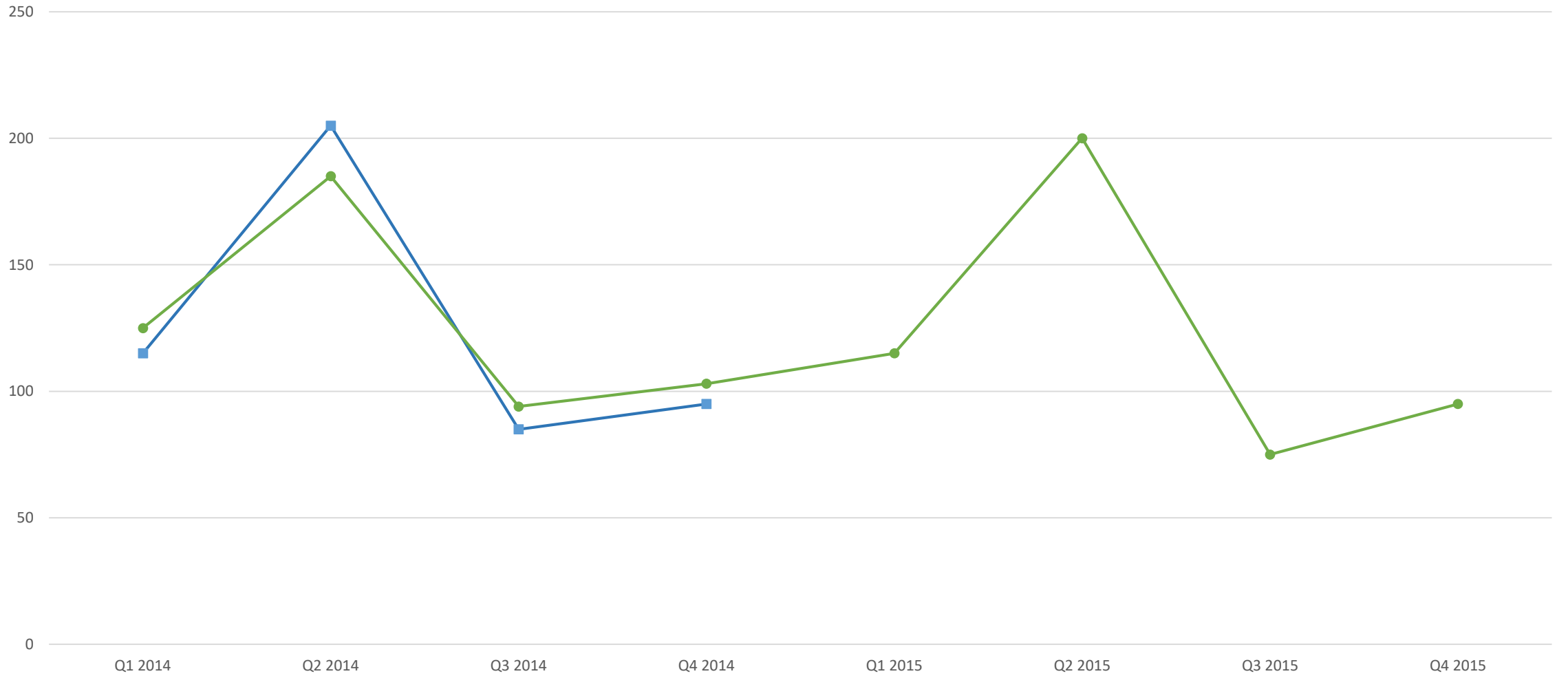
Considerations for Data Review

Clients Served ('16)

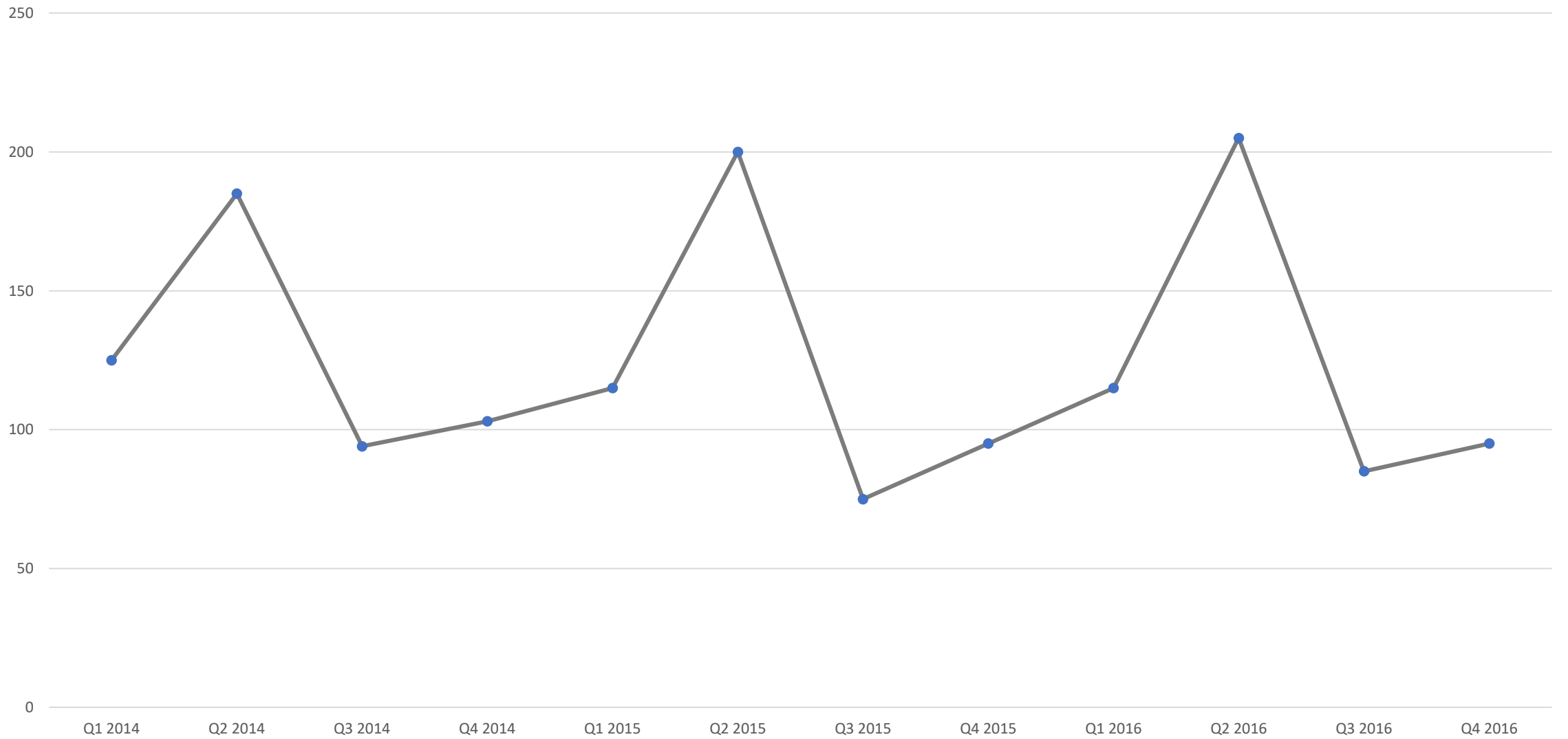


Clients Served

—■— 2016 —●— 2014 to 2015



Clients Served ('14-'16)



Context is everything!

Who

- Where did this data come from?
- What biases may these people have?
- How can we control those factors?

When

- How does seasonality affect my outputs?
- Does my data show the impact of external funding cycles?
- Am I trying to predict forward or analyze past performance?

Why

- What questions do I want to answer with this data?
- Why do the answers to those questions matter to my Org? Board? Community?

How/Where

- What was the data collection methodology?
- How could this lead to issues with my data?

Ways to add context to your data

Filtering: Cut out the noise and focus on what you need

Grouping: Identify which data points/sources are similar

Sorting: Understanding and ranking by importance

Visualization: Speaks louder than raw numbers

Be skeptical: Put yourself in the shoes of your funders, Board, etc.

Trends > Data Points: A snapshot vs a movie



Data Sources

Let's Get on the Same Page

APR = Annual Performance Report

CoC = Continuum of Care

CAPER = Consolidated Annual Performance and Evaluation Report

DQ = Data Quality

ESG = Emergency Solutions Grant

HMIS = Homeless Management Information System

UDE = Universal Data Elements

Use your HMIS Data

One of the best data sources is HMIS because it tracks and sorts client information and has built-in reporting capability

However, HMIS data like all data requires good quality in order to tell a story

HMIS Dashboard Reports- quick and easy

Many HMIS agencies and projects have CoC or ESG funding

- ESG projects submit CAPER reports
- CoC projects submit APR reports

Both reports flag data quality issues, including missing, inaccurate, and/or conflictual data

Caper Validation Table

5a - Report Validation Table

Report Validation Table	
1. Total Number of Persons Served	66
2. Number of Adults (age 18 or over)	38
3. Number of Children (under age 18)	28
4. Number of Persons with Unknown Age	0
5. Number of Leavers	66
6. Number of Adult Leavers	38
7. Number of Adult and Head of Household Leavers	38
8. Number of Stayers	0
9. Number of Adult Stayers	0
10. Number of Veterans	0
11. Number of Chronically Homeless Persons	1
12. Number of Youth Under Age 25	2
13. Number of Parenting Youth Under Age 25 with Children	1
14. Number of Adult Heads of Household	33
15. Number of Child And Unknown-Age Heads of Household	0
16. Heads of Households and Adult Stayers in the Project 365 Days or More	0

CAPER DQ: UDEs, Income, Exits

6a - Data Quality: Personally Identifiable Information

Data Element	Client Doesn't Know/Client Refused	Information Missing	Data Issues	% of Error Rate
Name (3.1)	0	0	0	0%
SSN (3.2)	0	0	0	0%
Date of Birth (3.3)	0	0	0	0%
Race (3.4)	0	0		0%
Ethnicity (3.5)	0	0		0%
Gender (3.6)	0	0		0%
Overall Score				0%

6b - Data Quality: Universal Data Elements

Data Element	Error Count	% of Error Rate
Veteran Status (3.7)	0	0%
Project Start Date (3.10)	0	0%
Relationship to Head of Household (3.15)	0	0%
Client Location (3.16)	0	0%
Disabling Condition (3.8)	0	0%

6c - Data Quality: Income and Housing Data Quality

Data Element	Error Count	% of Error Rate
Destination (3.12)	0	0%
Income and Sources (4.2) at Start	0	0%
Income and Sources (4.2) at Annual Assessment	0	0%
Income and Sources (4.2) at Exit	0	0%

CAPER DQ: Chronically Homeless

6d - Data Quality: Chronic Homelessness							
Entering into project type	Count of total records	Missing time in institution (3.917.2)	Missing time in housing (3.917.2)	Approximate Date started (3.917.3) DK/R/missing	Number of times (3.917.4) DK/R/missing	Number of months (3.917.5) DK/R/missing	% of records unable to calculate
ES, SH, Street Outreach	0			0	0	0	0%
TH	0	0	0	0	0	0	0%
PH (all)	24	0	0	0	0	0	0%
Total	24						0%

CAPER DQ: Timeliness

6e - Data Quality: Timeliness

Time For Record Entry	Number of Project Start Records	Number of Project Exit Records
0 days	65	12
1 - 3 days	1	4
4 - 6 days	0	0
7 - 10 days	0	0
11+ days	0	50

What other puzzle pieces can be found in CAPER reports?

Chronically Homeless Status

26b - Number of Chronically Homeless Persons by Household					
	Total	Without Children	With Children and Adults	With Only Children	Unknown Household Type
Chronically Homeless	1	1	0	0	0
Not Chronically Homeless	65	17	48	0	0
Client Doesn't Know/Client Refused	0	0	0	0	0
Data not collected	0	0	0	0	0
Total	66	18	48	0	0

Disabilities

13b1 - Physical and Mental Health Conditions of Leavers

	Total Persons	Without Children	With Children and Adults	With Only Children	Unknown Household Type
Mental Health Problem	15	14	1	0	0
Alcohol Abuse	2	2	0	0	0
Drug Abuse	3	3	0	0	0
Both Alcohol and Drug Abuse	2	2	0	0	0
Chronic Health Condition	2	2	0	0	0
HIV/AIDS	0	0	0	0	0
Development Disability	2	1	1	0	0
Physical Disability	11	10	1	0	0

13c1 - Physical and Mental Health Conditions of Stayers

	Total Persons	Without Children	With Children and Adults	With Only Children	Unknown Household Type
Mental Health Problem	1	1	0	0	0
Alcohol Abuse	0	0	0	0	0
Drug Abuse	0	0	0	0	0
Both Alcohol and Drug Abuse	0	0	0	0	0
Chronic Health Condition	0	0	0	0	0
HIV/AIDS	0	0	0	0	0
Development Disability	0	0	0	0	0
Physical Disability	0	0	0	0	0

Non-Cash Benefits & Health Insurance

20a - Type of Non-Cash Benefit Source			
	Benefit at Start	Benefit at Latest Annual Assessment for Stayers	Benefit at Exit for Leavers
Supplemental Nutrition Assistance Program (SNAP) (Previously known as Food Stamps)	92	0	108
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	5	0	4
TANF Child Care Services	1	0	0
TANF Transportation Services	2	0	1
Other TANF-Funded Services	1	0	0
Other Source	1	0	0
21 - Health Insurance			
	At Start	At Annual Assessment for Stayers	At Exit for Leavers
MEDICAID	156	0	151
MEDICARE	25	0	26
State Children's Health Insurance Program	0	0	0
Veteran's Administration (VA) Medical Services	10	0	9
Employer-Provided Health Insurance	9	0	10
Health Insurance obtained through COBRA	0	0	0
Private Pay Health Insurance	8	0	10
State Health Insurance for Adults	0	0	0
Indian Health Services Program	0	0	0
Other	1	0	1
No Health Insurance	206	0	191
Client doesn't know/Client refused	0	0	0
Data not collected	0	0	0
Number of stayers not yet required to have an annual assessment		18	
1 Source of Health Insurance	172	0	168
More than 1 Source of Health Insurance	17	0	18

Prior Living Situation

15 - Living Situation					
	Total	Without Children	With Children and Adults	With Only Children	Unknown Household Type
Homeless Situations					
Emergency shelter, including hotel or motel paid for with emergency shelter voucher	32	15	17	0	0
Transitional housing for homeless persons (including homeless youth)	0	0	0	0	0
Place not meant for habitation	6	3	3	0	0
Safe Haven	0	0	0	0	0
Interim Housing	0	0	0	0	0
Subtotal	38	18	20	0	0
Institutional Settings					
Psychiatric hospital or other psychiatric facility	0	0	0	0	0
Substance abuse treatment facility or detox center	0	0	0	0	0
Hospital or other residential non-psychiatric medical facility	0	0	0	0	0
Jail, prison, or juvenile detention facility	0	0	0	0	0
Foster care home or foster care group home	0	0	0	0	0
Long-term care facility or nursing home	0	0	0	0	0
Residential project or halfway house with no homeless criteria	0	0	0	0	0
Subtotal	0	0	0	0	0
Other Locations					
Permanent Housing (other than RRH) for formerly homeless persons	0	0	0	0	0
Owned by client, no ongoing housing subsidy	0	0	0	0	0
Owned by client, with ongoing housing subsidy	0	0	0	0	0
Rental by client, no ongoing housing subsidy	0	0	0	0	0
Rental by client, with VASH subsidy	0	0	0	0	0
Rental by client with GPD TIP subsidy	0	0	0	0	0
Rental by client, with other housing subsidy (including RRH)	0	0	0	0	0
Hotel or motel paid for without emergency shelter voucher	0	0	0	0	0
Staying or living in a friend's room, apartment or house	0	0	0	0	0
Staying or living in a family member's room, apartment or house	0	0	0	0	0
Client Doesn't Know/Client Refused	0	0	0	0	0
Data not collected	0	0	0	0	0
Subtotal	0	0	0	0	0
Total	38	18	20	0	0

Length of Time in Program

22d - Length of Participation by Household Type					
	Total	Without Children	With Children and Adults	With Only Children	Unknown Household Type
7 days or less	7	0	7	0	0
8 to 14 days	4	0	4	0	0
15 to 21 days	0	0	0	0	0
22 to 30 days	1	1	0	0	0
31 to 60 days	2	2	0	0	0
61 to 90 days	4	1	3	0	0
91 to 180 days	38	8	30	0	0
181 to 365 days	10	6	4	0	0
366 to 730 Days (1-2 Yrs)	0	0	0	0	0
731 to 1,095 Days (2-3 Yrs)	0	0	0	0	0
1,096 to 1,460 Days (3-4 Yrs)	0	0	0	0	0
1,461 to 1,825 Days (4-5 Yrs)	0	0	0	0	0
More than 1,825 Days (>5 Yrs)	0	0	0	0	0
Data not collected	0	0	0	0	0
Total	66	18	48	0	0

Length of Time Until Housed

22c - RRH Length of Time between Project Start Date and Housing Move-in Date

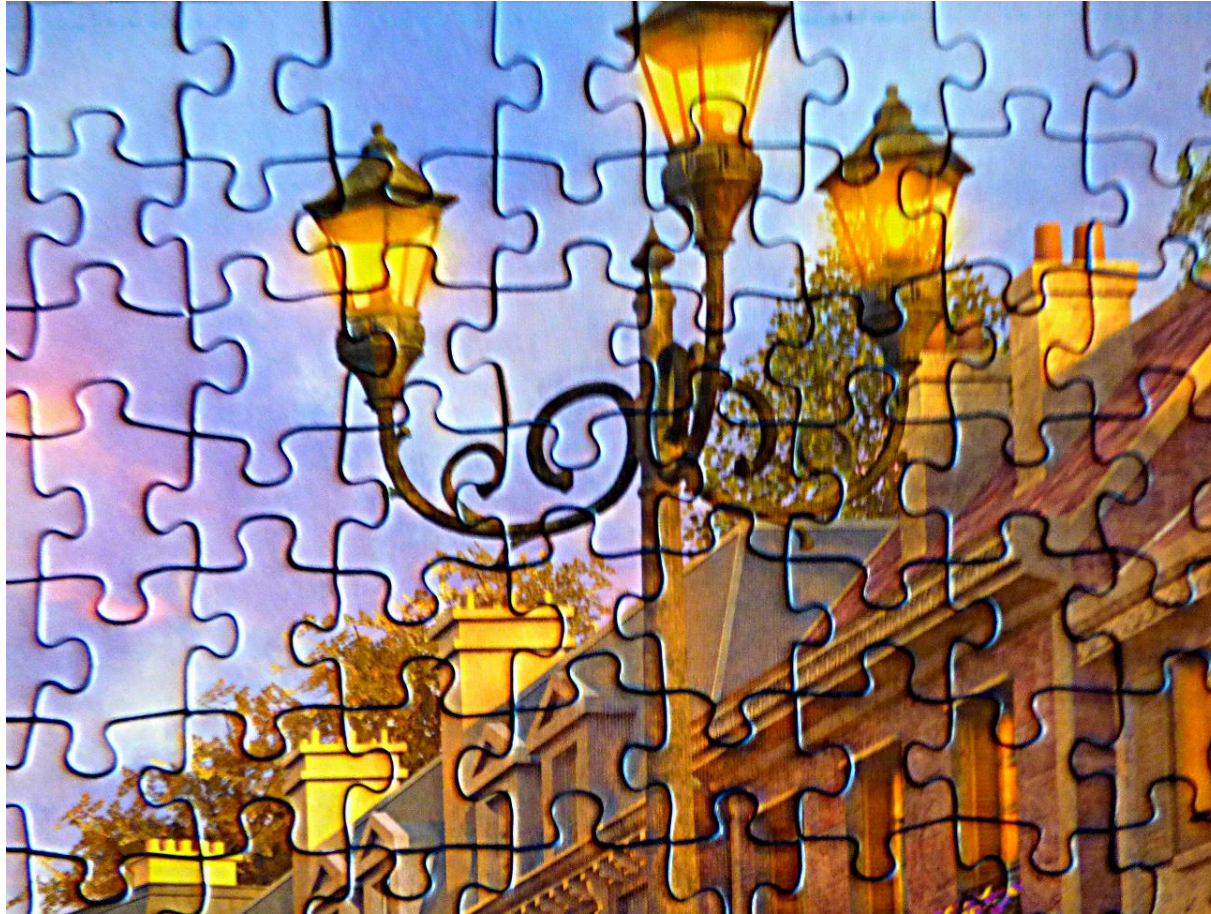
	Total	Without Children	With Children and Adults	With Only Children	Unknown Household Type
7 days or less	16	4	12	0	0
8 to 14 days	13	6	7	0	0
15 to 21 days	1	1	0	0	0
22 to 30 days	6	1	5	0	0
31 to 60 days	23	5	18	0	0
61 to 180 days	7	1	6	0	0
181 to 365 days	0	0	0	0	0
366 to 730 Days (1-2 Yrs)	0	0	0	0	0
Data not collected	0	0	0	0	0
Total	66	18	48	0	0

Exits

23c - Exit Destination - All persons

	Total	Without Children	With Children and Adults	With Only Children	Unknown Household Type
Permanent Destinations					
Moved from one HOPWA funded project to HOPWA PH	0	0	0	0	0
Owned by client, no ongoing subsidy	0	0	0	0	0
Owned by client, with ongoing subsidy	0	0	0	0	0
Rental by client, no ongoing subsidy	28	21	7	0	0
Rental by client, with VASH subsidy	0	0	0	0	0
Rental by client with GPD TIP subsidy	0	0	0	0	0
Rental by client, other ongoing subsidy	0	0	0	0	0
Permanent Housing (other than RRH) for formerly homeless persons	0	0	0	0	0
Staying or living with family, permanent tenure	4	4	0	0	0
Staying or living with friends, permanent tenure	0	0	0	0	0
Rental by client, with RRH or equivalent subsidy	12	3	9	0	0
Subtotal	44	28	16	0	0
Temporary Destinations					
Emergency shelter, including hotel or motel paid for with emergency shelter voucher	0	0	0	0	0
Moved from one HOPWA funded project to HOPWA TH	0	0	0	0	0
Transitional housing for homeless persons (including homeless youth)	1	1	0	0	0
Staying or living with family, temporary tenure (e.g., room, apartment or house)	18	14	4	0	0
Staying or living with friends, temporary tenure (e.g., room apartment or house)	40	40	0	0	0
Place not meant for habitation (e.g., a vehicle, an abandoned building, bus/train/subway station/airport or anywhere outside)	0	0	0	0	0
Safe Haven	0	0	0	0	0
Hotel or motel paid for without emergency shelter voucher	4	2	2	0	0
Subtotal	63	57	6	0	0

What can the complete picture tell us?



What can the complete picture tell us?

Demographic information about the clients we serve

The number of people served in a specific timeframe

The household composition of the people served

The number of Chronically Homeless served to prioritize housing

The number of people served who already have income

The length of time that people remain un-housed

The location of people before and after services



Take Action!

To do after this talk:



Run reports on your projects

CAPER

APR

Other ART reports



Review the reports

Data quality

Client demographics

Key Metrics



Present them in staff meetings

Discuss findings

Ask questions

Develop/determine ways to improve client outcomes

ncceh.org/hmis

access local support for Balance of State, Wake, Durham, & Orange CoCs

919.410.6997 or hmis@ncceh.org
helpdesk for local support