



# Data Dashboards for Insight, Action, and Engagement

April 2019

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# Learning Objectives

You will...

- Recognize what type of dashboard to deploy when: private-facing **or** public-facing
- Become familiar with data visualization best practices
- Understand how to design your own data dashboard

# Rationale

## HUDs Data Strategy

**SNAPS**

Data TA Strategy to Improve Data and Performance

**Characteristic: CoCs have data-driven leaders**

Current status (or near-term)	Majority of CoCs in 3-5 years	Advanced CoCs in 3-5 years
<ul style="list-style-type: none"><li>CoC has a data subcommittee</li></ul>	<ul style="list-style-type: none"><li>CoC shares a vision to end homelessness</li><li>CoC supports culture of performance</li></ul>	<ul style="list-style-type: none"><li>CoCs are engaged with and sharing data and performance metrics across systems of care</li></ul>

# Rationale

## HUDs Data Strategy

### SNAPS

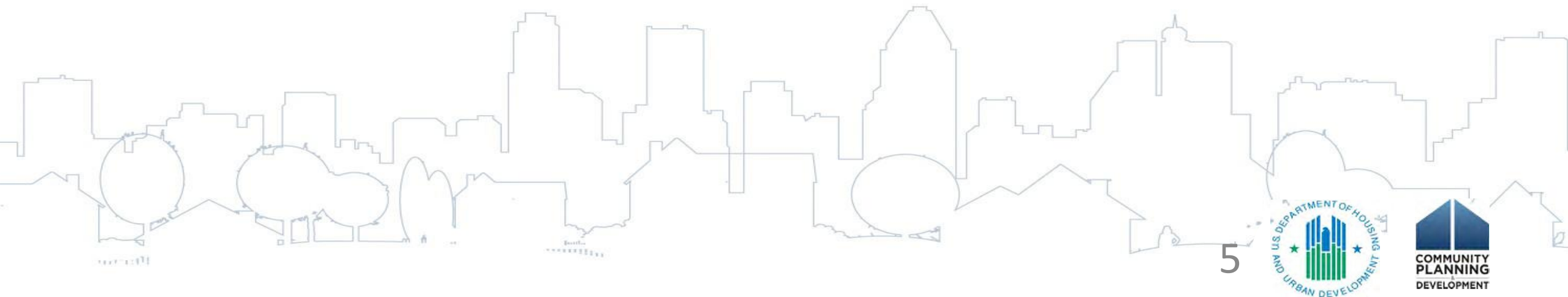
### Data TA Strategy to Improve Data and Performance

**Characteristic: Continuum of Care (CoC) uses data to prioritize existing resources for neediest clients**

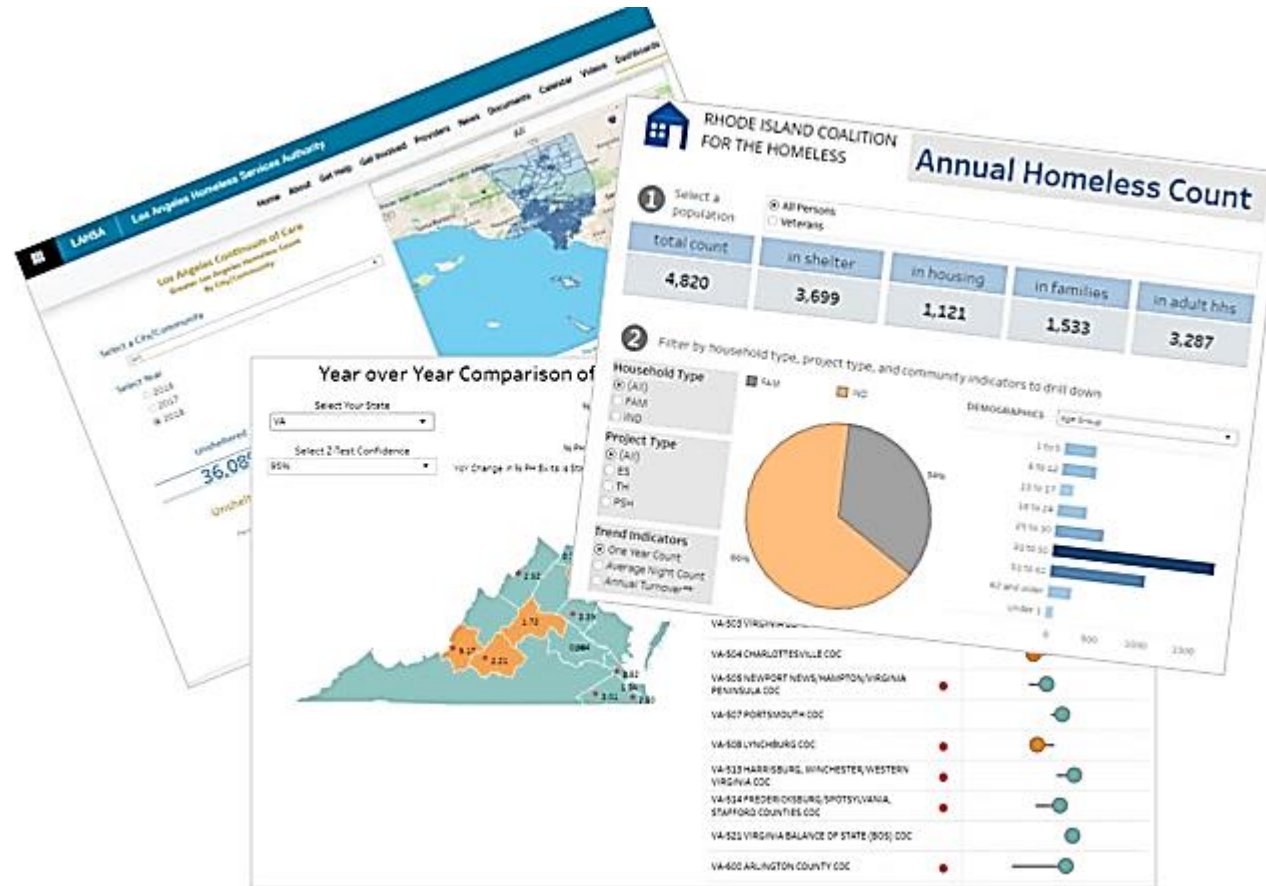
Current status (or near-term)	Majority of CoCs in 3-5 years	Advanced CoCs in 3-5 years
<ul style="list-style-type: none"><li>HUD defines vulnerability (to what) and communities are using all available resources for most vulnerable persons</li></ul>	<ul style="list-style-type: none"><li>Homeless system uses RRH for progressive engagement and 100% of PSH is highly targeted</li></ul>	<ul style="list-style-type: none"><li>Data from non-homeless systems of care is used to prioritize highly vulnerable persons, plus highly targeted prevention (based on local evidence)</li></ul>

# Breakout

## Listening Exercise

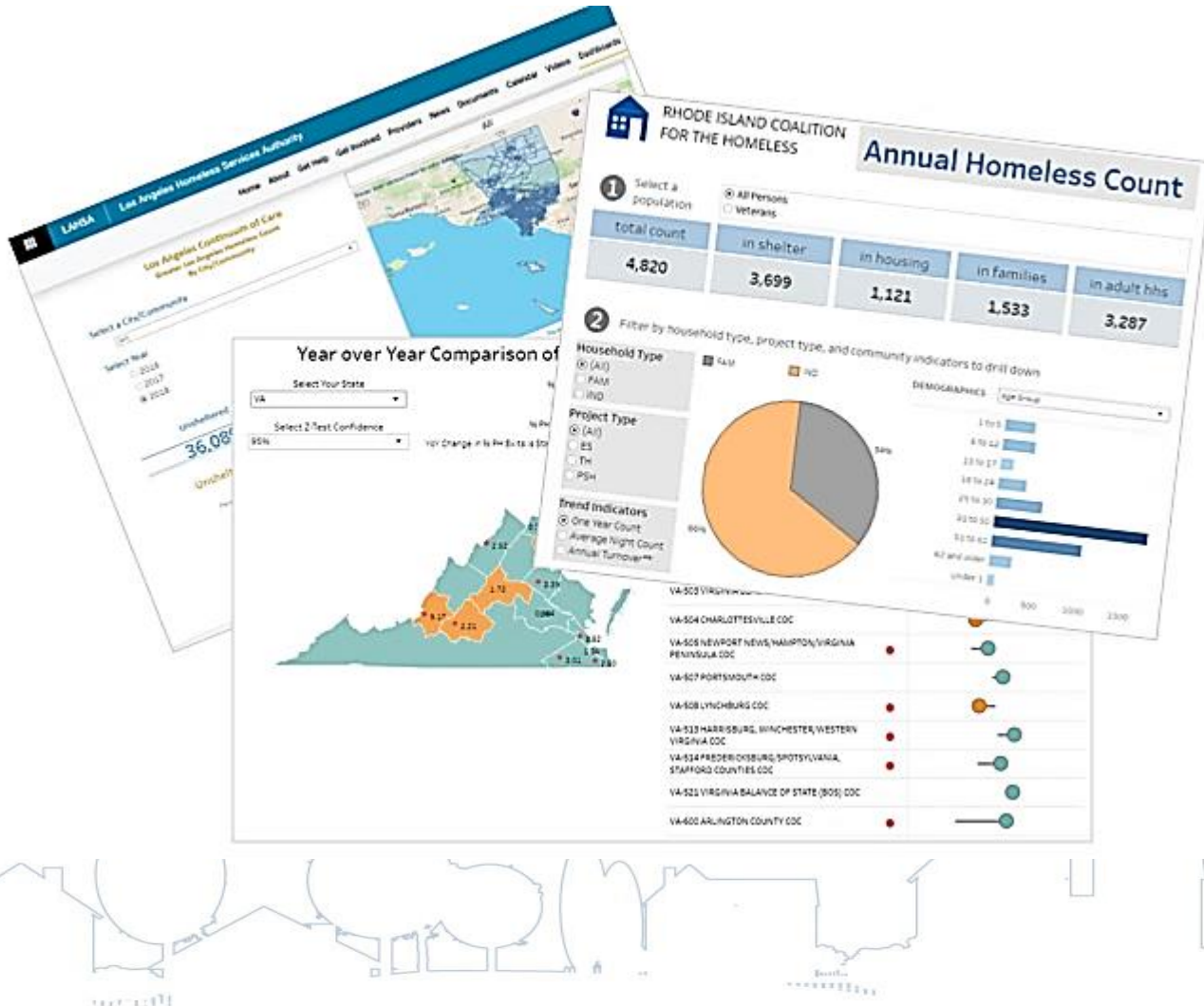


# Public Data Dashboards vs. Private-facing Dashboards





# Public Data Dashboards vs. Private-facing Dashboards

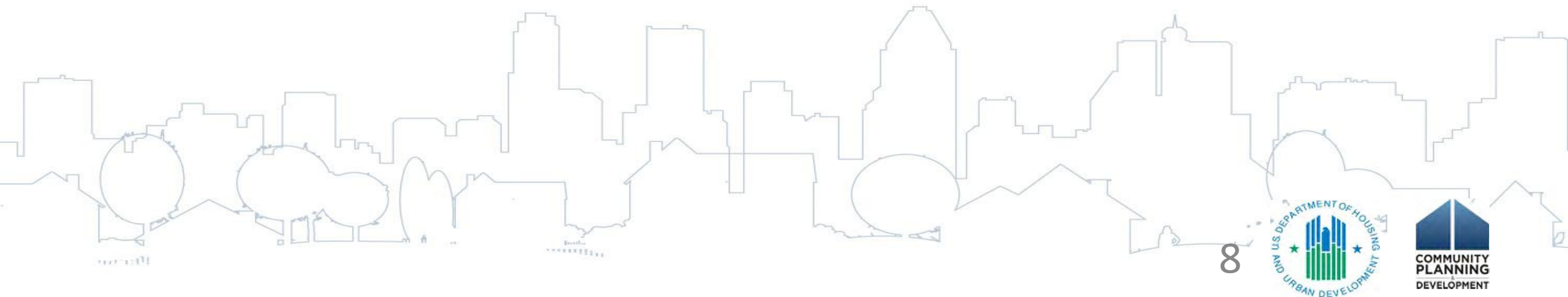


Public-facing dashboards differ from  
Private-facing dashboards  
in  
**Intent**  
and  
**Execution**

# Public Data Dashboards vs. Private-facing Dashboards

Unlike private-facing dashboards, private dashboards are...

- Intended for stakeholder communication, community engagement, and public education
- Designed for understanding, multi-modal sharing, civic action



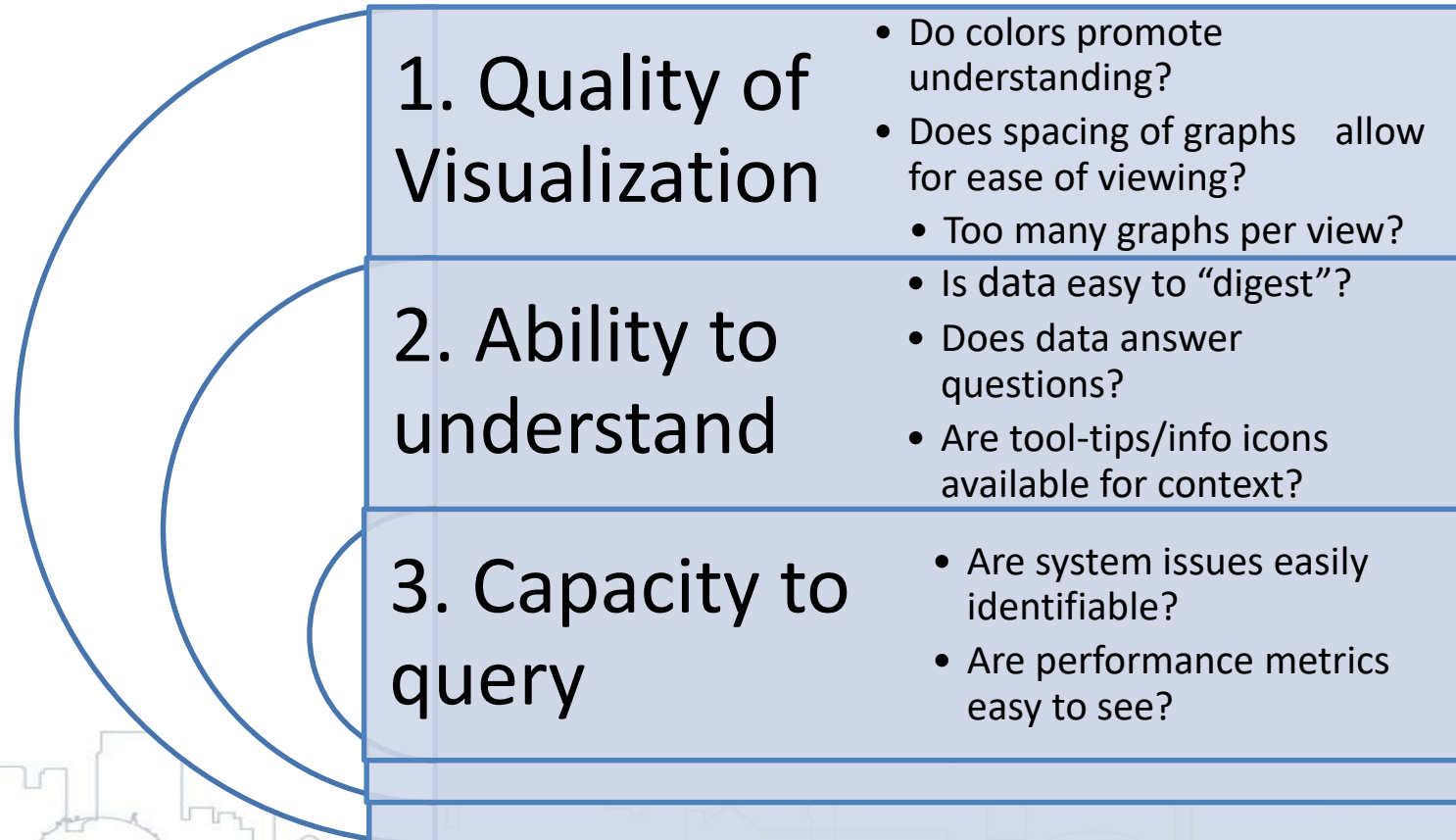


# Data Dashboards

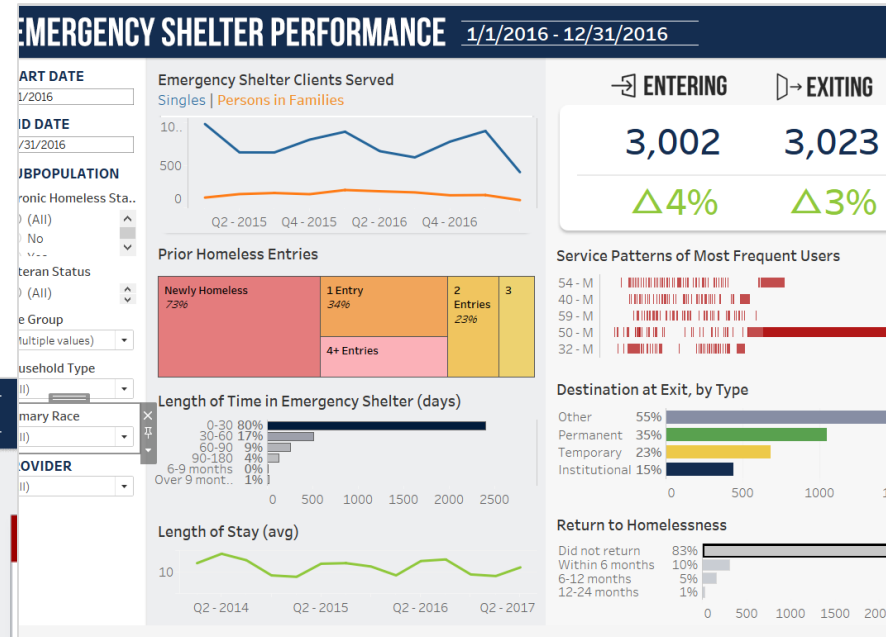
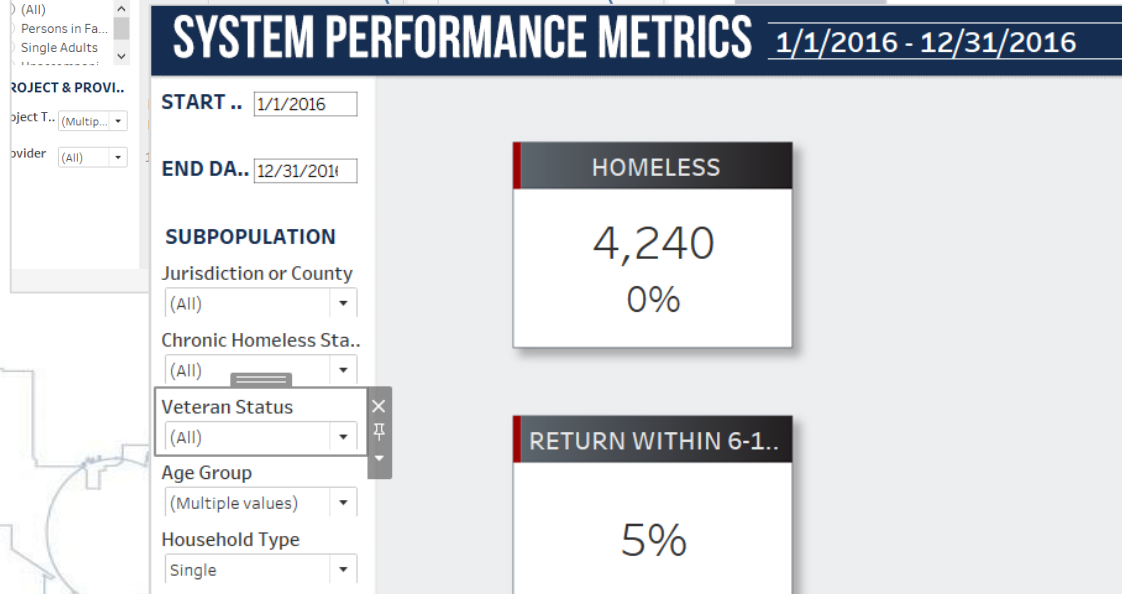
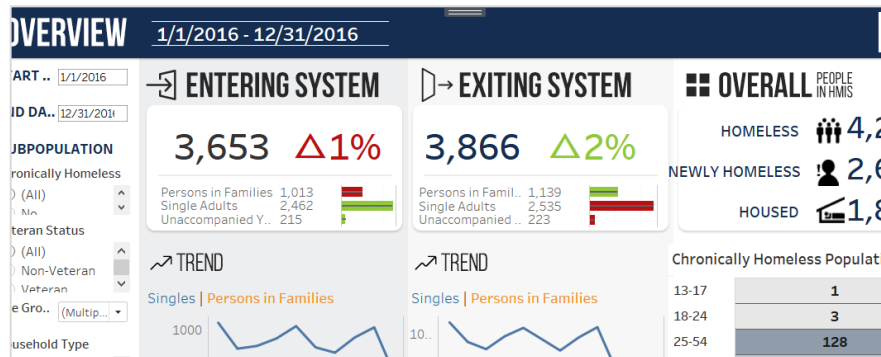
## Assessing Data Dashboards

Learning data viz inductively!

# How do we assess the effectiveness of data dashboards?



# Private-facing Dashboards - How to assess?



# Public-facing Dashboards - How to assess?

Public -  
web-based  
HMIS  
Dashboard

[CHICAGO's Dashboard to End Homelessness](#)

## Chicago's Dashboard to End Homelessness



## Chicago's Dashboard to End Homelessness

All Chicago created **Chicago's Dashboard to End Homelessness** to empower the housing and homeless services system to assess their progress and take action to prevent and end homelessness in Chicago. This Dashboard harnesses data from the Homeless Management Information System (HMIS) to transparently depict how people experiencing homelessness access services and move to housing. This dashboard will be updated on a weekly basis.

### Key System Indicators

One List: Individuals/Households Experiencing Homelessness

**8,513**



# Public-facing Dashboards - How to assess?

Public -  
web-based  
HMIS  
Dashboard

**WASHINGTON STATE  
DEPARTMENT OF COMMERCE**  
[WashingtonBalanceofStateHomeless  
SystemPerformanceRapidRe-  
HousingDashboard/RRHDashboard](https://www.wa.gov/comm/washington-balance-of-state-homeless-system-performance-rapid-re-housing-dashboard/rrhdashboard)

## Dashboards

Published quarterly, project-type specific dashboards provide performance outcome results for counties as a whole, for each agency, and for each project. At this time, only counties that are included in the Balance of State Continuum of Care are included in project-type dashboards.

[Rapid Re-Housing Dashboard](#) (web)

[Temporary Housing Dashboard](#) (web)

[Homelessness Prevention Dashboard](#) (web)

### — Purpose and Use

The purpose of the Homeless System Performance Reports is to promote evidence-based housing interventions that efficiently move people experiencing homelessness into permanent destinations and to improve county data reporting. These system goals are outlined in the [Homeless Housing Strategic Plan](#).

Additionally, these reports provide communities with information regarding their progress towards locally established performance benchmarks.



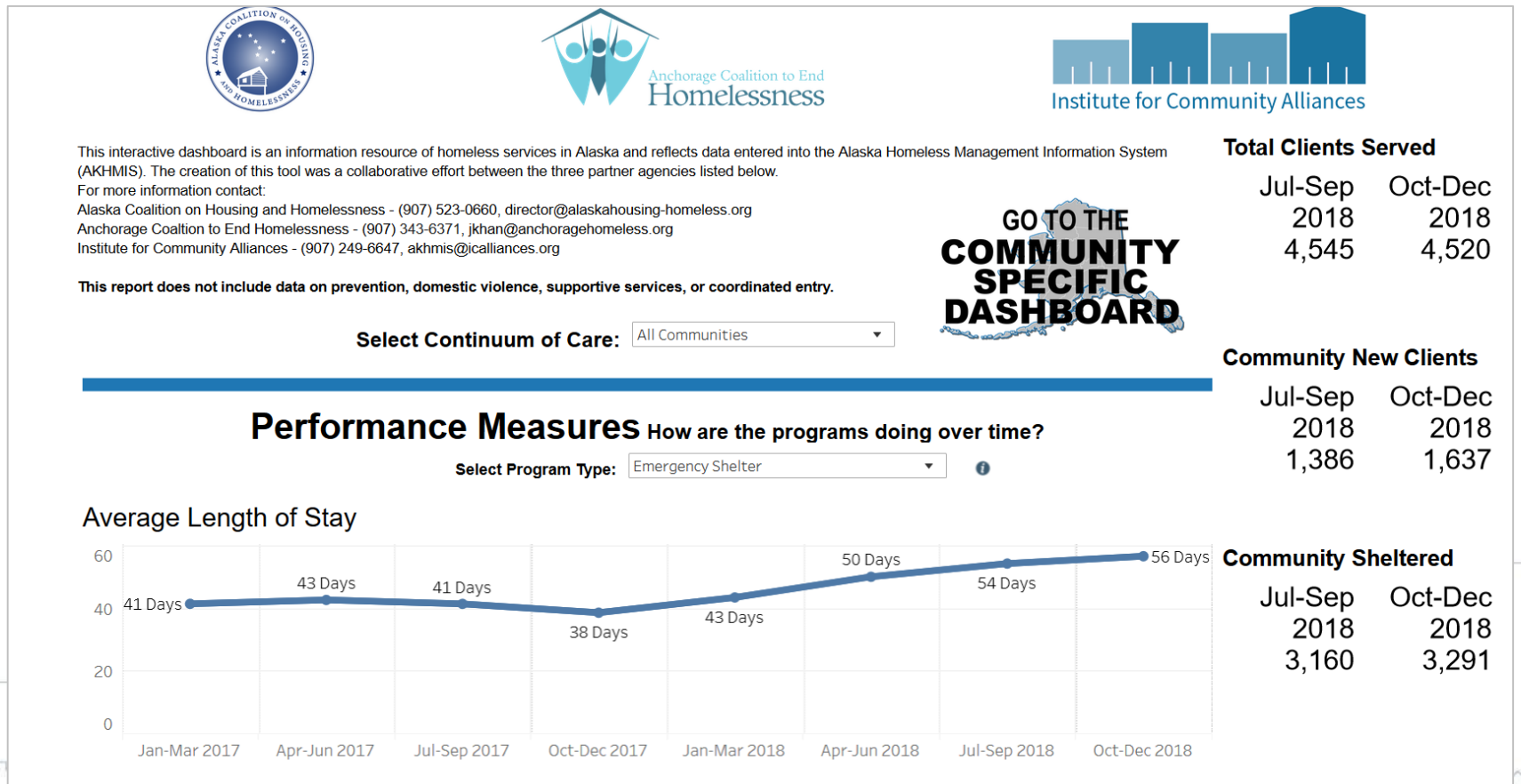


# Public-facing Dashboards - How to assess?

Public –  
web-based  
HMIS  
Dashboard

**ALASKA**

[State of Alaska -  
Homelessness Dashboard](#)



# Dashboard Effectiveness Assessment

Assessment/ critical analysis questions:

- How well do dashboards guide viewers *through* the data?
- Is there a sense of the “whole”? Does the data dashboard walk viewers through a *data story*?
- Do dashboards help viewer/s move data into action?  
Promote shared understanding?

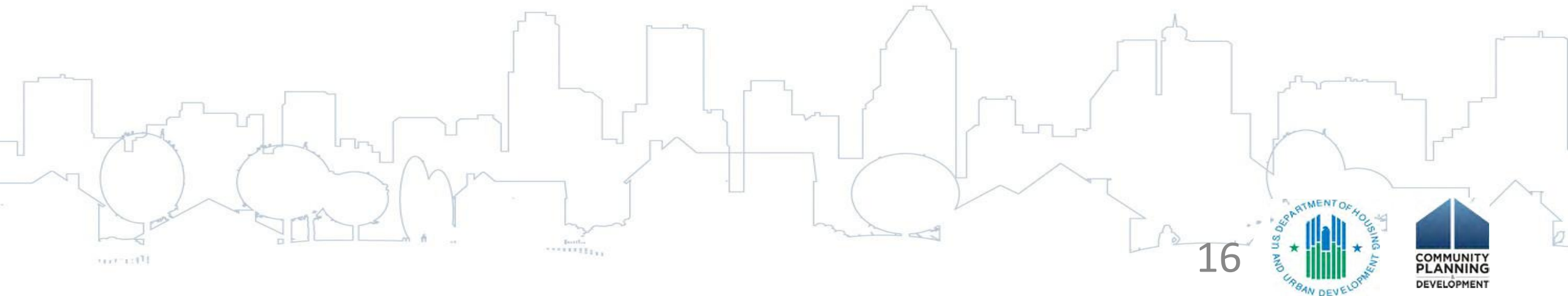
# Dashboard Effectiveness Assessment

## **Group discussion**

Pros and cons of the framework

Additional considerations?

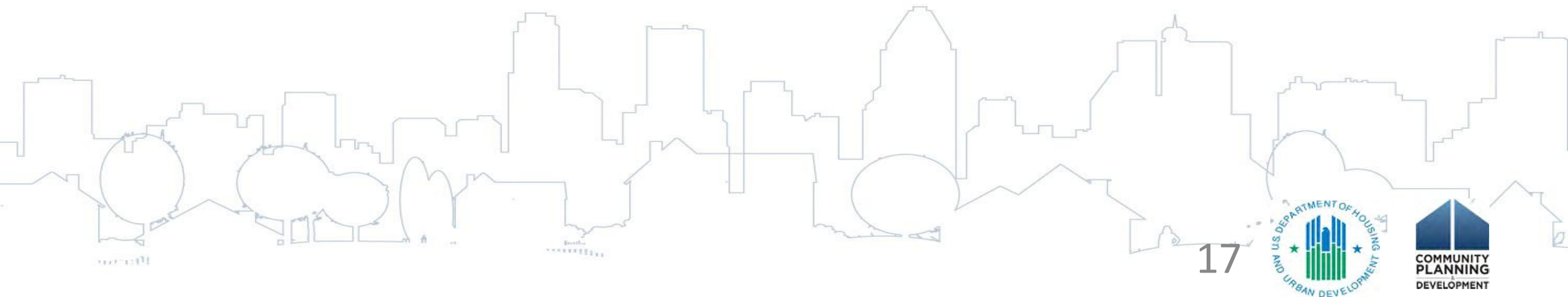
Previous opportunities to apply this type of framework?



# Dashboard Assessment Considerations

**Did our assessment reveal best practices regarding...**

- Dashboard design
- Data visualization
- Data storytelling and communication



# Data Dashboards

## Building Data Dashboards

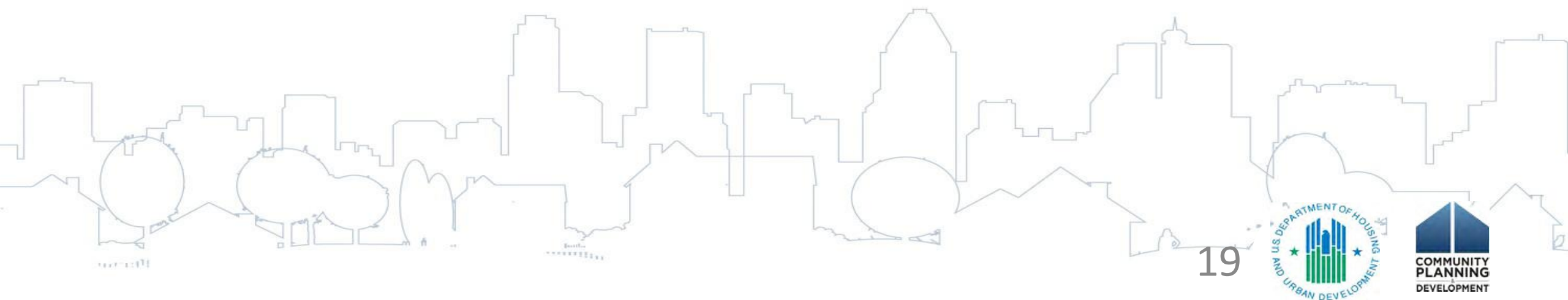
Learning data viz deductively!



# Hands On

## Pre-data dashboard

- Define the communication need *and* who is needing it
- Determine what type of dashboard should be deployed
- Create a data analysis plan - and pull, clean and transform the data



# Hands On

## Pre-data dashboard

- Do a mock up of the dashboard
- Know your talking points



# Hands On

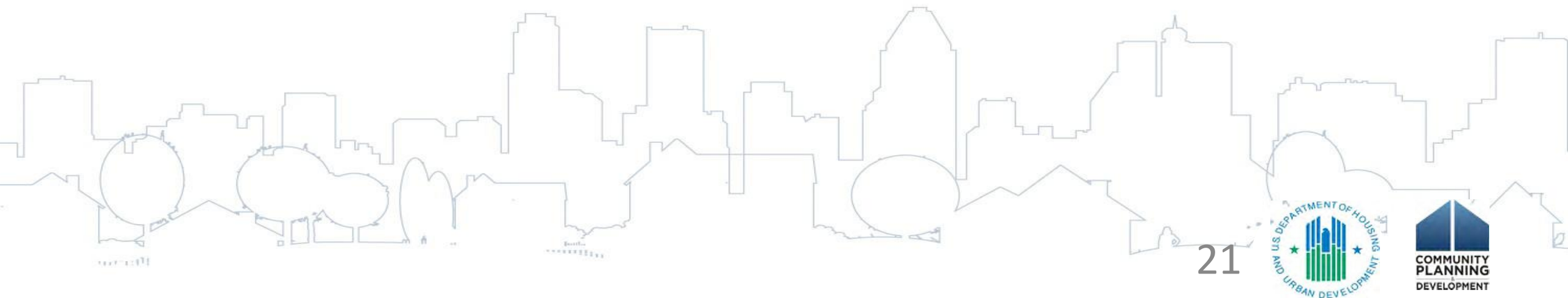
## Pre-data dashboard

- Restructure data

Tip:

You may need to restructure your data from “wide” to “long.”

“Long” data, or “stacked” data, has only **one** column of numerical data.



# Hands On

## Pre-data dashboard

- Restructure data

	Yesterday	The day before	A long time ago
This	#	#	#
That	#	#	#
That Other Thing	#	#	#



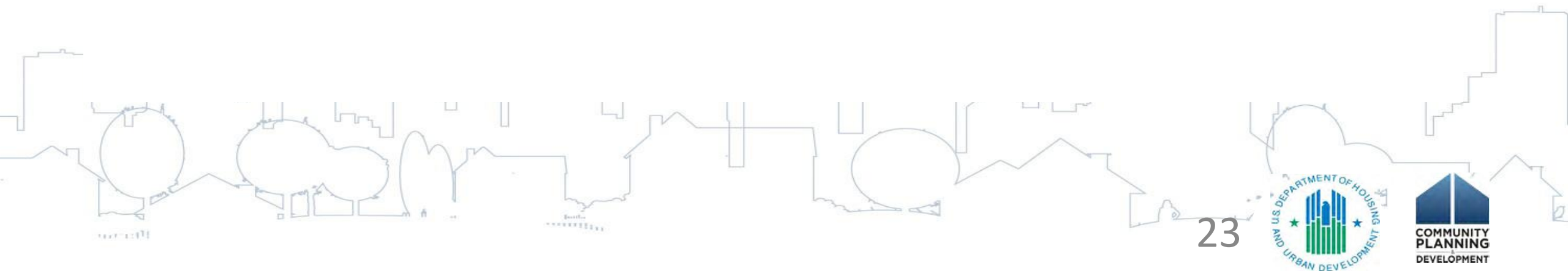
What	When	How much
This	Yesterday	#
This	The day before	#
This	A long time ago	#
That	Yesterday	#
That	The day before	#
That	A long time ago	#
That other thing	Yesterday	#
That other thing	The day before	#
That other thing	A long time ago	#

Good news: Tableau has a free plug for this

# Hands On

## Pre-data dashboard

- Restructure data - demonstration

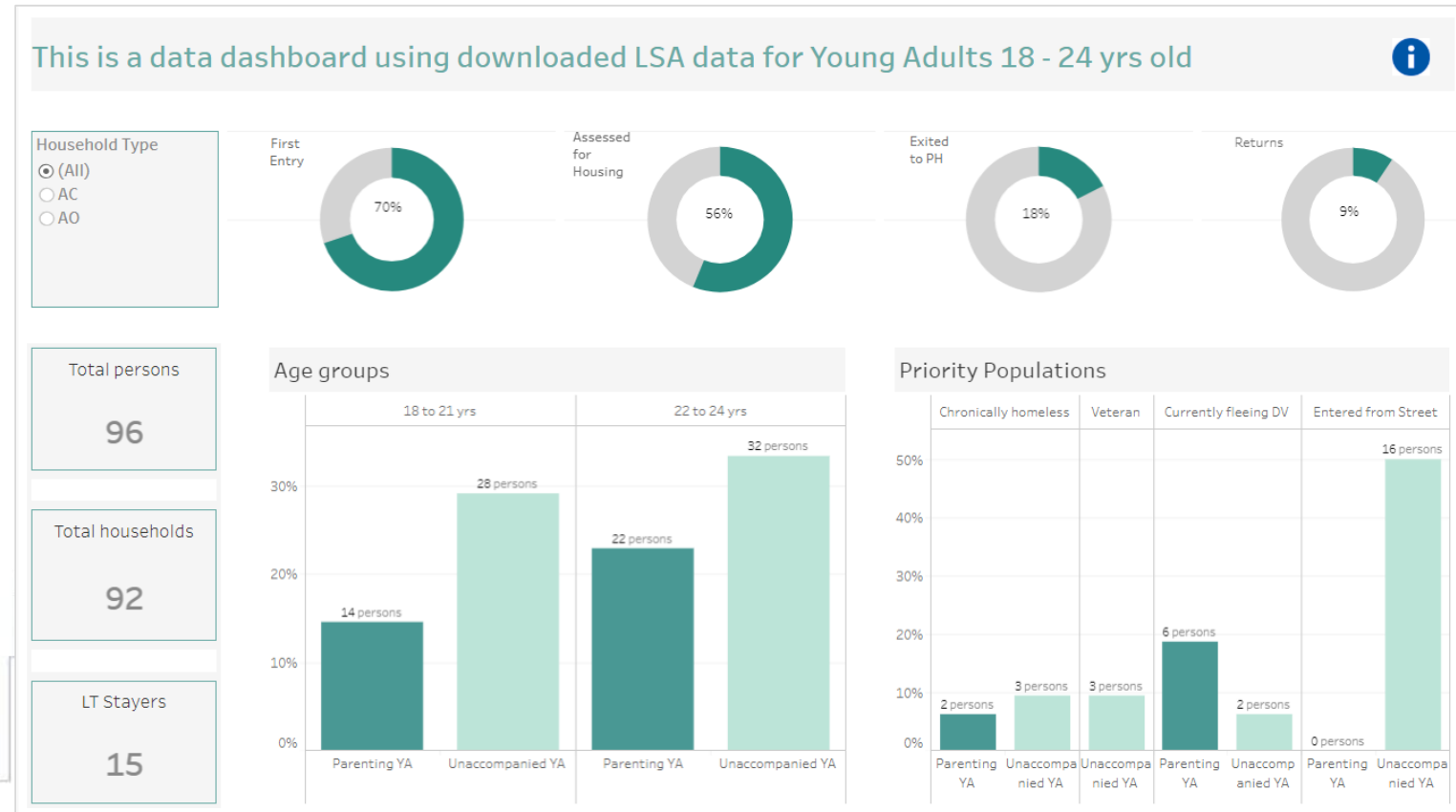




# Hands On

## Building a dashboard: Demonstration

Featuring LSA data  
regarding  
young adults



# Data Dashboard Demo: Let's Build Our Own

1. Connect to your data and tidy it up, if necessary

Data interpreter >>>>

Tableau - Book4

Marital Status

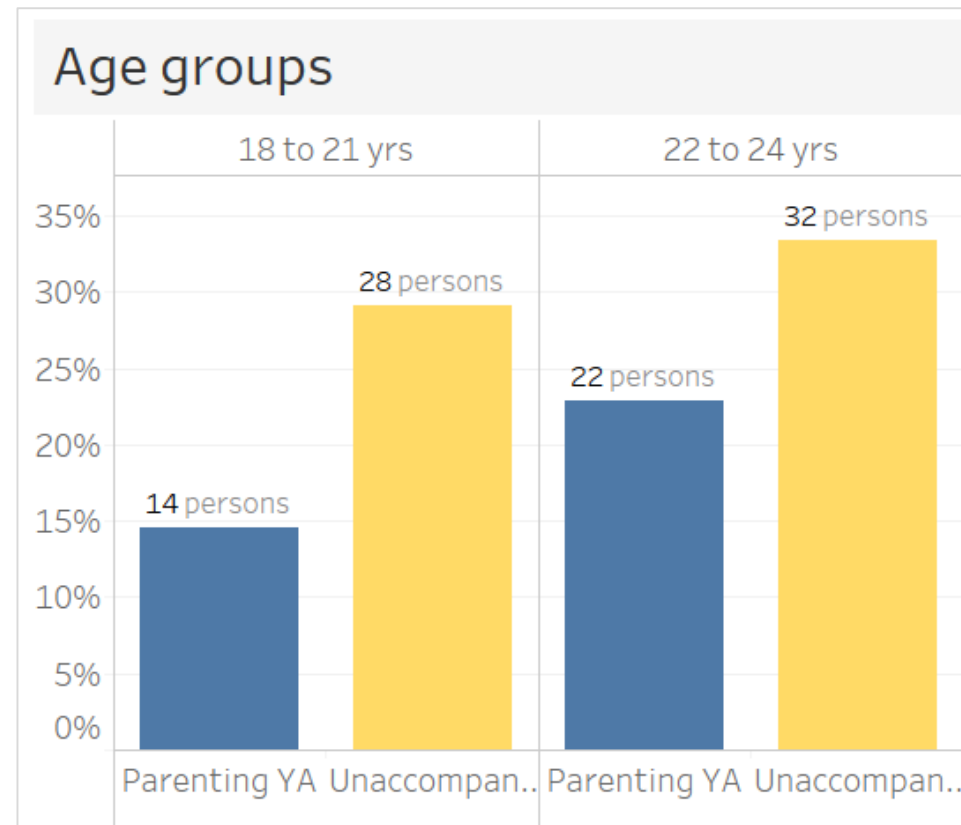
AirForce

Sort fields Modified

Pay Grade	Single Without Chi...	Single Without Chi...	Single Without Chi...
E-1	7,721	1,550	9,271
E-2	4,380	1,010	5,390
E-3	29,725	7,108	36,833
E-4	20,805	4,756	25,561
E-5	14,623	4,104	18,727
E-6	3,660	1,377	5,037
E-7	1,441	617	2,058
E-8	182	139	321
E-9	83	48	131
TOTAL ENLISTED	82,620	20,709	103,329
O-1	3,831	1,068	4,899

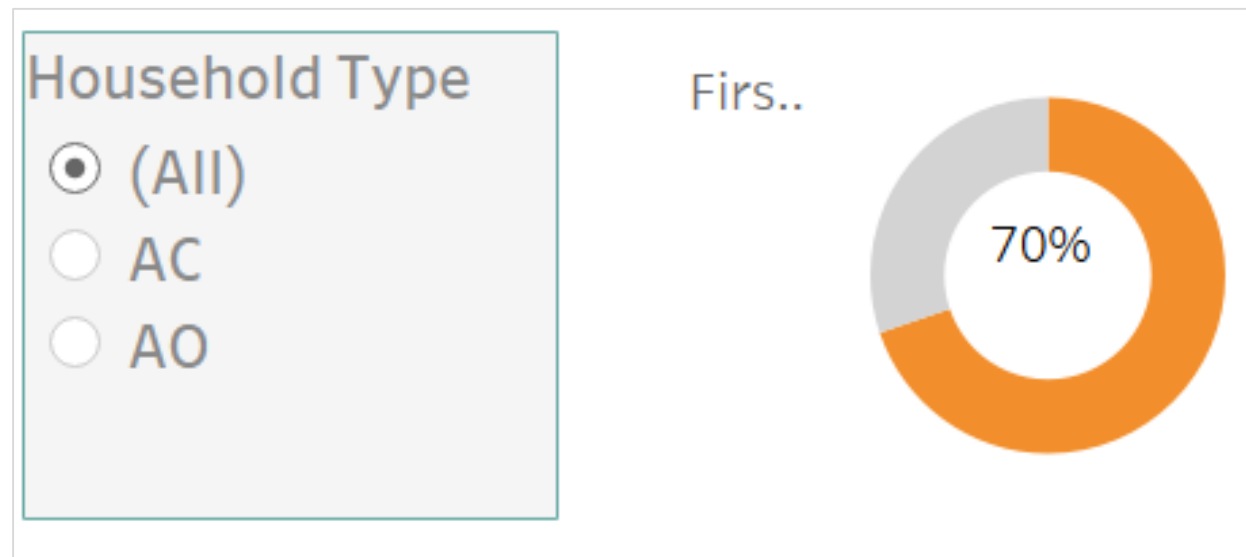
# Data Dashboard Demo: Let's Build Our Own

## 2. Build your first chart, then build a few



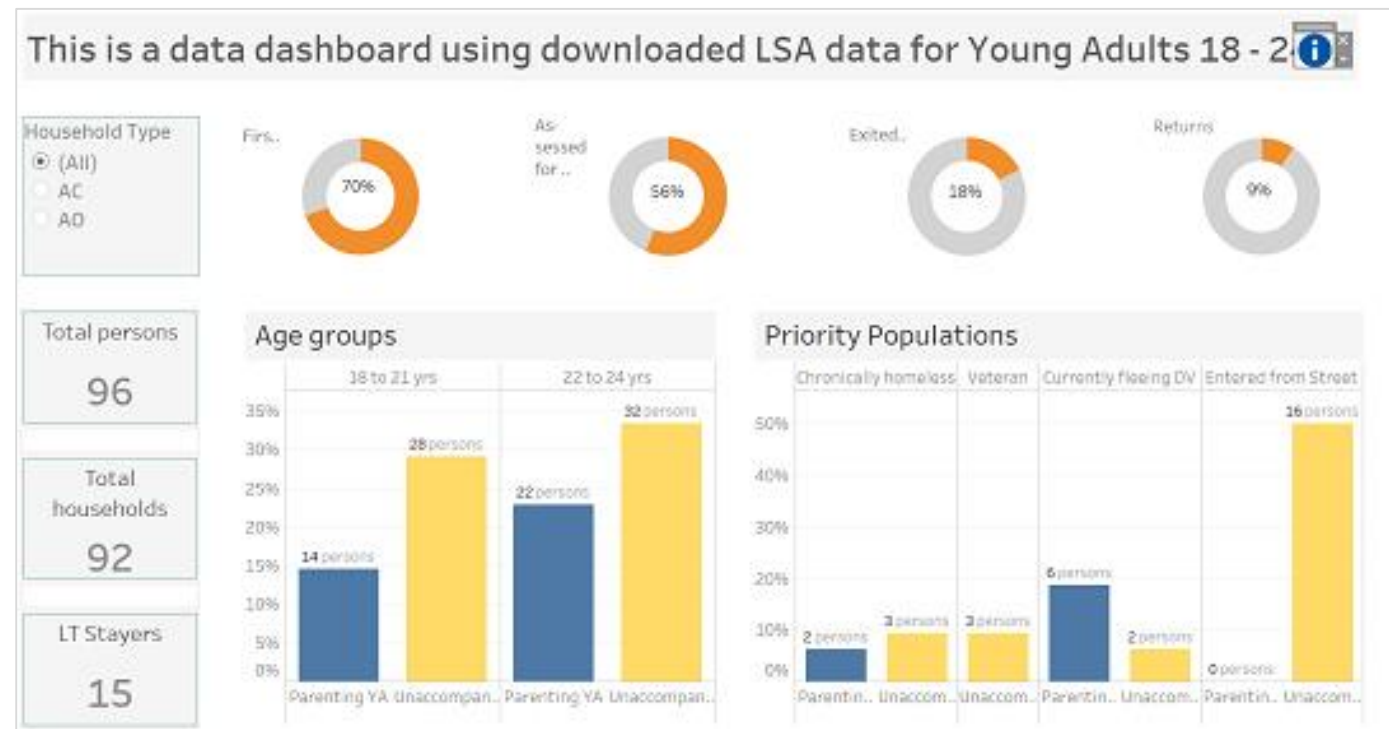
# Data Dashboard Demo: Let's Build Our Own

## 3. Customize your charts and other visuals, with an eye on interactivity



# Data Dashboard Demo: Let's Build Our Own

## 4. Combine visualizations to create a dashboard





# Data Dashboard Demo: Let's Build Our Own

## 5. Customize the dashboard –

Add text, images, links, information, navigation and other components to make your dashboard friendly and engaging!



# Data Dashboard Demo: Let's Build Our Own

## 6. Publish and Share!

# Return to Dashboard Assessment Considerations

## Best practices regarding...

- Dashboard layout and design
  - Use of the F pattern
  - BANs
  - Images, logos, links

# Return to Dashboard Assessment Considerations

## Best practices regarding...

- Visualization(s)
  - Use [color theory/deliberate palettes](#)
  - Use [highlighting](#)
  - Which [chart to use when?](#)
  - [Remove to improve](#)

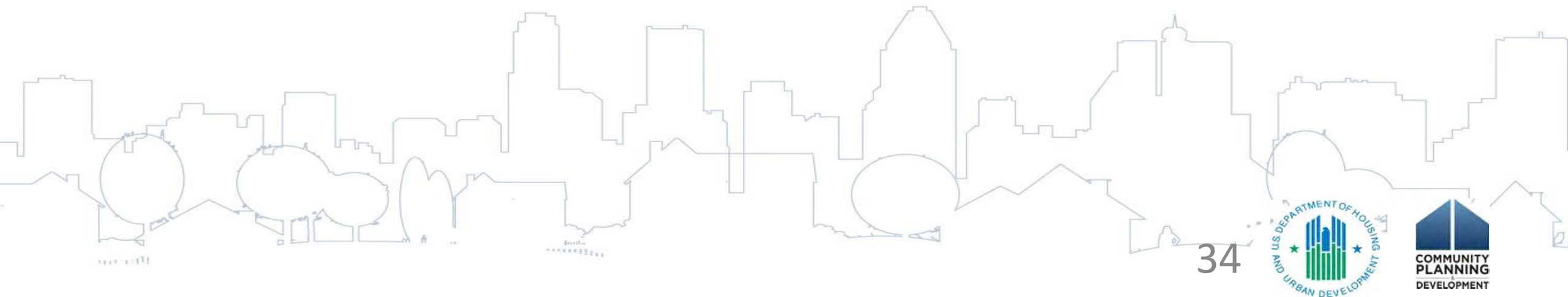
# Return Dashboard Assessment Considerations

## Best practices regarding...

- Storytelling and Communication(s)
  - Guided navigation
  - Specific data storytelling techniques
  - Interactivity

# Resources

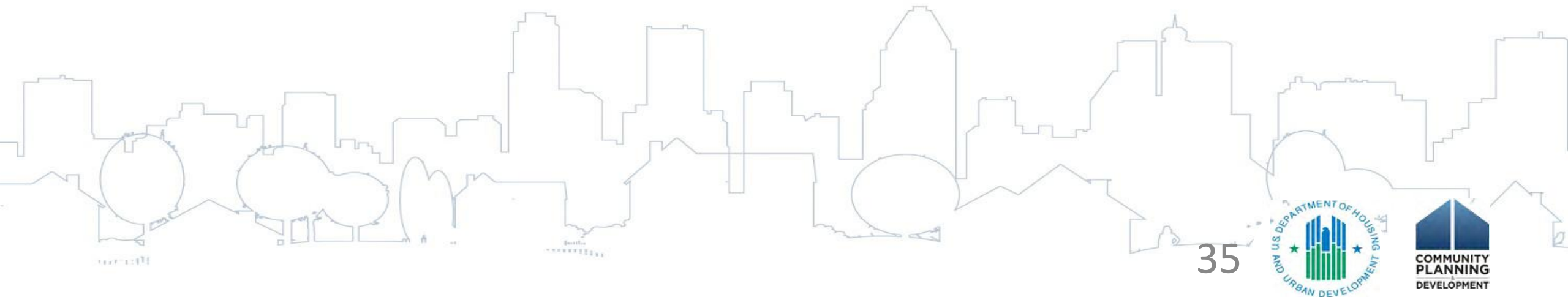
- [Data Visualization with Tableau](#) (Free Tutorial in Data Camp)
- Dashboard Design (free webinar series from Tableau and Andy Kriebel) of [The Big Book of Dashboards](#)
- Alternative Dashboard Tools: [Flourish](#) (Freemium) and [Infogram](#)





# What's Next for You?

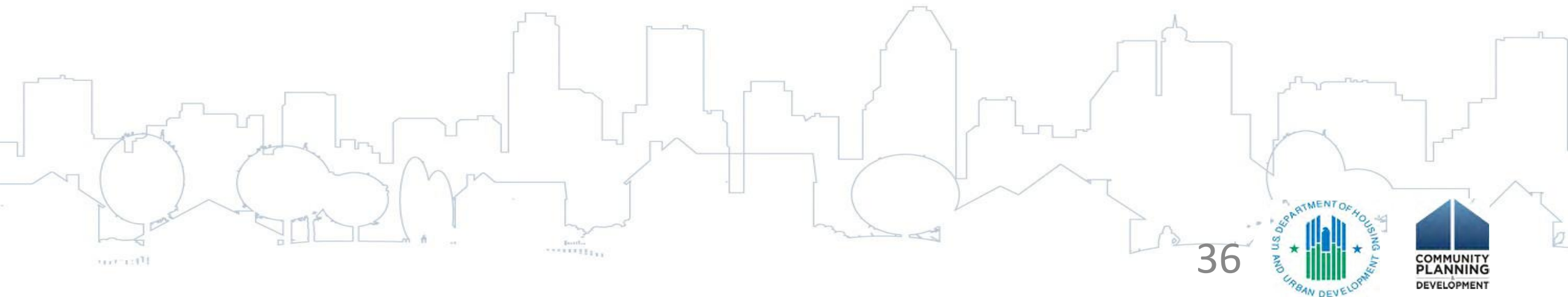
- Key takeaways?
- How might your community use the techniques that were demonstrated?
- What are your next steps?



# What's Next for Us?!

**Please take a moment to complete the evaluation form for this session.**

Let us know what worked,  
what could be refined, what else should be added!



# Thank you!

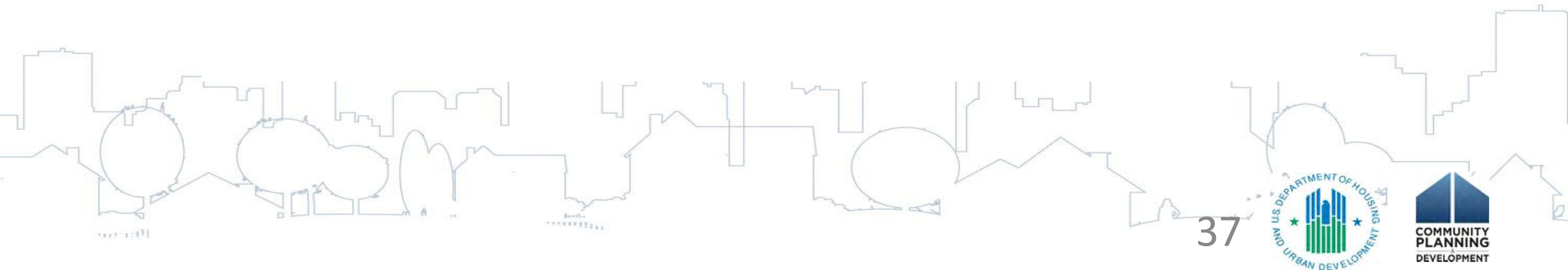
## Contact information

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# Miscellaneous!

Additional URL information to create a full screen dashboard:

Append the existing viz link with:  
**&:showVizHome=no**

