Analyzing Data for System Improvement: An Overview
April 2019
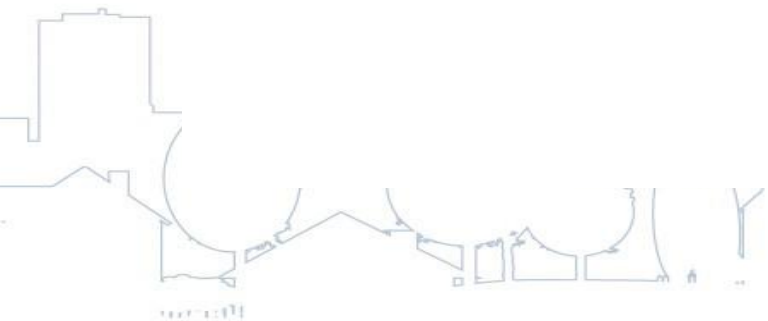
Andrea Miller, Cloudburst
Leah Rainey, ICF

Today's Agenda

Review Learning Objectives

- Part 1: **An Overview of Tools and Resources**

- Part 2: **Using HUD Tools and Resources for System Improvement**

- Break Out Session and Interactive Exercise
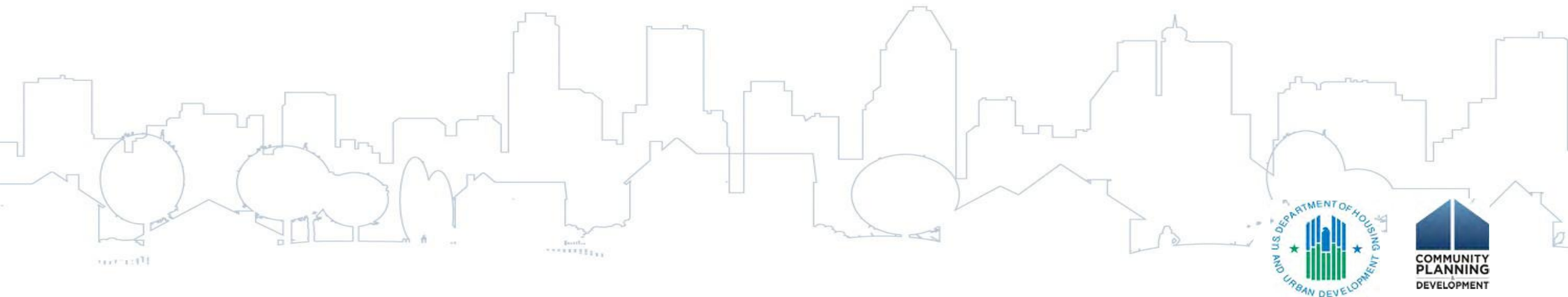
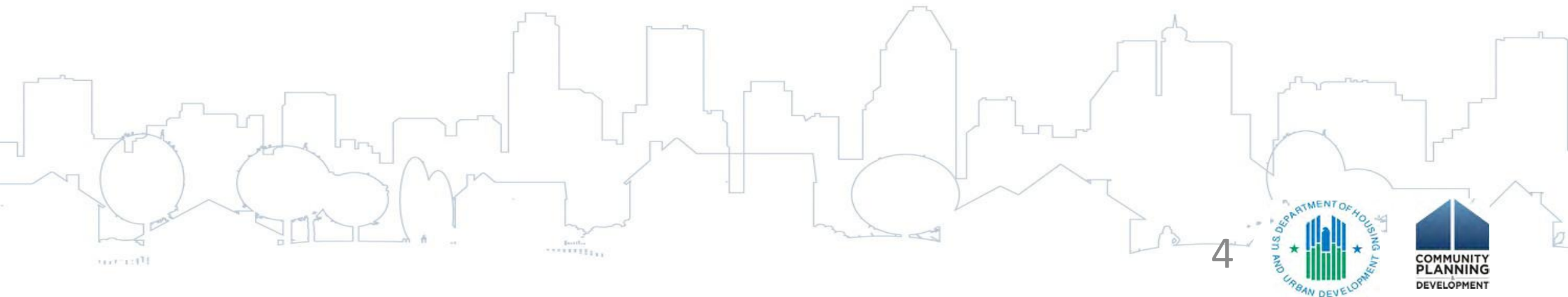- Part 3: **Group Discussion & Wrap Up**

Learning Objectives

1. Intuitively navigate to and among multiple HUD data platforms and data sources

2. Use local HUD data for system planning and improvement

3. Recognize when alternate or ad hoc reporting strategies are needed to supplement HUD data
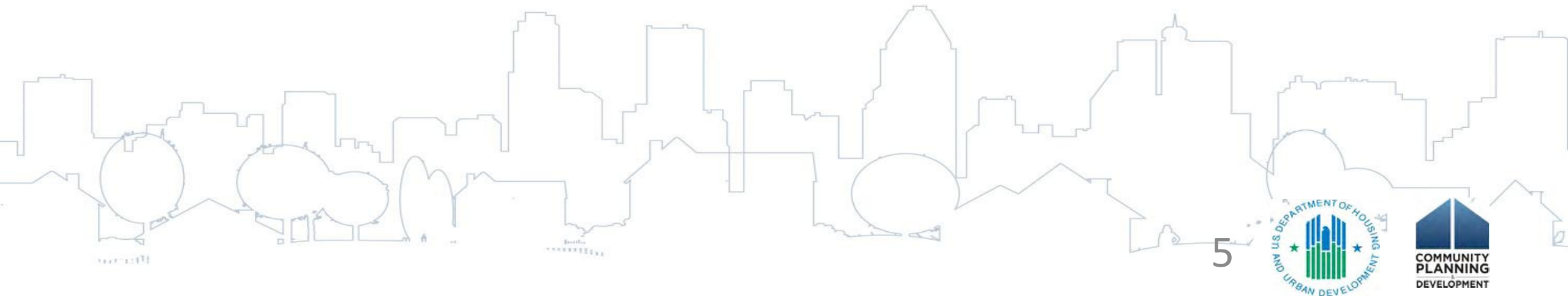
Part I: An Overview of Tools and Resources

Let the Data Tour Begin

- **WHAT**: What tools and resources are available and what are they telling me?
- **WHERE**: Where do I access these resources?
- **HOW**: How can I best use them? (Part 2)

What's Available

Reports, Data, and Resources at every level
at the HUD Exchange, HDX, Sage and HMIS

- National
- State
- CoC (System Level)
- Project (Project Level)

What is the HUD Exchange?

An online platform for providing program information, guidance, services, and tools to HUD's community partners:

- State and local governments
- Nonprofit organizations
- Continuums of Care (CoCs)
- Public Housing Authorities (PHAs)

Centralizes resources and services, making information transparent and accessible

Improves HUD's ability to respond to grantee needs by enhancing the efficiency of HUD staff and TA providers

What is the HUD Exchange?

The HUD Exchange provides resources and assistance to support HUD's community partners including:

- Programs and Related Topics (Policy)
- Resources
- Trainings
- Program Support
- Grantee Data and Profiles
- News

HUD Exchange

Report	Level of Analysis	Report Format	Longitudinal availability
CoC Landing Page			
Grant Inventory Worksheet	CoC	XLS	Annual data | FY2017 - present
CoC Awards by Program Type	National, State, and CoC	PDF	Annual data | FY2005 - present
Housing Inventory Count Report	National, State, and CoC	PDF	Annual data | FY2005 - present
Homeless Population and Subpopulation Reports	National, State, and CoC	PDF	Annual data | FY2005 - present
CoC Dashboard Report	CoC	PDF	Annual data | FY2009- present
Point in Time Count Data	Flexible	XLS	Annual data | FY2007 - present
Housing Inventory Count Data	Flexible	XLS	Annual data | FY2007 - present
System Performance Measures Data	Flexible	XLS	Annual data | FY2015 - present

COMMUNITY PLANNING DEVELOPMENT
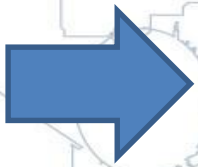
HUD HDX 1.0

- The Homelessness Data Exchange (HDX) is an online data submission tool for reporting to HUD, primarily to allow HUD to create the national-level <u>Annual Homeless Assessment Report (AHAR)</u> to Congress.

Allows Continuums of Care to submit or <u>view data </u>on the:
•Housing Inventory Count (HIC)
•Point-in-Time (PIT) Count
•System Performance Measures (SPM)
•Annual Homeless Assessment Report (AHAR) –past submissions only

What's Available in HDX: System Level

- **HIC:** Housing Inventory Count; annual submission of all beds dedicated to serve people experiencing homelessness (CoC level)

- **PIT:** Point-in-Time Count; annual sheltered count and bi-annual unsheltered count of persons experiencing homelessness; one day snapshot

- **SPM**: System Performance Measures

HUD HDX 1.0

HUD HDX 1.0

HUD HDX 1.0

HUD HDX 1.0

HUD HDX 2.0

- The new Longitudinal Systems Analysis (LSA) report has replaced the CoC's submission of a local "AHAR" from their HMIS.
- New platform, the Homelessness Data Exchange, version 2.0, for the submission of the LSA.

- **AHAR**: Annual Homeless Assessment Report to Congress; leverages PIT, HIC and HMIS data for an annual overview of trends in homelessness

  IS NOW

- **LSA**: Longitudinal System Analysis; a HUD report, produced from a CoC's HMIS and submitted via HDX 2.0

16

LSA Overview

For those people and households served by continuum projects during the fiscal year, the LSA includes:

- Demographic characteristics like age, race, gender, and veteran status

- Length of time homeless and patterns of system use

- Information specific to populations whose needs and/or eligibility for services may differ from the broader homeless population

- Housing outcomes for those who exit the homeless services system.

- Includes additional data about households and populations who exited the system

LSA Data View in HDX 2.0

STELLA

Other NHSDC Sessions
will focus on the LSA
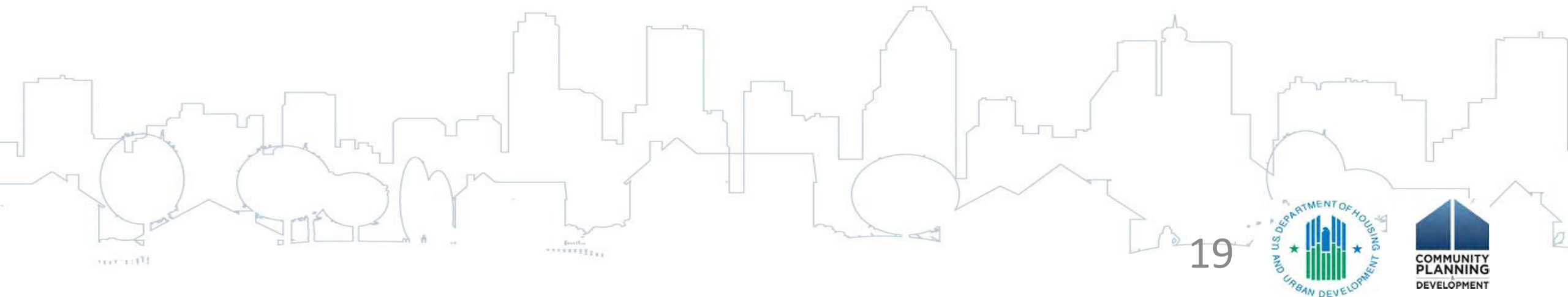
SAGE

- In April 2017, HUD began requiring CoC homeless assistance grant recipients to submit their <u>APR</u> data through a new online system – **the Sage HMIS Reporting Repository**.

- In October 2017, ESG recipients submit their accomplishment data in Sage. recipients will no longer need to use <u>ESG-CAPER</u> Annual Reporting Tool (eCart).

- Project reports (Comma Separated Value (CSV) downloads) generated by HMIS or comparable databases can be uploaded directly into Sage.

APR: Annual Performance Report; specific to Continuum of Care (CoC) Program funding; utilizes a Comma Separated Value (CSV) submission process
- Street Outreach, Safe Haven, Services Only, Transitional Housing, Permanent Housing (PSH and RRH); unique APRs for HMIS, Planning Grants (including CE planning grants)

CAPER: Consolidated Annual Performance and Evaluation Report; specific to Emergency Solutions Grant (ESG) funding
- Emergency Shelter, Street Outreach, Homelessness Prevention, Rapid Re-housing

- Enable agencies to evaluate and improve their performance
- Can reveal significant information about how each of their projects are functioning where improvements are necessary
- Can help agencies identify gaps in data and services.

SAGE DEMO

https://www.sagehmis.info/

HMIS Canned Reports

These reports are programmed by the software and cannot be manipulated. These reports are also "live time" reports, meaning data entry that occurs today will appear in the reports immediately.

In addition to reports already mentioned (APR, Caper, SPM) some other canned reports include:

PIT report, HIC report, AHAR, LSA Output, Data Quality Report(s)

WHERE CAN YOU FIND ALL OF THIS IN ONE PLACE?
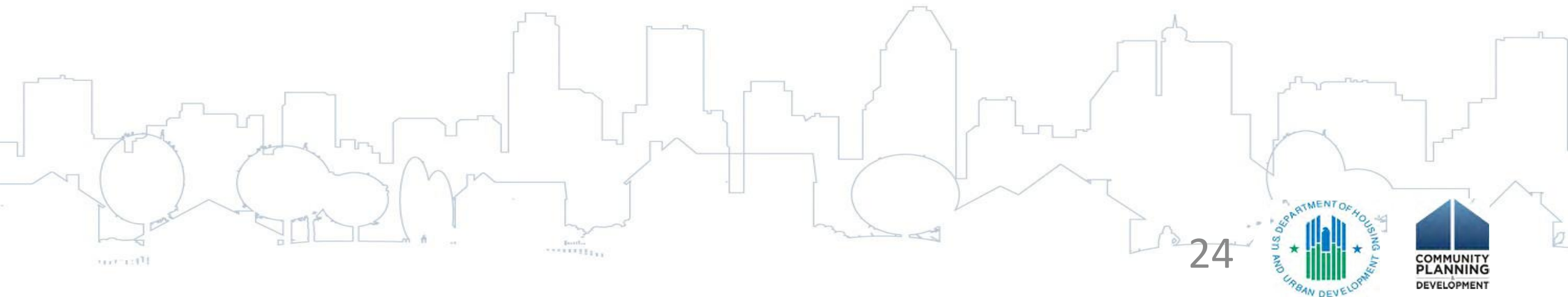
*Ctrl+ Click
on image to access
the worksheet >>*

Platform	Report	Level of Analysis	Report Format	Longitudinal availability	Contents
HUD Exchange	CoC Landing Page				
	Grant Inventory Worksheet	CoC	XLS	Annual data | FY2017 - present	
	CoC Awards by Program Type	National, State, and CoC	PDF	Annual data | FY2005 - present	
	Housing Inventory Count Report	National, State, and CoC	PDF	Annual data | FY2005 - present	
	Homeless Population and Subpopulation Reports	National, State, and CoC	PDF	Annual data | FY2005 - present	
	CoC Dashboard Report	CoC	PDF	Annual data | FY2009- present	Integrates geographical, funding, PIT and HIC data.
	Point in Time Count Data	Flexible	XLS	Annual data | FY2007 - present	
	Housing Inventory Count Data	Flexible	XLS	Annual data | FY2007 - present	
	System Performance Measures Data	Flexible	XLS	Annual data | FY2015 - present	
HDX	HIC Reports	CoC	Browser, PDF, RTF, XLS, CSV	2008 - present	
	PIT Reports	CoC		2009 - present	
	AHAR Reports	CoC		2007 - present	
	Sys PM Reports	CoC		FY2015 - present	
	CoC Profile Reports	CoC		2009 - present	
	HDX Competition Reports	CoC		2017 - present	
HDX 2.0	LSA Summary Data View	CoC	Browser	Annual data | FY2017 - present	On screen display of hyperlinked demographic and system use data, by household type
	Exported Summary Data File	CoC	CSV	Annual data | FY2017 - present	Provides a CSV file of the data displayed in the summary data tables.
	Exported Full Analysis File	CoC	CSV	Annual data | FY2017 - present	Comprehensive CSV file of the calculations that HDX 2.0 has been programmed to run on the
Sage	APR	Provider and Project	Browser	Defined by user	
	CAPER	Provider and Project	Browser	Defined by user	

COMMUNITY PLANNING DEVELOPMENT

Part II: **Leveraging HUD data resources for System Improvement**
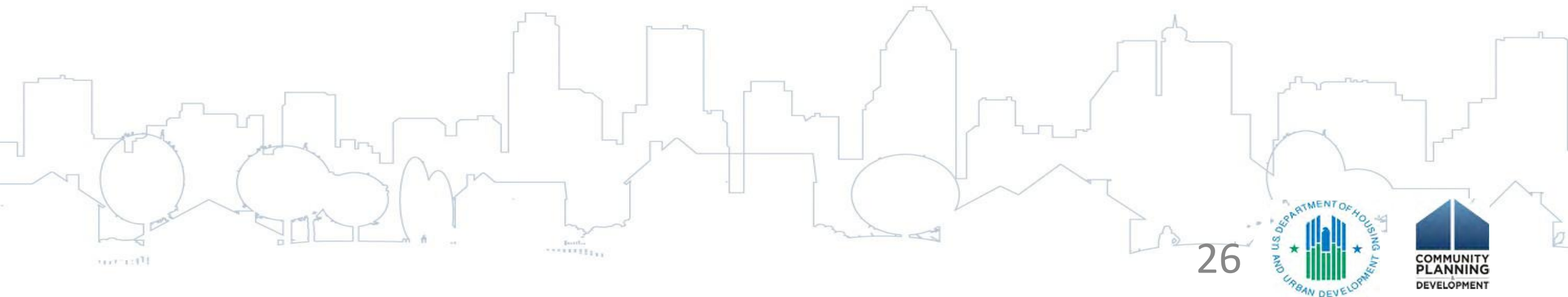
System Improvement?

System Improvement
- The process of regularly assessing the results produced by a system.

- It involves identifying processes and outcomes that are integral to the performance of the service delivery system, selecting indicators of these processes and outcomes, and analyzing information related to these indicators on a regular basis.

- It incorporates Continuous Quality Improvement, which involves taking action as needed based on the results of the data analytics identified performance improvement opportunities.

Using HUD CoC Data for System Improvement

- Resources for background and context

- System Improvement Planning

- Continuous Quality Improvement
    - The PDCA Cycle
    - Gathering baseline data
    - Ongoing Monitoring and Evaluation

Using HUD CoC Data for System Improvement

Resources for background and context

- [System Improvement Briefs](#)
  - [Data Quality and Analysis for System Improvement](#)
  - [Strategies for System Improvement](#)

- USICH Federal Benchmarks
- National Data Reports

See Appendix

Resources: System Improvement Briefs

1. DQ and Analysis for System Improvement

- Focuses on Universal System Improvement Measures

▶ Local System Improvement Measures can tailor the CoCs plan to its unique community needs

Resources: System Improvement Briefs

2. Strategies for System Improvement

- Focuses on long-term strategies

▶ CQI transforms LT strategies Into incremental, measurable short-term and interim goals

System Improvement Strategies	System Performance Measures		
	Length of Time Homeless (Measure 1)	Successful Placement and Retention of PH (Measure 7)	Returns to Homelessness (Measure 2)
1. Enhance Coordinated Entry			
Prioritize Vulnerable Households	✓	✓	
Right-size Assistance	✓	✓	✓
Incorporate Diversion Practices	✓	✓	✓
Streamline Admissions and Lower Barriers	✓	✓	
Link to Effective Outreach and In-reach	✓	✓	
Target Prevention Assistance		✓	✓
2. Strengthen Housing-Focused Practices			
Housing Focused Case Management	✓	✓	✓
Policies and Procedures to Promote Housing Stability		✓	✓
Housing Navigation	✓	✓	✓
3. Scale Permanent Housing Interventions			
Recruit Private Landlords	✓	✓	
Leverage Mainstream Housing and Services	✓	✓	✓
Reallocate Resources	✓	✓	
Build Rapid Re-Housing Capacity	✓	✓	✓

Q. How can CoCs make good use of all this 'prepackaged' data?
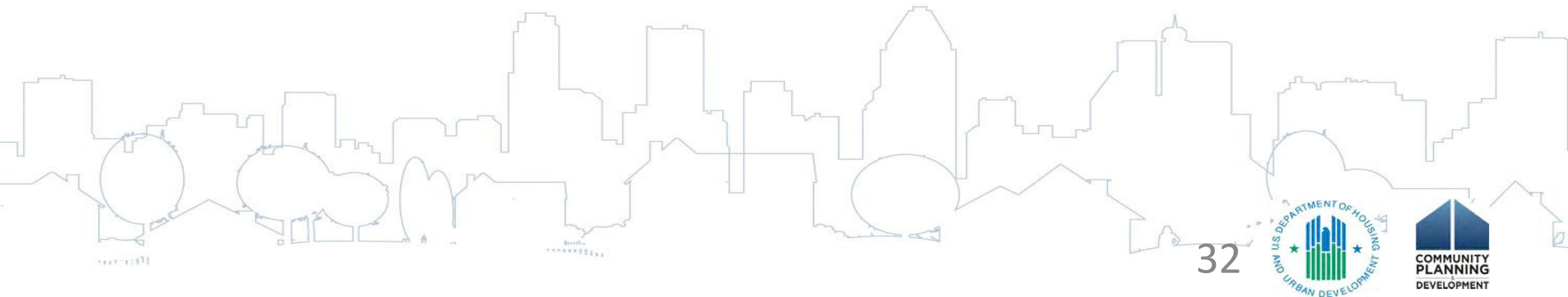
A. By incorporating it into system improvement efforts!
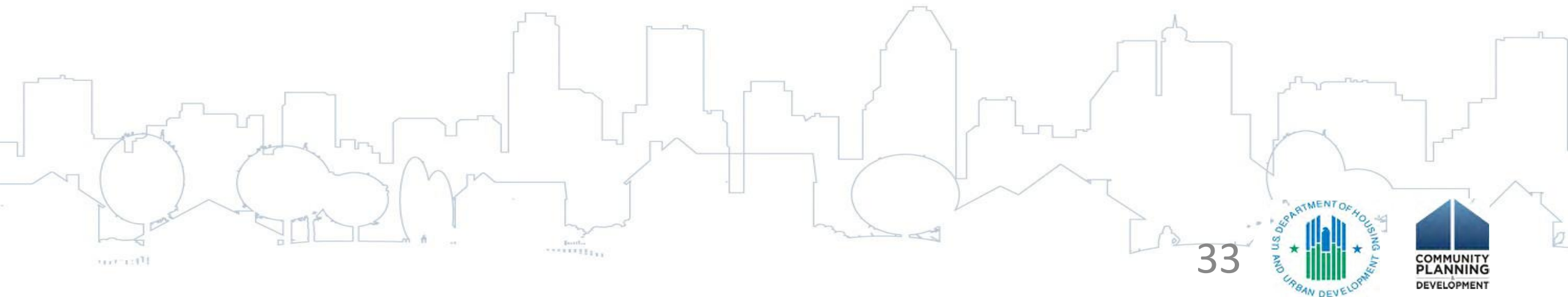
System Improvement Planning

System Improvement Planning & Process

- Devise a System Improvement Plan

- Incorporate Continuous Quality Improvement strategies

- Foster communication and feedback loops

- Iterate
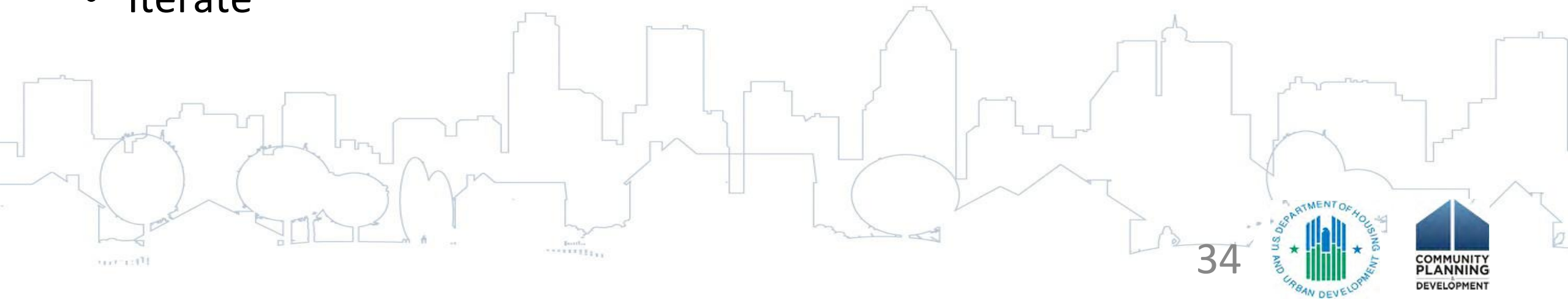
System Improvement Planning

- **Devise a System Improvement Plan**

    1. Establish system-level performance goals and benchmarks

    2. Develop a performance management plan

    3. Monitor and communicate performance year round

    4. Build capacity and replicate best practices

    5. Incorporate performance into system planning

System Improvement Planning

- **Incorporate Continuous Quality Improvement**
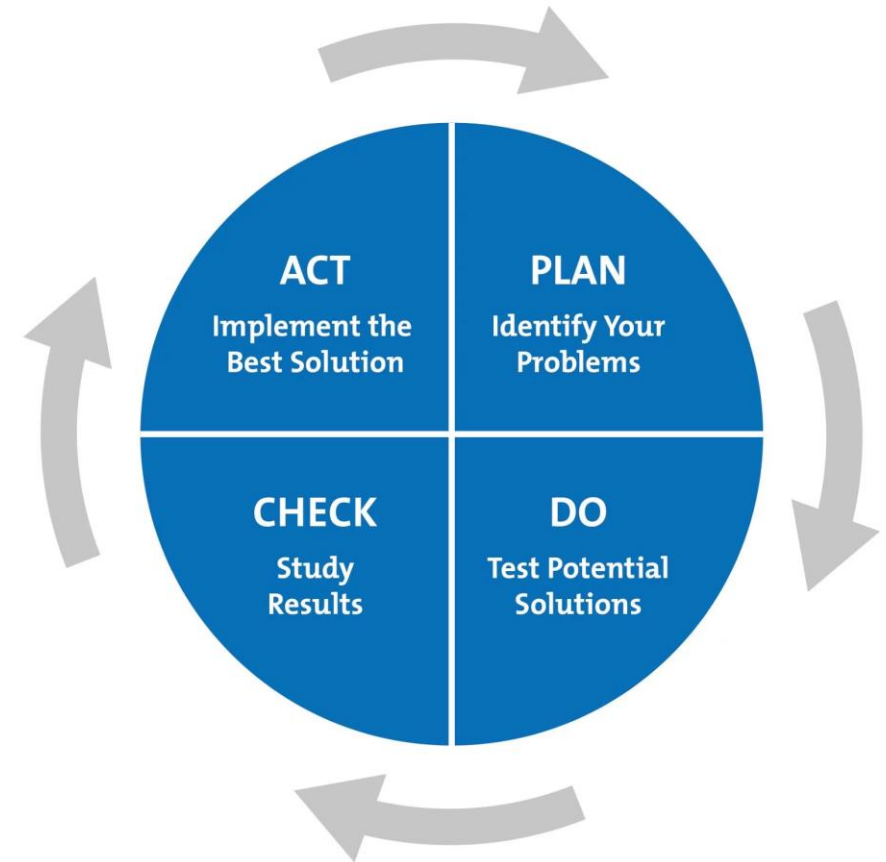
System Improvement Planning

- **Incorporate CQI**

  Plan: Devise measurable objectives

  Do: Devise steps to meet those objectives

  Check: Assess actual-to-expected outcome(s)

  Act*: Address areas in need of improvement
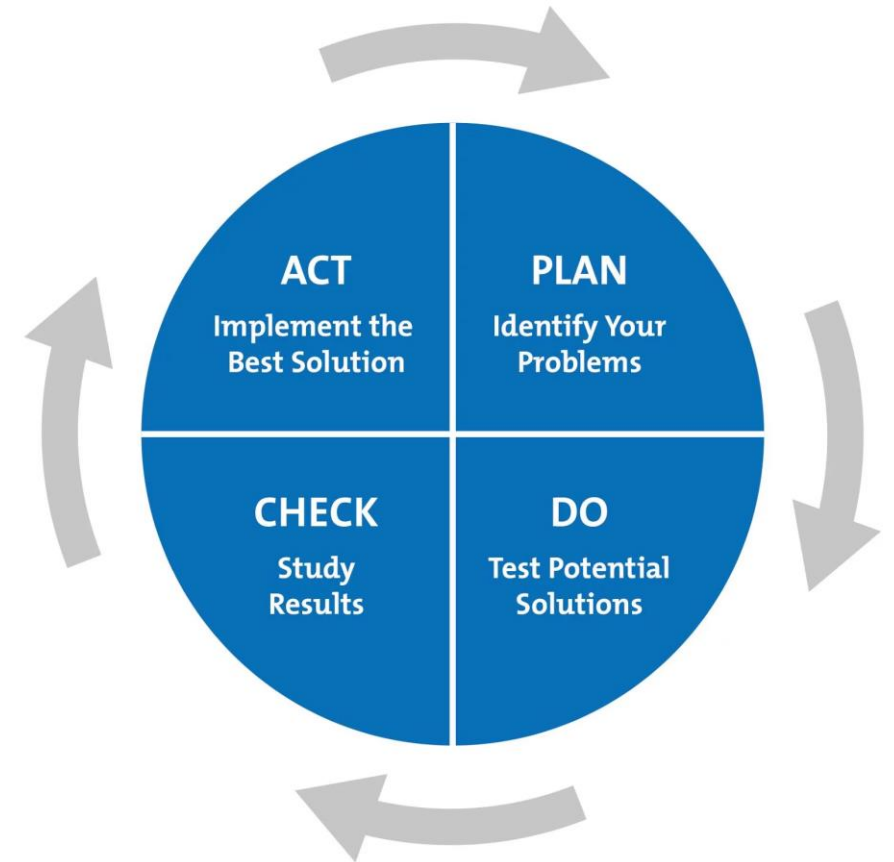
  *sometimes referred to as "adjust"

System Improvement Planning

- **Incorporate data!**

  Plan: Establish baseline data

  Do: Collect required data

  Check: Compare baseline to follow up data

  Act*: Refine data analysis and reporting

  *sometimes referred to as "adjust"
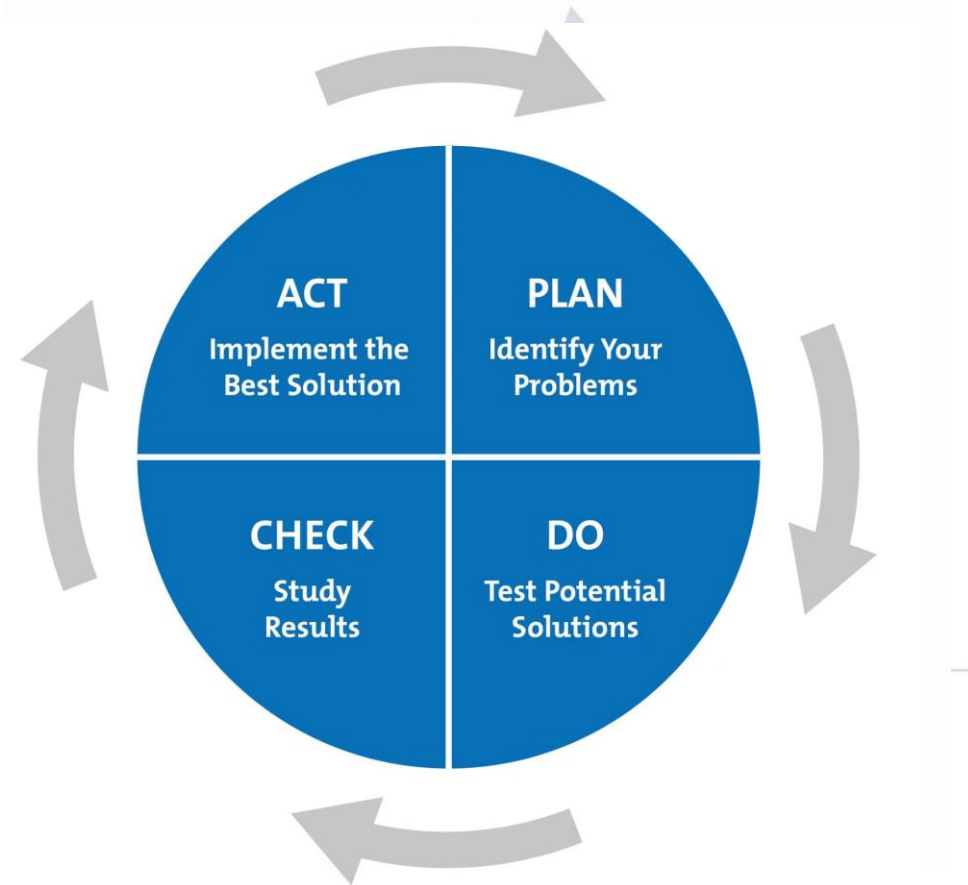
System Improvement Planning

- **Incorporate communication!**

  Plan: Establish reporting strategy

  Do: Pilot a CQI report

  Check: Assess its usability and 'actionability'

  Act*: Refine its format and contents

  *sometimes referred to as "adjust"

System Improvement Planning

- **Iterate**

- **Augment**
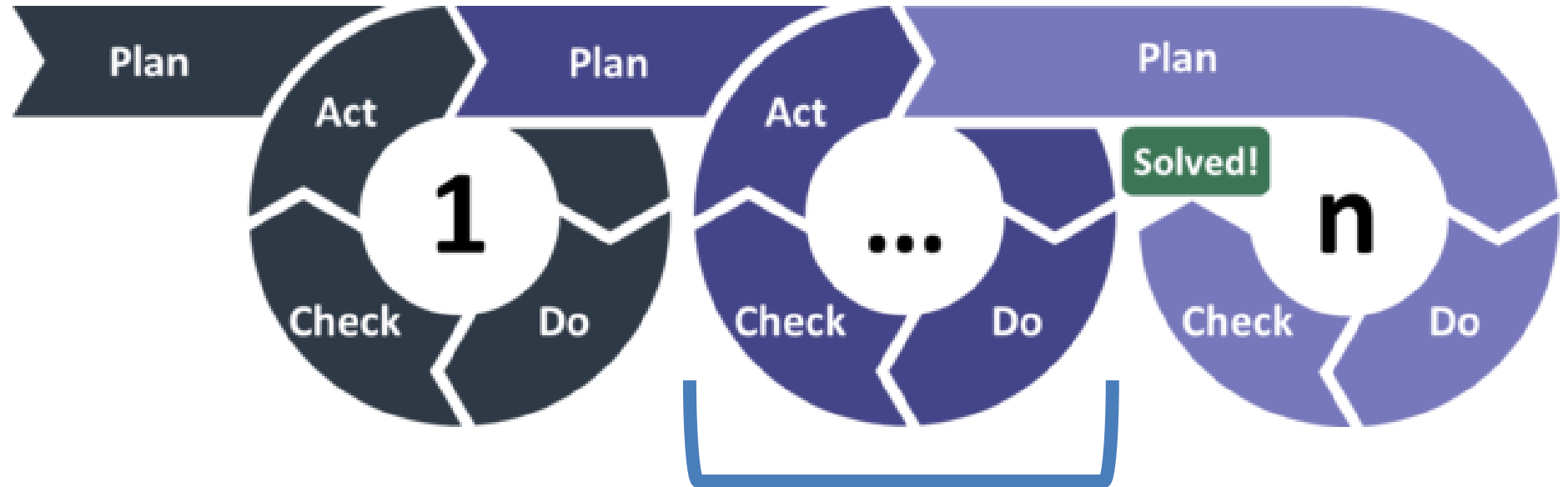
Focus groups, surveys, etc.

System Improvement Planning
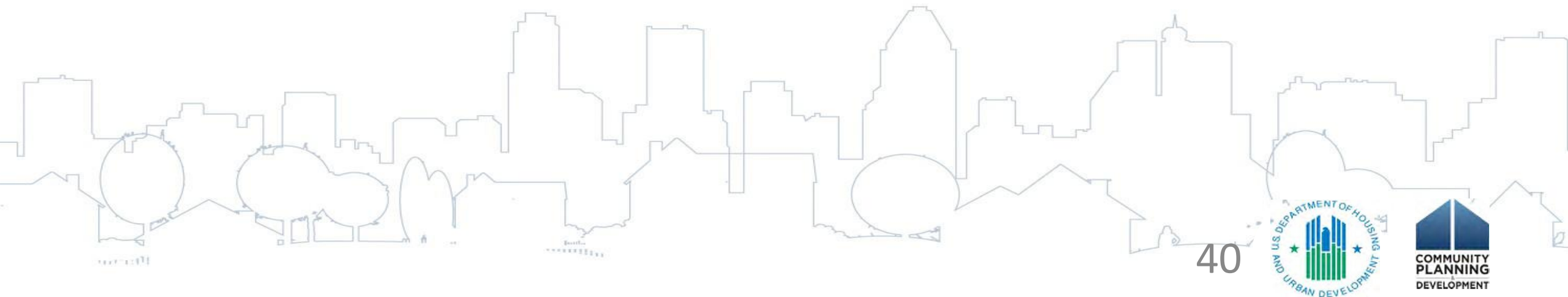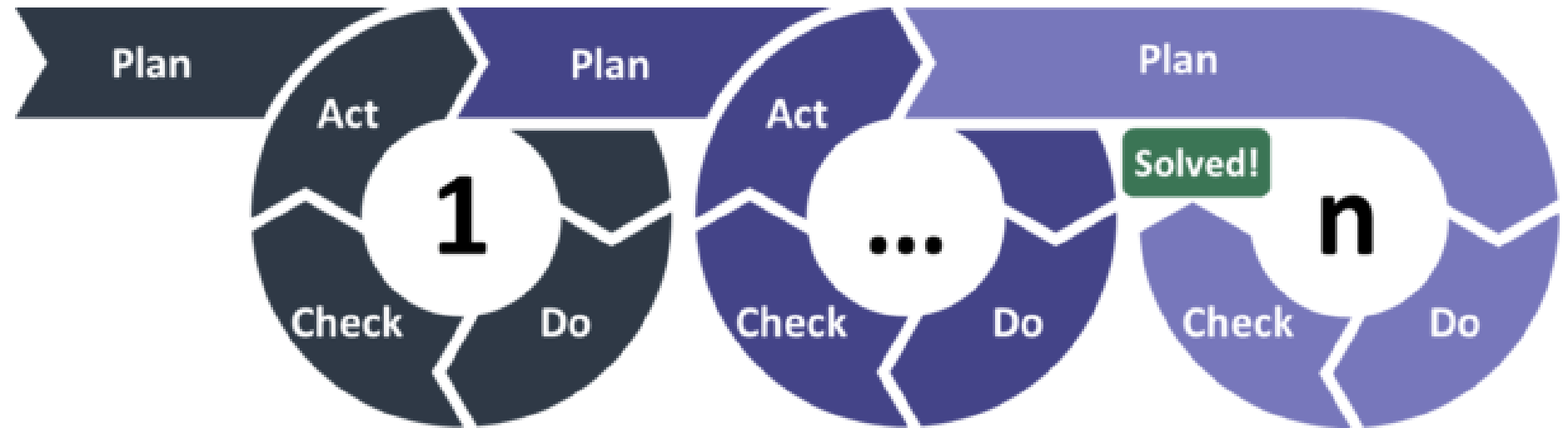
System Improvement in Action

(((Demonstration)))

Ctrl+ Click on image to access the template >>

System Improvement Plan
Anytown CoC
Effective July 1st, 2019

Goal: Decrease length of stay in shelter among all guests

Indicator	Process | Outcome Measure	Baseline	Target	Reporting Frequency	Steward
1. Length of stay in emergency shelter	a.				
	b.				
2. Length of stay for those who exit to PH is reduced	a.				
	b.				
	c.				

System Improvement in Action

Your Turn!
(((Breakout exercise)))
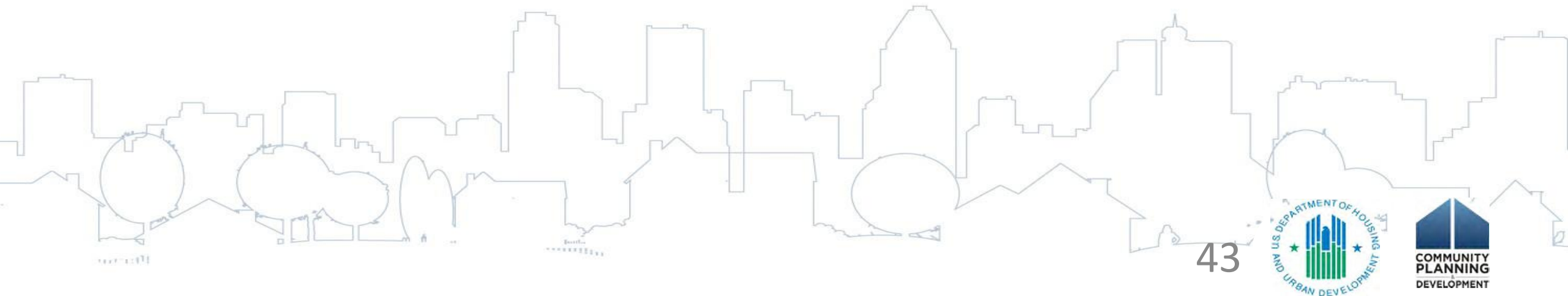
Use the PDCA cycle to help identity potential pain points and begin to establish a plan for improvement.

Scenario 1:

Your CoC's largest emergency shelter has noticed an increase of young adults entering shelter over the past year than in previous years. The shelter staff are also noting that the ever-growing young adult population seem to stay longer in shelter than their 'above 25' counterparts. CoC providers meanwhile report that they don't have quantified data regarding exit destinations specific to young people.
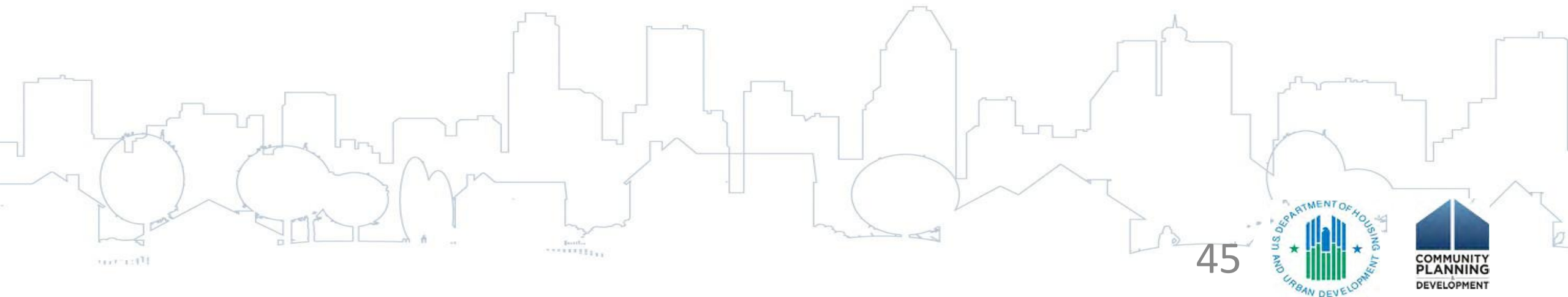
System Improvement Planning

Group feedback: What did you focus on in your plan?

Level of analysis
Data sources
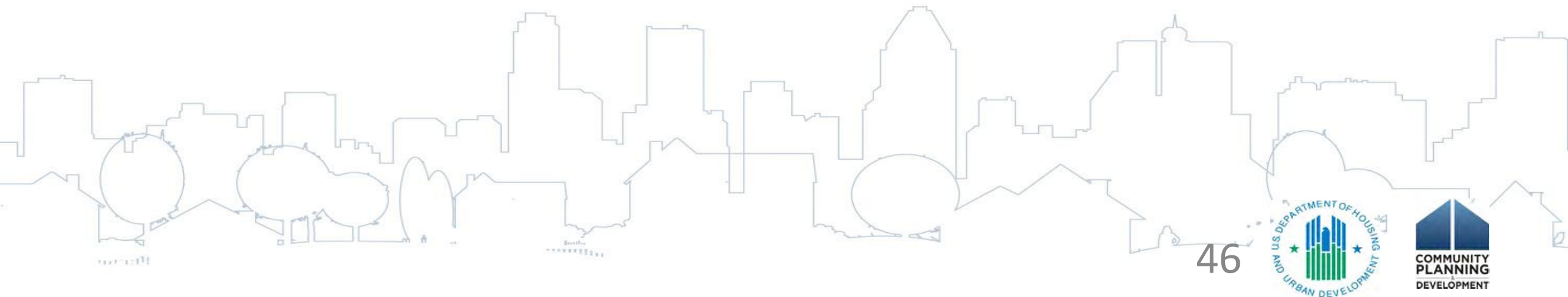Monitoring strategies
Reporting and feedback loop strategies

Local Action Planning

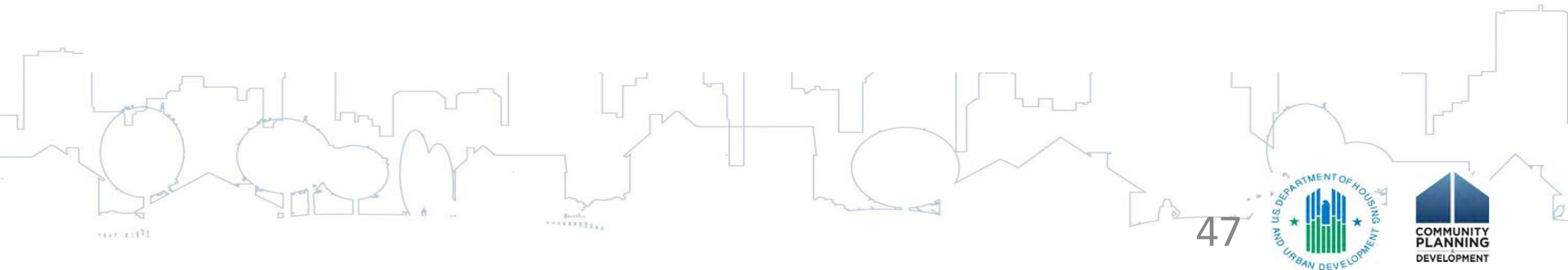Key Take Aways?
Next Steps?

Thank You!

Contact Information

Andrea Miller
amiller.rotondi@gmail.com

Leah Rainey
leah.rainey@icf.com

Appendix of Resources

A list of useful resources for system improvement planning:
- For background
- For context
- For benchmarking and comparing to 'peer' CoCs
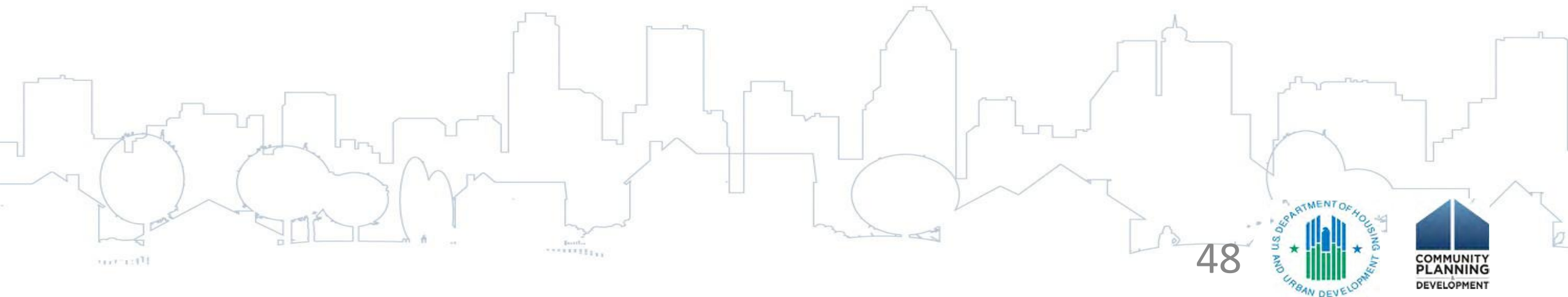
Resources: USICH Criteria and Benchmarks

- For background and knowledge

- For benchmarking and developing targets

  - [For Ending Veteran Homelessness](#)
  - [For Ending Chronic Homelessness](#)
  - [For Ending Family Homelessness](#)
  - [For Ending Youth Homelessness](#)

Resources: National Data Reports

- For benchmarking and developing targets

- For comparison with "peer" CoCs

Published Reports

- The Annual Homeless Assessment Report: Part One and Two
- The SPARC Phase One Study
- NAEH State of Homelessness Annual Report
- Homelessness Trends Analysis (Zillow)

Resources: National Data Reports

- For benchmarking and developing targets

- For comparison with "peer" CoCs

Interactive Reports
- [HUD CoC System Performance Visualization](#)
- [Is Homelessness Rare, Brief, and Non-Reoccurring?](#)
- [National, State and CoC Point in Time Count 10 Year Trends](#)
- [National, State and CoC Point in Time Count 5 Year Trends](#)

Resources: Secondary Data Sources

- For context

    [NLIHC: Out of Reach](#)
    [HUD CPD Maps](#)
    [The National Center for Homeless Education](#)
    [Data Lab Homelessness Analysis](#)(beta)

    [American Community Survey](#)
    [American FactFinder](#)
    [County Health Rankings & Roadmaps](#)
    [Data Lab Homelessness Analysis](#)(beta)