



# Understanding Community Resources

## A Tool for Data Landscaping

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Groups interested in launching collaborative interventions that span different service sectors need to find ways to build trust and share data and insights. Gathering and analyzing administrative data across agencies and programs can be enormously powerful. Sharing administrative data can help groups better target services, identify and eliminate inefficiencies, expand evidence-based programs, and implement performance-based approaches and funding models, such as pay for success (PFS, discussed in box 1).

But to access and analyze data, communities must first understand their local data landscapes, including what data resources are available and whether they can be shared. This brief provides a tool and insights intended to help communities begin assessing their data landscapes. It is intended for people new to sharing data or those looking to create new data-sharing efforts.

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### BOX 1

#### **Pay for Success**

PFS is an innovative financing mechanism that shifts financial risk from a traditional funder—usually a government—to a private or nonprofit funder. The new investor provides up-front capital to scale an evidence-based program to improve outcomes for a vulnerable population. If an independent evaluation shows that the program achieved agreed-upon outcomes, then the investment is repaid by the traditional funder with interest. If not, the investor takes the loss. This model shifts financial and reputational risk from the government to external investors and promotes rigorous evaluation and meaningful outcomes. By prioritizing evidence, outcomes, performance management, and the strategic deployment of resources, PFS has the potential to improve how social services are delivered to the most vulnerable, yielding benefits to individuals, governments, and society at large. To learn more, visit [pfs.urban.org](https://pfs.urban.org).

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Data landscaping, or mapping out who owns and shares data and what questions can be answered with those data, is valuable for organizations trying to understand and improve service delivery and outcomes in their communities regardless of their specific project. When data landscaping, stakeholders work together to assess what relevant data exist in their community, who holds them, how to use them, and whether data sharing is already under way. These stakeholders ideally share goals or service populations and might include state and local governments or agencies, nonprofits, researchers, or other service providers.

Our data landscaping tool is a starting point for stakeholders from diverse sectors who might be interested in assessing and sharing data but don't know how best to proceed. The tool (shown in table 1 and appendix A) is essentially a series of questions that organizations can ask themselves and their project partners. It helps clarify key information about data, triggers new questions about data coverage and quality, and highlights potential constraints to data sharing and analysis.

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## BOX 2

### Pay for Success Administrative Data Pilot and Products

This brief is part of a series designed to help states, municipalities, and local organizations identify, link, and analyze administrative data to better track outcomes of the social services they deliver. The guidance provided in each product emerged from training and technical assistance the Urban Institute provided to 28 communities during 2015–19 as part of our Pay for Success Initiative<sup>a</sup> and Pay for Success Administrative Data pilot. Funded by Arnold Ventures and the Corporation for National Community Service, Urban supported partners in addressing and overcoming barriers to administrative data access so that their communities will be better equipped to move toward implementing PFS and other performance-based strategies.

The additional products in this series provide recommendations on how to navigate some of the most vital processes undertaken by communities Urban worked with. They are as follows:

- **Guidance on Collecting Administrative Data for Pay for Success Projects**, which shares lessons from four organizations that tackled administrative data challenges as they carried out a PFS program.
- **Assessing Feasibility Studies**, which offers guidance on determining whether pay for success is a viable strategy for a specific intervention.
- **Developing a Collaborative Planning Team**, which provides tips on bringing together and engaging diverse stakeholders around data collection and sharing.
- **How to Launch a Supportive Housing Pay for Success Initiative**, which offers initial steps to get PFS supportive housing efforts off the ground and focuses on how to establish an evidence-based supportive housing PFS program that can measure and link payments to outcomes.

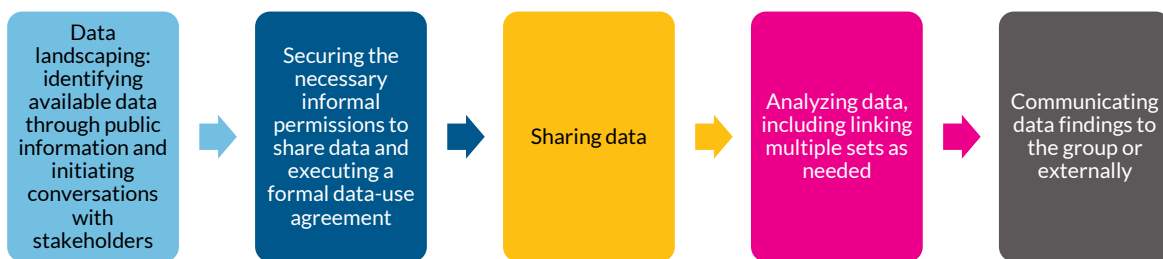
<sup>a</sup>“Frequently Asked Questions,” Urban Institute Pay for Success Initiative, accessed September 5, 2019, <https://pfs.urban.org/faq/>.

The tool and this brief are part of a series of highlighting lessons learned from Urban’s training and technical assistance provided through the Pay for Success Administrative Data Pilot (box 2). The tool can be used in conjunction with another brief in this series, “Developing a Collaborative Planning Team: Steps for Managing Data Sharing” (Fedorowicz and Engelhardt 2019).

## Data Landscaping as a Step Toward Data Sharing

Often, assessing local data resources is a step toward sharing or linking data across agencies or service providers (figure 1). For those interested in engaging in PFS and other performance-based strategies, data sharing is essential. These projects make decisions based on data and link payments to outcomes. A typical performance-based project requires sharing information on the participants that are likely to receive services as well as on the outcomes achieved.

**FIGURE 1**  
**Steps to Using Shared Data for Informed Policy and Programs**



Data sharing, however, can be daunting for stakeholders who are unsure of how to start. Assessing local data resources through data landscaping is usually one of the first steps of a performance-based project and is a great start to the data-sharing process. Data landscaping can help establish relationships and build trust among stakeholders, which is often just as important to data sharing as resolving technical or legal concerns (and perhaps even more important).<sup>1</sup>

By completing and sharing the data landscaping tool in the next section of this brief, project partners can raise their specific concerns, questions, and goals for data sharing. In early conversations, stakeholders will ideally communicate their broad research questions, the resources they will need to answer them, and the types of data they have or would like to access. The tool helps create an informal, collaborative environment for partners to think through critical issues and refine their goals before formally making data requests of various stakeholders in their organizations.

# How to Use the Data Landscaping Tool

Once you have decided to begin data landscaping, you or your team will need to complete three critical steps:

1. **Think about the needs of your project and the questions you hope to answer.** Consider convening stakeholders as part of or in addition to a collaborative planning team. Depending on your project and the data needed, you may need to speak with just one data owner, but you may also need to contact several. Potential organizations to include are local nonprofits, government agencies, and service providers. Consider these conversations part of an ongoing discussion that will help refine your search and inform which types of data you may want to access.
2. **Search publicly available resources to see if you can easily find some of this information.** Many local governments maintain [open data portals](#) that include data inventories. Reports published on data providers' websites are also useful resources.
3. **Ask data providers (whether in your project planning team or not) to provide information on datasets of interest.** Identify who in your community may have access to or control of useful datasets. These might be government entities, service providers, private organizations, or members of a local collaborative planning team (see [Fedorowicz and Engelhardt 2019](#)). After you have identified your stakeholders of interest, use the questions in table 1 as a guide to conversations with them. Not every question may be relevant, and some additional ones may emerge through discussion. The questions are designed to create a summary of a **single data source or dataset** and can be used repeatedly for multiple datasets.

Although we show these steps linearly, they are often iterative. As you incorporate new information into what you already know, you may decide to change the project's goals or reach out to new organizations.

The tool (table 1) can be used in different ways and should be customized to fit your needs. For example, if you are only interested in a single dataset, you can send table 1 to the partner that manages it and ask them to provide answers. You can also send the worksheet in the appendix, which presents same questions with more extensive formatting.

**TABLE 1**  
**Data Landscaping Questions**

Organization name of data provider or manager	
Staff name, title, and e-mail	
Dataset or datasets managed	Enter the name of the databases/systems your organization is responsible for managing related to the topic above

Description of data	Describe the data you collect. If possible, list summary types of information that might be relevant to the project. Examples include demographic information, entry/exit dates, arrest/booking information (if working in criminal justice), or diagnosis information (if working in health).
Frequency of update	Describe how and when data are entered or updated (e.g., during intake, at arrest, or during client meetings).
Years of data available	Describe the total time frame of data available.
Unit of analysis	Describe how the data appear in the system (e.g., individual)
Identifiers in dataset	Describe what data fields provide information for a person's identity that you can link across systems (e.g., name or date of birth)
Individuals responsible for data entry	List the types of people who are responsible for inputting the data, such as case workers, police officers, or emergency medical technicians.
Data analyst	Provide the name of the person or people responsible for doing data analysis for your organization.
Public aggregate data	Indicate and link to (if possible) any reports or open data that have been produced using your data.
Data dictionary	Indicate whether your organization has a data dictionary or other written documentation.
Individual-level data sharing (with memoranda of understanding or data-sharing agreements)	Indicate whether your organization has previously shared data.
Current sharing partners	If you share data, list the organizations you share data with.
Data signing authority	Provide the name of the people who can agree to requests.
Challenges to sharing data	List any legal restrictions for data sharing. This might include compliance with the Health Insurance Portability and Accountability Act or 42 CFR Part 2.
Other challenges or concerns	List out other nonlegal challenges or concerns associated with sharing data.

If you're soliciting information from several partners, send table 1 or the worksheet in the appendix out to each partner. Ask them to fill it out for each dataset of interest, then compile all the responses yourself. You might also choose to create a spreadsheet with the questions in table 1 as the column headers and ask each partner to create a new row of answers for their datasets. Box 2 presents an example of this method. This process might be labor intensive for partners, and you should implement strategies to minimize the amount of effort required. One way to do this might be to ask for a meeting and move through the elements in an interview style.

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## BOX 2

### Data landscaping in Charlottesville, Virginia

Community members in Charlottesville, Virginia convened to share data to better understand the service use of people experiencing homelessness. Urban's PFS Administrative Data team provided technical assistance, starting with a spreadsheet that solicited the information from table 1. The team asked for responses from the local fire and EMS departments, the city jail, local mental health service providers, the city's department of social services, and local hospitals.

The Urban Institute team aggregated answers to share with the group so that each partner could see the other data available in their community. The tool served as a helpful starting point for conversations and in drafting data-sharing agreements. The next steps were to use the information and trust generated through data landscaping to come up with shared research questions and identify researchers at the University of Virginia to match and analyze the datasets.

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As your team gathers information from stakeholders, create a summary document that tracks the information on the datasets and serves as a resource for data sharing. This document will allow you and other stakeholders to

- identify information that will help answer your research questions;
- document existing data sharing within the community;
- identify public reports and other forms of aggregate data that will help inform your project
- identify resources, such as data dictionaries that list the specific fields of data in any dataset and what they contain, to catalog data and inform analysis; and
- identify potential challenges and other concerns organizations may have about data security or the use of the data.

This request may require some time investment from partners because administrative data often do not have written documentation. Make sure your initial outreach highlights the benefits of data landscaping to the partner and the benefits to the community or target population. Try to proceed through the data landscaping process in a way that is easiest for your partners.

## What Comes Next?

Once partners have created documents or spreadsheets that inventory the relevant data systems in the community and the necessary information, several paths forward are available. The most immediate next step is to use the information you have collected in conversations with the project stakeholders. With your team and others, discuss the types of data that exist, what you believe can be done with them, and what knowledge gaps persist.

If data sharing is the ultimate goal, the information in the data landscape can be used to draft data-sharing agreements. Data-sharing agreements are formal documents that data providers and recipients sign. They outline the purpose of the data sharing; the data's limits, restrictions, or regulations; and a plan for destruction of the data. Data-sharing agreements can either be created for specific projects or long-term sharing efforts. In either case, keeping a data landscaping document current with relevant partners can help everyone involved access the information they need and build local relationships.

If you've uncovered existing data-sharing relationships, look for ways to build off that infrastructure. You may not need to start from scratch if you can update and modify agreements already in place. Some agreements may be able to easily incorporate new datasets. Even if sharing datasets about individuals turns out to be impractical, stakeholders can still look for ways to share knowledge. For example, it may be possible to share information, such as deidentified data, summary tables, or analysis results, without violating state and federal regulations or without creating a legal and technical infrastructure.

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### BOX 3

#### Additional Resources for Data Sharing

This data landscaping tool and the PFS Administrative Data Pilot series (listed in box 1) are a part of a broader set of resources to help communities with data sharing. The [National Neighborhood Indicators Partnership](#) (NNIP) has two other resources that could be helpful to you:

- **NNIP Lessons on Local Data Sharing:** This online guide explains how to get organized before negotiating for data, lists strategies for convincing data providers to share data; and links to a set of sample data-sharing agreements.<sup>a</sup>
- **NNIP's Resource Guide to Data Governance and Security:** Chapter 4 of this guide discusses relevant topics such as acquiring data through public portals, freedom of information requests, and negotiation.<sup>b</sup>

<sup>a</sup> See "NNIP Lessons on Local Data Sharing," NNIP, last updated September 14, 2018, <https://www.neighborhoodindicators.org/library/guides/nnip-lessons-local-data-sharing>; and "Library Catalog," NNIP, accessed September 12, 2019, <https://www.neighborhoodindicators.org/library/catalog?type=151&partner=All&keys=>.

<sup>b</sup> See Leah Hendey, Amanda Gold, and Kathryn L.S. Pettit, *NNIP's Resource Guide to Data Governance and Security* (Washington, DC: Urban Institute, 2018).

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## Conclusion

No matter how you navigate the data landscaping process, it is critical to do so with the understanding that building trust takes time. This tool, when used and broadly shared, increases transparency about local data strengths and limitations; in doing so, it can help develop and strengthen local partnerships. Collaborators can then tackle data system sharing or improvement together rather than piecemeal. Further, this tool helps provide a foundation for data sharing, which will decrease start-up times for

future projects or research questions. Understanding what data exist in the community and what data stakeholders' goals and challenges are can set you on a stronger path toward local data sharing.



## Appendix: Data Landscaping Worksheet

<b>Organization name of data provider or manager</b>	
<b>Staff name, title, and e-mail</b>	
<b>Dataset or datasets managed</b>	<i>Enter the name of the databases/systems your organization is responsible for managing related to the topic above</i>
<b>Description of data</b>	<i>Describe the data you collect. If possible, list summary types of information that might be relevant to the project. Examples include demographic information, entry/exit dates, arrest/booking information (if working in criminal justice), or diagnosis information (if working in health).</i>
<b>Frequency of update</b>	<i>Describe how and when data are entered or updated (e.g., during intake, at arrest, or during client meetings).</i>
<b>Years of data available</b>	<i>Describe the total time frame of data available.</i>
<b>Unit of analysis</b>	<i>Describe how the data appear in the system (e.g., individual)</i>
<b>Identifiers in dataset</b>	<i>Describe what data fields provide information for a person's identity that you can link across systems (e.g., name or date of birth)</i>
<b>Individuals responsible for data entry</b>	<i>List the types of people who are responsible for inputting the data, such as caseworkers, police officers, or emergency medical technicians.</i>

<b>Data analyst</b>	<i>Provide the name of the person or people responsible for doing data analysis for your organization.</i>
<b>Public aggregate data</b>	<i>Indicate and link to (if possible) any reports or open data that have been produced using your data.</i>
<b>Data dictionary</b>	<i>Indicate whether your organization has a data dictionary or other written documentation.</i>
<b>Individual-level data sharing (memoranda of understanding or data-sharing agreements)</b>	<i>Indicate whether your organization has previously shared data.</i>
<b>Current sharing partners</b>	<i>If you share data, list the organizations you share data with.</i>
<b>Data signing authority</b>	<i>Provide the name of the people who can agree to requests.</i>
<b>Challenges to sharing data</b>	<i>List any legal restrictions for data sharing. This might include compliance with the Health Insurance Portability and Accountability Act or 42 CFR Part 2.</i>
<b>Other challenges or concerns</b>	<i>List out other nonlegal challenges or concerns associated with sharing data.</i>

## Notes

<sup>1</sup> For more information on building trust through working groups, please see another PFS-AD brief, “Developing a Collaborative Planning Team: Steps for Managing Data Sharing” (Fedorowicz and Engelhardt 2019).

## Reference

Fedorowicz, Martha, and Will Engelhardt. 2019. "Developing a Collaborative Planning Team: Steps for Managing Data Sharing." Washington, DC: Urban Institute.

## About the Authors

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