A Roadmap for Policy Change
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Introduction

Remember the DARE program? What began as a partnership between the LAPD and LA public schools to help kids "say no to drugs" became a politically popular campaign that was adopted by school districts around the country. Meanwhile, through the 1990s and 2000s, more than 30 rigorous evaluations found that the program did not work - with one study even finding that it actually increased youth drug use. Three decades later, the federal government is still talking about reviving this popular but detrimental program.

The challenges that cities face

The story of DARE reveals some of the other challenges facing governments in implementing evidence-based policies. Presented with constraints on time and pressure to act, policy makers may rely on emotions and gut feelings as a "short cut" to decision making. It can be hard to reject the funding and political capital that often comes with a program that has the kind of momentum that DARE had. Even if elected officials admit that a policy is problematic or at least no longer effective, it takes leadership to put energy and resources into changing course. And even then, city leaders have to make the case to residents for why a change is necessary, especially after they have invested time and public dollars into a previous approach.

Local governments are increasingly on the front lines of addressing large scale problems with global implications, such as climate change, immigration, and economic inequality. Although researchers are validating diagnostic models and evidence-based interventions to help solve those problems, local government staff have limited time and capacity to find, evaluate, and implement these solutions. Searches by city staff may lead to promising examples in other cities, links to scholarly articles, websites of nonprofits that work on this issue, journal articles, and related news articles. Rather than weighing and evaluating this information, cities may choose to try one policy solution that seems feasible. Without careful monitoring or evaluation, though, this trial and error approach can lead to an environment in which cities fund service providers based on existing relationships and avoid repurposing funding from programs that are ineffective for fear of repercussions, such as people losing their jobs. Further, conversations about what other cities are doing and the available literature sometimes happen on an ad hoc basis; city staff do not often feel prepared to conduct a systematic review. When cities do make changes, they are sometimes incremental and at the program level, instead of addressing multiple factors at once at a system level. Attempting to address a problem that's too broad, such as blight, can be
Without a deep understanding of the root causes of the problem, it can be difficult to identify the best evidence to use. Finally, it can be difficult to know how to implement a particular policy in your city and whether it will have the desired effect.

When the Unified Government of Kansas City, KS, and Wyandotte County (UG) began working on its blight problem, the UG convened a research team to look for evidence from other cities. Using search terms like blight, land bank, abandoned properties, and vacancy that led the UG to learn about the similar efforts in the cities of New Orleans, Baltimore, Mobile, Kansas City, MO, and cities in Ohio and Memphis. The team also remained open to hearing ideas from internal staff who learned about practices from other cities through their own professional organizations and university affiliations, that they had not been empowered to test or implement previously. Since the topic of blight ranges from property maintenance to safety issues, the City research team had to do a lot of reading and debating over conflicting concepts for tackling a wide range of issues within that spectrum. This involved asking questions about whether the policy will work in Kansas City, and what changes would need to be made for it to be successful. When researching land banks, the City learned about the Center for Community Progress, a nonprofit that helps communities address vacant, abandoned, and deteriorated properties. Conversations with the Center for Community Progress led to exploring the idea of a vacant property registry. Upon conducting further research, UG staff came across information on a court ruling from Chicago that certain vacant buildings do not need to follow the City of Chicago’s vacant building ordinance. This directed the search to understand if other cities had examples of whether vacant property registries are working. To determine whether this might work in the context of Kansas City, staff began vetting ideas to see if there were any aspects that conflicted with City ordinances. The UG also examined the feasibility of implementing the necessary technology and feasibility from the perspectives of property owners and UG staff. This initial research and analysis phase took about six months and was led by the General Services Director, a VISTA intern, and the research team. In developing this Roadmap, the City mentioned that it would be helpful to have access to case studies with detailed information on the policy solutions that cities have taken and the specifics of how they have been implemented.

**Purpose of the Roadmap**

This Roadmap is meant to empower cities to take ownership of the policy change process, to frame problems in a way that creates a demand for evidence, and to form long-term relationships with political, policy, practitioner, and researcher allies. This work is necessary. Research from the field of implementation science suggests successful implementation of evidence into practice happens when cities take the time to identify the right people to work with, choose the best evidence from a variety of sources, and consider the best way to adapt
that evidence to their own context. Through our interviews with city staff, we observed that framing the problem clearly, forming advisory groups or some other coalition, and identifying and implementing an appropriate solution are necessary ingredients to successful policy change.

Through this Roadmap, GovEx hopes to facilitate a new way to help American cities rethink the how they solve problems and address the most salient policy challenges in urban governance.
Using the Roadmap

Who should use this Roadmap?

This Roadmap is for any staff member in city government who is charged with solving a problem or implementing a policy. Although the steps can be used to change existing programs or implement new programs, the focus of the Roadmap is on long-term, sustainable policy change. We use the term "policy" to mean laws, regulations, funding decisions, and interventions.

City staff who are reading this guide may be coming from different starting points. It is important to be honest about where that is. For instance, you may be looking for new solutions to longstanding, seemingly intractable problems such as an annual increase in gun violence, or maybe you are facing newer challenges, like the opioid epidemic. Or perhaps you are looking for a data-driven way to address issues related to day-to-day service delivery, such as permitting or bike lanes. The steps are applicable whether you are working on a large scale issue or a local municipal issue.

You can use this guide whether you are a decision maker or front line worker. Throughout the Roadmap, there's information about when and how to engage other people. Collaboration is a key theme through this Roadmap. The good news is, you do not have to do this work alone!

The approach and the tools contained in the Roadmap should be relevant whether you are in a strong mayor or council-manager form of government. Elevating this process to the level of Mayor, City Manager, or City Council may take time and multiple steps, but we hope you will find ways to incorporate data and evidence into your day-to-day work.

What are the steps of the Roadmap?

The chapters in this Roadmap represent the high-level steps involved in policy change. You will notice that the sections refer to one another and build on the previous steps. The Roadmap is meant to be iterative; you will revisit some steps.

The roots of the problems that cities are working to solve are complex and may be the legacy of historical federal policy or sweeping social trends. Although this Roadmap does not explicitly include steps on reviewing this history, we encourage readers to develop a deep understanding of the problem in your own city, while considering current state and federal context.
In interviews with GovEx on the policy change process in their cities, "people" was the word most commonly used by interviewees when describing the various steps to implement a new policy or program. You will notice that this is a theme throughout this Roadmap: The first section begins with identifying the relevant people. The chapter on identifying roles for key partners serves as a foundation for the following steps. The discussion of evidence encourages readers to consider ways in which people can build and use evidence to design strong programs and initiatives, change human behavior, assess impact, ensure effective use of public resources, and improve lives.

Meaningful application of evidence by policy makers does not happen with one-time sharing of cutting edge evidence. Rather, "meaningful influence requires a long-term strategy to form alliances and develop knowledge of policy makers and policy making." In addition to working with the right people and understanding evidence and context, we hope that Roadmap users will form a peer network that shares not just which policy solutions exist, but what implementation looks like. As one city we spoke to in developing this Roadmap put it, "a lot of our city's problems have been solved by others, we just need to figure out how to implement the solutions."

The examples throughout the Roadmap are illustrative of governments that have effectively implemented the relevant steps in this Roadmap, but please note that no city does all of this perfectly. Together, the steps in this Roadmap are meant to help cities frame their problems, create a demand for evidence, and build sustainable coalitions for meaningful policy change.
Gather information about the problem

In your earliest phase it is critical to develop a comprehensive understanding of the problem. You will want to learn about the people who are affected by the problem you are trying to solve and those who can impact the problem. From there, you will get insight into the root cause of the problem, the work that has been tried in the past, and the effectiveness of those efforts. The work from this chapter will serve as the foundation for activities in subsequent chapters. You may revisit these steps as you identify indicators and plan your implementation and analysis.

Be sure to dedicate time and resources to this step. It can be tempting to skip ahead to looking for solutions or to assume that you have an understanding of the problem as a result of a public engagement process.

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The City of Lewisville, TX, conducted a Citywide public engagement process to develop its Lewisville 2025 Strategic Plan. One of the Big Moves outlined in the plan was "Extending the Green," or expanding green space and connecting recreation areas with neighborhoods. The action steps to achieve this goal included cleaning up creeks and removing debris to make them more accessible. The clean ups went smoothly in several neighborhoods, but the City met with opposition from one neighborhood that preferred the natural habitat and expressed concern about the environmental impact of the clean ups. According to Lewisville, if the City had mapped all of the stakeholders to determine who needed to be at the table and who was missing, focusing information gathering on the neighborhood level, it have avoided this problem.

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Start with the "who"...the people

Establish a project team

Begin by naming the project team for this process, including a project lead. The project lead should be someone in City government who is respected, can galvanize other key partners, and has the time to lead this work. This is someone who may have to have difficult conversations with City leadership, departments, and other funded partners. It is not necessary for the project lead to be a policy expert. It is more important for them to have the right relationships and position within the organization. The project team should include individuals with diverse perspectives from multiple departments. There should be someone with policy experience on the project team to ground the conversation in realistic action. Having a team member who can coordinate with researchers on rigorous analysis and translate that work for others is key. Additionally, be sure to include front line staff workers: They will have valuable insight based on their interactions with residents and policy solutions.
have to make sense to the people who will be charged with implementing them. Building a strong, diverse project team is important to ensure that the work does not live and die by one person.

**Identify key partners**

Next, identify the people who the project team can work with on the issue you are facing, including people with lived experience in the problem your city is trying to solve, department staff, and subject matter experts outside of city government. This is the concept behind "build with, not for," a movement led by Laurenellen McCann that emphasizes community expertise and leadership. Mapping out key players and their roles is critical do to early in the information gathering phase, since coalition building is such an integral part of the policy change process. This process might consist of stakeholder mapping (described below), community resource mapping, and cultural mapping. In your mapping, remember to consider potential allies and those who may present roadblocks along the way.

Policy making is not top down or linear. In some cases cities may have to share decision-making power with other actors. For instance, in many cities the local Continuum of Care (CoC) is the lead entity on homelessness services. CoCs apply for and steward federal funds to address homelessness and coordinate services among local providers. Although city governments do have a role in CoCs, they are not always the lead agency charged with distributing funds and therefore their role in homelessness policy may be limited. County governments often have health departments while cities do not. In those cases the balance of power favors county government.

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The City of Denton, TX, was recently faced with an issue of resident complaints about a new dockless bike share that arrived in town and is viewed by some as "expensive litter." In response, Denton's City Council, which was already discussing potential rules for bike share companies, elevated this issue and charged city staff with identifying a solution. Presently, the City is reviewing ordinances from nearby cities to determine how they are solving this problem, and what solutions may be feasible in Denton. The mapping example below represents local actors in Denton with a stake in this issue who have multiple perspectives and levels of power.
Use this template, developed by the Centre for Public Impact (CPI), to brainstorm who you might reach out to as you embark on the road to policy change. Remember to think about how each person or group relates to the problem.

**Begin to define the "what," or the problem, in your City**

The rest of this section will help you refine the problem statement. For now, gather some key partners to clearly articulate why change is needed. Use the template below, developed by Denver Peak Academy, to capture the problem statement. You will build on this later.

**Problem Statement – Why Change is Needed (1-2 Sentences)**

Through our interviews with city staff we heard that when discussing municipal challenges, it can be tempting to jump to a solution before taking the time to really understand the root cause of the problem. This makes sense, since city leaders and staff are responsible for delivering services and being responsive to residents, while addressing new problems that arise in the city.

The roots of the problems that cities are working to solve are complex and may be the legacy of historical federal policy or sweeping social trends. To help the problem seem less daunting, it can help to break them down into the root cause to identify a manageable component of the problem. Using a fishbone exercise or "five whys" technique can also help...
to find the root cause of the problem, and avoid simply addressing symptoms of the problem and repeating the mistakes of history. Tools such as journey maps can help you understand the experience of those who are affected by the problem.

The Centre for Public Impact, with support from Bloomberg Philanthropies, developed an exercise to support cities in identifying the "right sized problem." According to CPI, a "right sized" problem is one that is large enough to potentially apply to other cities, but small enough to solve within a reasonable time frame.

At the beginning of Mayor Berke's administration in the City of Chattanooga, TN, veterans experiencing homelessness were asking the City for help in finding housing. Talking to this population revealed that veterans had trouble identifying affordable housing, which motivated the Administration to work on a solution. The problem of veterans experiencing homelessness was the "right size" because it focused on one segment of people experiencing homelessness - veterans - and their specific challenge in identifying affordable housing.

What is the right-sized problem?

**What is the problem?**

**There are too many veterans experiencing homelessness in Chattanooga.**

<table>
<thead>
<tr>
<th>Cause 1</th>
<th>Cause 2</th>
<th>Cause 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of housing</td>
<td>System of services is too difficult for veterans to navigate</td>
<td>Case Managers can’t find veterans after they come in for an appointment</td>
</tr>
</tbody>
</table>

Circle one of the causes and deep-dive into that cause by asking why:

- **Why:** Landlords won’t accept veterans in their units
- **Why:** There are many housing programs that have veterans and each has its own requirements
- **Why:** The veteran doesn’t have a way to follow up with the case manager
- **Why:** Landlords have requirements for income, criminal background, etc.
- **Why:** There are many housing programs that have veterans and each has its own requirements
- **Why:** Veterans don’t have a regular location, email, or answer their phone
- **Why:** Landlords have had bad experiences with past tenants
- **Why:** Case Agency has requirements tied to their specific grant or funding source

Develop a comprehensive understanding of how your city currently addresses the issue

In the Chattanooga example mentioned above, City staff discovered that veterans were having trouble navigating the City's various affordable housing programs and getting access to the housing and services that they needed. At the same time, newly elected Mayor Berke was exploring current and future opportunities to serve this population. Rather than continue to use federal funding for emergency shelters, Mayor Berke directed city staff to prioritize
"Housing First," which values connecting people with permanent housing over transitional housing and supportive service after speaking with representatives at the US Department of Housing and Urban Development (HUD).

This examination of what the City is currently funding and the sources of that funding was a turning point in Chattanooga. Understanding this problem from a systems perspective - including policies and funding streams at multiple levels of government, social networks through which information is often spread, technology, the built environment of market-rate and public housing - helped the new Mayor analyze existing efforts and lead staff and other actors in the same direction.

**Begin to gather the data**

To truly capture the suite of services that your City is providing, ask department staff to list the programs related to your problem statement that your city runs or funds. When listing the programs, capture details such as:

- program name
- the name of the dataset that is relevant to each program
- a description of the dataset
- the source of the dataset
- if the data is internal or external
- whether this data is already being collected

This information will form the basis of your inventory of administrative data, or datasets that are kept by governments for operational purposes. This may include call center records (311, 911), tax data, property assessments, inspection information, social service records, etc. At this point, list all relevant administrative datasets. You will prioritize which datasets to gather more information on later when you are developing indicators.

A sample template that can be used to capture this information is below:

**Problem Statement:** ________________________________
To gather this information, consider assigning one point person to survey or interview city staff. Speaking with front line workers, staff who work with federal grants, department heads, and everyone in between will ensure a deep understanding of the relevant programs and datasets. During the course of these conversations, be sure to ask city staff which organizations they work with externally and capture that information as well even if they are not recipients of city funding. In addition to conversations with experts in city government, your city’s budget documents are another great source of information.

**Collect data and observe trends**

Next, try to gain an understanding of why the problem still exists if it has been something you have worked on for awhile, or why it is emerging now if it is new.

Analyzing **administrative data** can demonstrate past effectiveness of initiatives related to your problem statement. Using the dataset inventory that you began in the previous step, talk to department staff about which datasets are most relevant to the problem and gather a few years worth of historical data. Begin to look for trends in this data, discussing potential reasons for those trends with relevant staff. Can the trends be explained by seasonality, changes in funding, staffing fluctuations, or some other reason? Based on the historical data analysis, create a baseline against which future changes can be observed.

Other datasets can help provide additional context. For instance, if the number of people experiencing homelessness in your city is increasing, it may be helpful to take a look at housing affordability. If you do not have the data you need, consider a **proxy measure**. As an example, housing is often considered **affordable** if it costs 30% or less of a household's income. But if household income data is not available at the city level, **Area Median Income (AMI)** can be a helpful **proxy**.
Qualitative data can also help answer questions around the effectiveness of previous efforts. Try to obtain a variety of perspectives -- both mainstream and outliers -- from networks beyond your own to provide you with the greatest vantage point for evaluating potential impact. Understanding how those efforts were received by different parts of your community, and if there may be elements of previous systems to preserve, will be crucial to the success of any policy change. This information may be obtained through focus groups, interviews, and surveys. For more information on how to use these qualitative research tools, please see these resources developed by the Agency for Health Care and Research and Urban Institute.

Finally, take a look at national data to see where else this problem might exist. This research may be helpful in later steps, when you are looking for promising policies in other cities.

Putting it all together

Use the template below, developed by Denver's Peak Academy, to capture your refined, "right sized" problem statement, and current and future states. Working through this exercise with partners is helpful to gain buy-in. The responses will be important when getting other partners on board.

<table>
<thead>
<tr>
<th>Why Change Is Needed</th>
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<tbody>
<tr>
<td>Your right-sized problem</td>
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<table>
<thead>
<tr>
<th>Current State</th>
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<tbody>
<tr>
<td>Analysis of trends in data</td>
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<table>
<thead>
<tr>
<th>Future State</th>
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<tbody>
<tr>
<td>Ideally, what are the outcomes you hope to achieve</td>
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Checklist

The key steps to gathering information are below:

- At this point, focus on the problem rather than jumping to solutions
- Listen to people who are asking for help and to advocates who are raising issues
- Be as specific as possible in identifying the root cause and honing in on the part of the problem that your city can address
- Identify trends based on multiple sources of data including historical administrative data, proxy measures, qualitative data, and national measures
Gather information about the problem

- Capture your problem statement, the results of your analysis, and desired outcomes
Strategically engage key partners

Policy theory research often focuses on increasing policy makers’ access to evidence as a way to avoid taking shortcuts, like making decisions based on emotion. Implementation science suggests that increasing access to evidence is not enough, and that policy change should be examined in the wider context of debate, coalition forming, and persuasion. Meaningful policy change requires "a long-term strategy to form alliances and develop knowledge of policy makers and policy making," rather than using evidence in policy making on an ad hoc or one-off basis.

Understanding networks and systems is important to develop sustainable policy change. This section is meant to help readers take the steps to build engagement strategies for partners that represent different systems and networks. Engagement should be an ongoing process of connecting people to one another and to an issue. Engagement should not be in name only - we have all experienced engagement activities that give people a specific role to play that leads to a neat, predictable outcome. According to the "Build With" movement, undervaluing and underinvesting in engagement strategies can lead to a disconnect of certain individuals or groups, and mistrust of government. When developing engagement activities, remember that how people engage and whether they engage has to do with how you structure opportunities for engagement.

Convene a core advisory group

An advisory group comprised of people from multiple sectors can be helpful as you consider the local social, environmental, and political context in which you intend to introduce policy change. Revisit your stakeholder map, and determine who would be best to serve on this group. To make sure you are considering the problems and solutions through an equity lens, include people with lived experience who have expertise in the effectiveness of systems, whether those systems function as intended, and how they may impact human behavior. You may also wish to include someone with experience working with data and analysis - this person can help determine the type of data that may be readily available and useful to collect, and can also help plan and shape your analysis to figure out which programs are effective. Be sure to invite front-line workers as well - it's critical that whatever solutions come out of this process are meaningful to those who will be responsible for implementing them.

Bringing people together can be challenging, but there are a few ways to set and manage expectations. First, make sure that the group is aware of the problem statement, current state, and future state - this can help start everyone off on the same page. Next, spend
some time getting to know each other’s work to learn about everyone’s strengths. This shared understanding can help as you clarify roles and responsibilities of each partner in the group -- this is important to avoid finger-pointing in the future, and to ensure that none of the tasks slip through the cracks. In some cases, there are many actors with different responsibilities, as in the case of Baltimore City’s 38-member Youth Fund Task Force, which is chaired by nonprofit and corporate partners and includes representatives from the nonprofit and faith communities; students; the business sector; local universities; City Council; and the Mayors Office.

Once roles and responsibilities are clear, you may consider developing a charter, guidelines, or terms of reference to set expectations for the group. Be sure to distinguish this from other boards and commissions that your city may have. Next, you may wish to establish a regular, ongoing meeting schedule. Be sure to send agendas and meeting materials ahead of time, and clarify the objective of each meeting.

In Seattle, the City developed its Housing Affordability and Livability Agenda (HALA) to respond to rising housing costs and homelessness. This is a trend in other west coast cities as well, which may be explained by an influx of new residents who are attracted by the emergence of tech jobs, the attraction of the outdoor lifestyle, or the recent passage of progressive policies like legalized gay marriage, a $15 minimum wage, and legalization of marijuana. Seattle brought together a multi-stakeholder advisory group comprised of local housing experts, renters and homeowners, developers, and government officials to share information about their needs, and develop recommendations based on these needs. The interests and motivations of this group were varied, and it took about ten months to find common ground. The series of recommendations that the advisory group created is meant to serve residents with a spectrum of needs.

Build a process for community participation

Of course, not everyone can be included in an advisory group, and advisory group members may not necessarily represent the varied perspectives of their peers - for instance, not every homeowner has the same set of needs. To gather input from a wider swath of the population, it can be helpful to build a process to invite the public at large to share their ideas. Cities do this in a variety of ways, from online conversations and surveys to in-person meetings. Remember that being intentional about gathering the viewpoints of people is more important than using the latest technology and tools.

The insight generated by community participation exercises can be included in your review of evidence, which is discussed in a subsequent chapter. In West Virginia, a state that has been hit hard by the opioid epidemic, state health officials drafted an opioid response plan that was informed by public engagement, as well as local and regional subject matter.
experts. The public was invited to present comments on ideas for decreasing overdose, early intervention, treatment, and recovery. Public health and medical faculty from West Virginia University, Marshall University, and Johns Hopkins University provided responses to the comments. The result was an Opioid Response Plan that health commissioner Rahul Gupta presented to Governor Jim Justice.

A sample spectrum to plan your own community participation process, created by Laurenellen McCann, is below.

![Constituent Involvement Spectrum](image)

**Source:** Laurenellen McCann

Community-based participatory research is another way to work with the community to improve outcomes. CBPR means the community is involved in all aspects of the research process, which is often iterative. In CBPR, traditional researchers and community members share knowledge as well as resources and credit.

**CBPR In Action:** In San Francisco, an environmental justice nonprofit teamed up with the City's Department of Public Health and an outside evaluator to understand the root causes of obesity and food insecurity in low-income neighborhoods, and identify solutions. Through research methods such as interviewing residents and store owners, diagramming store shelves, GIS mapping, an economic analysis, and review of similar policies in nearby cities, the team observed that the stores that residents have access to were stocked with less healthy foods, and that residents wanted more healthy food, and less alcohol and tobacco. This project resulted in local and state legislation to encourage stores to stock fresh produce.
Develop relationships with subject matter experts

One way to keep subject matter experts engaged is to involve them in the community participation process, as described above. In the West Virginia example, subject matter experts responded to and synthesized the public comments. Other opportunities are described below:

Advisory: A city department head, Mayor, or staff member may develop a one-on-one advisory relationship with university faculty member, or a collaborative between the City and University to address a particular problem. A great place to start is to look for relevant practice centers within your local university, and reaching out to subject matter experts. In addition to their expertise on the relevant policy topic, he or she may also be able to identify other experts, and even provide support on hiring the right talent to lead certain programs. An advisory relationship with a university subject matter expert can also help when cities are considering bringing in new programs. These experts are often familiar with programs that are based on national models, and can provide insight into a program's origin and lineage, effectiveness in other places, and the potential for implementation in your city. Academics can also help identify indicators based on government indicators or literature. Finally, relationships between policymakers and researchers provide the most broadly effective route to pulling research into policy.

Research and evaluation: Academic experts may support cities in evaluation - indeed, evaluating city initiatives is a traditional model of city/university relationships. Sharing the information you collected in the "Gather Information" phase can help researchers understand your work and goals, which in turn will strengthen the support that they can provide. Discussing details about your intervention and evaluation plan at the beginning of the process means that a research partner can help with the evaluation design and data collection. For instance, the Wilson Sheehan Lab for Economic Opportunities walks cities through considering the following questions before partnering on an evaluation:

1. Is there a clear policy/program model with objective screening criteria?
2. Is it possible to evaluate what happens both with the policy/program and in the absence of the policy/program?
3. Are there one or more measurable outcomes of interest?
4. Are there enough people for rigorous quantitative analysis?
5. What data will be necessary for the study, and what are the processes for accessing these data source(s)?
6. Is there a compelling reason to evaluate?
In addition to assessing readiness to conduct an evaluation, researchers can help you hone in on the purpose of the evaluation. The World Bank describes several potential uses of evaluation which are defined here. In brief, evaluation can help decision makers:

- make resource allocation decisions
- rethink root causes of problems
- identify new problems
- decide on a best alternative
- determine whether programs or policies are being implemented with fidelity
- determine whether programs or policies are having the desired impact

Researchers can also provide support in sharing the results with the scientific community through papers and conferences, which is valuable in creating a peer network of evidence-based city practitioners.

*Training and technical assistance:* University partners, especially those at practice centers, can be helpful in developing or updating training curriculum, training the trainer, and delivering training to city staff.
Review the evidence and collect details

Once you have a thorough understanding of the problem, data, and actors, you will need to conduct your own research on available evidence and learn about the landscape of policy options. Your goal will be to develop an accessible list of information about policies that have helped solve similar problems in other places. This chapter will guide you through the steps of preparing your reviewers, understanding levels of evidence, and collecting the details on evidence that you will need for discussion with decision makers in your city.

Select and prepare your reviewers

Assign a person or team to review relevant interventions that have demonstrated success in other jurisdictions. Their goal will be to produce a review of all of the relevant programs, policies, or initiatives that your team could consider implementing. They will be conducting a literature review, supplemented by interviews with experts and peers who have information about potential programs.

Since the people you assign to this task are providing the baseline of potential options to implement, it is important that you choose people you are confident will be thoughtful and thorough in their work. It is also critical that they are aware of the importance of source credibility. Ensure your reviewers have familiarized themselves with rules for critically analyzing information sources before they get started. If they are including news articles as part of their search, they should also be aware of methods for evaluating news credibility.

Ask your reviewers to develop a plan and timeline to complete the review. This starts with solidifying a governing research question. One way to know you are creating a detailed research question is to use the acronym "PICO," reminding you to include reference to the population, intervention (if you have one in mind), comparison, and outcome elements in your research question. For example, if you know that you have a population of teenagers who are homeless, you have learned from your stakeholders that many of these teenagers identify as LGBT, and you have heard something about the approach of creating drop-in centers for delivering support, you could ask:

```
For LGBT youth facing homelessness (population), how effective are drop-in centers (intervention) relative to standard social services (comparison) at settling them in permanent housing (outcome)?
```

If you do not have an intervention in mind, you can leave out the intervention and comparison, and simply ask:
How can we help LGBT youth facing homelessness (population) obtain permanent housing (outcome)?

Once your reviewers have their research questions, use the questions to create a list of keywords they can use in their literature search. This will help keep their collection of articles reasonably focused. Have them describe what their search process will be, including listing the databases they will review and their plan for storing the information they will collect. (Here are some additional suggestions for structuring a review plan.)

What your reviewers will be doing is a lightweight version of a rapid review. To the extent that they would like to develop a methodology for specific search protocols, including critical appraisal processes, they can certainly go ahead and do so.

Use different levels of evidence for the most complete picture

As discussed in the "Working with a range of evidence" chapter, the Nesta Standards of Evidence framework -- reproduced below -- is helpful to understand the level of confidence that a program or intervention is having a positive impact. This approach lets you put interventions that you have heard about locally, but which have not been studied, together with those with a demonstrated causal effect. This is helpful since a number of policies, programs, and practices that you will want to consider may not yet have much of a research record.

Nesta Standards of Evidence (Source: Puttick and Ludlow 2012)

- **Level 5**: You have manuals, systems and procedures to ensure consistent replication and positive impact.
- **Level 4**: You have one or independent replication evaluations that confirm these conclusions.
- **Level 3**: You can demonstrate causality using a control or comparison group.
- **Level 2**: You capture data that shows positive change, but you cannot confirm you caused this.
- **Level 1**: You can describe what you do and why it matters, logically, coherently and convincingly.
Nearly any piece of information about an intervention can be classified within the standards of evidence. For example, if someone has a credible hypothesis about how an intervention could produce benefit, this type of evidence would be classified as Level 1. This type of evidence could include interventions in other cities that you read about in the news or hear about at a conference. For instance, when USDA allowed schools and school districts to provide free breakfast and lunch to all students through the Community Eligibility Provision (CEP), many districts implemented this option even before there was evidence of effectiveness. This would fit into Level 1, since it builds on the logic that providing access to meals will decrease food insecurity.

You may also find pieces of information that qualify as Level 2 evidence. For instance, as more school districts implemented CEP, principals testified about positive changes they observed in students, such as a more positive demeanor that can lead to better academic performance. Data also showed that the students described were receiving more meals than before the program's implementation. However, it was too soon to build evidence to show a causal relationship between the increase in free meals and increased academic performance.

“Lower-level” evidence can consist of nuanced, but valuable, elements that relate to an intervention’s potential fit with a community. Qualitative information such as testimony from people who have experienced an intervention and those who have facilitated or implemented it, will always be useful to consider and provides detailed, local context.

Experimental studies -- described starting at Level 3, with controlled experiments, and going through Level 5 with fully fleshed out protocols and processes for replication -- still occupy the higher levels of this description of evidence. This prioritization shows the value of rigorous study for evaluating the impact of a particular policy or program, rather than other factors that could be influencing outcomes of interest. Remember that multiple types of evidence can complement rigorous impact evaluations and give city leaders additional insights and broader perspective.

Access information

Encourage your reviewers to begin their search for promising practices in government and non-profit clearinghouses and in academic policy journals. Work published in these sources has already been subjected to a high level of professional scrutiny and generally contains a great deal of detail, which means that your reviewers are more likely to be able to pull out the information you need to make a good decision.

Clearinghouses:
Here are some of the "clearinghouses" (collections of program evaluations) for evidence-based policies and programs:

- **Results First Clearinghouse Database**, The Pew Charitable Trusts.
  Collects together eight other clearinghouses to provide information on interventions in the following categories: adult criminal justice, education, child welfare, health, juvenile justice, mental health, substance abuse, and youth development. Individual clearinghouses included in Results First are:
  - **Blueprints for Healthy Youth Development** - for youth development and violence prevention
  - **California Evidence-Based Clearinghouse** - for child welfare interventions
  - **The Laura and John Arnold Foundation’s Social Programs That Work** - for social services programs
  - **The U.S. Department of Education’s What Works Clearinghouse** - for education interventions
  - **The U.S. Department of Health and Human Services’ Research-Tested Intervention Programs (RTIPs)** - for cancer control interventions
  - **The U.S. Department of Health and Human Services’ Teen Pregnancy Prevention Evidence Review (TPP Evidence Review)** - for sexual risk behavior and sexual health outcomes
  - **The U.S. Department of Justice’s CrimeSolutions.gov** - for criminal justice, juvenile justice, and crime victim services
  - **The U.S. Substance Abuse and Mental Health Services Administration’s National Registry of Evidence-based Programs and Practices* (NREPP)** - substance use and mental health interventions
  - **The University of Wisconsin Population Health Institute and Robert Wood Johnson Foundation’s County Health Rankings and Roadmaps What Works for Health (What Works for Health)** - health behaviors, clinical care, social and economic factors and the physical environment

- **UK What Works Centres.**
  The British government has chartered a network of subject-specific organizations which collect, synthesize, and report out evidence on the effectiveness of policy, programs, and practices.
  - **National Institute for Health and Care Excellence (NICE)** - health and social care
- Sutton Trust/Educational Endowment Foundation - educational achievement
- College of Policing What Works Centre for Crime Reduction - crime reduction
- Early Intervention Foundation - early intervention
- What Works Centre for Local Economic Growth - local economic growth
- Centre for Ageing Better - quality of life for older people
- What Works Centre for Wellbeing - wellbeing

- Wilson Sheehan Lab for Economic Opportunities (LEO), University of Notre Dame
  Provides links to their evaluations of interventions in criminal justice, self-sufficiency,
  education, health, and housing and homelessness.

- Clearinghouse for Labor Evaluation and Research, US Department of Labor
  Provides research on workforce and labor-related policies and programs.

  Studies on poverty-reducing interventions from around the world.

- Campbell Systematic Reviews, Campbell Collaboration
  Systematic review of policy interventions by scholarly "coordinating groups" in seven
  issue areas: crime and justice, education, international development, methods, social
  welfare, knowledge translation and implementation, and disability.

- Benefit-Cost Results, Washington State Institute for Public Policy.
  A Washington State-chartered program to establish the likelihood of relative costs and
  benefits for programs across the following areas: juvenile justice, adult criminal justice,
  child welfare, pre-K to 12 education, children's mental health, health care, substance
  use disorders, adult mental health, public health and Prevention, workforce
  development, and higher education.

- Effective Interventions, Centers for Disease Control and Prevention. Repository for
  evidence-informed HIV prevention/care interventions (with steps on how to implement)

**Journals and indexes:**

Once you have reviewed relevant information accessible through clearinghouses, it is worth
taking a look at individual studies published as scholarly articles. Your reviewers will do this
by searching article indexes and academic journals. Unfortunately, a number of useful
academic journals and indexing platforms may not be generally accessible to your reviewers
if you do not have a subscription to them. To address this, consider partnering with a local
college or university to provide you with a list of articles from the following sources. (This is also an excellent opportunity to seek research support from any academic stakeholders you identified previously.)

Indexes:

**Google Scholar** "includes most peer-reviewed online academic journals and books, conference papers, theses and dissertations, preprints, abstracts, technical reports, and other scholarly literature, including court opinions and patents." It allows you to specify a publication range in your search and provides links to likely sources for all listed articles.

**Policy File Index** "is a unique resource for U.S. public policy research in that it grants users access to timely, updated information from over 350 public policy think tanks, nongovernmental organizations, research institutes, university centers, advocacy groups, and other entities."

**Policy Archive** works "to collect and disseminate summaries and full texts, videos, reports, briefs, and multimedia material of think tank, university, government, and foundation-funded policy research."

Another source for high-quality research is the reports of the *Congressional Research Service*. You can find their reports aggregated [here](https://www.everycrsreport.com/).

Specific journals:

Often, the most useful academic journals for unearthing policy or program reviews will be in each specific subject area -- that is, in education journals for education policies. You can use a general index like Google Scholar to begin to learn which journals are most often useful for your search. However, you can also search the following two generalist policy publications for issues and articles related to your topic:

* Public Administration Review
* Journal of Policy Analysis and Management

**News sources, subject matter experts, and interviews:**

Although it is valuable to know what has been explored through a scholarly research framework, it is also useful to learn what kind of interventions are being tried in the field right now and how people feel about these trials. Search subscription news aggregators like LexisNexis or free news aggregators like Google News or Yahoo News for your issue area plus the word "policy" or "program" to see what kinds of interventions are being covered in the news.
Do not forget to contact the advisory group members who were chosen for their subject matter expertise. In addition to providing good material through interviews themselves, they may have ideas about other subject matter experts you should contact to ask about potential interventions.

**Peer cities and networks:**

In addition to reading about the work of other cities, it is ideal if you are able to speak with people who are involved with current implementations of interesting interventions. In your city, you likely have relationships with your neighbors, but it can be helpful to look outside of your region for solutions as well. To find counterparts in other cities who are working on a program you would like to learn more about, you can contact staff in intermediary organizations (like GovEx or your professional associations) who might be in a position to put you in touch immediately or who might see another good route for setting up a conversation. Here is a list of networks that may be helpful:

- International City/County Management Association (ICMA)
- National Association of Counties (NACO)
- National League of Cities
- US Conference of Mayors
- What Works Cities

**Collect the details**

Once your reviewers have found evidence on possible policies or programs to implement, they should capture key details that will help decision makers understand the potential effectiveness and applicability of each potential intervention.

For each source that has provided information you want to convey, use the template below to capture as many of the following details as possible. (You do not need to complete this for sources that provide duplicative information or are otherwise not that useful.)

<table>
<thead>
<tr>
<th>Program or policy name</th>
<th>(e.g., “Housing First” or “blighted properties registry”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source type</td>
<td>(e.g., journal article, interview, subject matter expert, study, association, community participation process)</td>
</tr>
<tr>
<td>Source details</td>
<td>(e.g., article title and publication, name and title of interviewee)</td>
</tr>
<tr>
<td>Evaluation methodology</td>
<td>(e.g., randomized evaluation, comparative evaluation of two different groups, before/after analysis)</td>
</tr>
<tr>
<td>Evidence level</td>
<td>(e.g., Level 1, 2, 3, 4, 5)</td>
</tr>
<tr>
<td>Description</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Program or policy goal</td>
<td>(1 sentence capturing the principal aim of the intervention)</td>
</tr>
<tr>
<td>Existing implementations</td>
<td>(Where has the intervention been tried? List as many sites as you are aware of.)</td>
</tr>
<tr>
<td>Characteristics of implementation sites</td>
<td>(For each implementation site, offer basic geographic ID — city and state. Then, you will want to collect the details which are relevant to your decision makers' considerations about what makes a location “similar to” or “different from” your situation. You will at least want to include, for each implementation site: Population number, Population density (rural, urban, suburban), Socio-economic characteristics. Before starting, ask your decision makers about any particular characteristics of program implementation sites they would want to know before seeking to replicate.)</td>
</tr>
<tr>
<td>Characteristics of implementation partners</td>
<td>(Any available details about organizations, institutions, or people who were involved with implementing the intervention - e.g., independent childcare center, public elementary school, city public health nurses.)</td>
</tr>
<tr>
<td>Characteristics of target population/eligible program participants</td>
<td>(Any available details about people who are the beneficiaries of the program or otherwise included or affected by the intervention - e.g., number of program participants, categories of property owners affected)</td>
</tr>
<tr>
<td>Policy or program duration</td>
<td>(How long has the intervention been in place in each implementation site? Has it ended and if so why?)</td>
</tr>
<tr>
<td>What benefits came from each implementation?</td>
<td>(Any observed positive effects of the intervention, including effect size.)</td>
</tr>
<tr>
<td>Statistical estimates of intervention effectiveness</td>
<td>(Any available statistical estimates of the intervention's effects.)</td>
</tr>
<tr>
<td>What drawbacks were observed?</td>
<td>(Any available details about unintended or unavoidable negative effects of the intervention.)</td>
</tr>
<tr>
<td>Program or policy costs</td>
<td>(Any available details about program costs per implementation.)</td>
</tr>
</tbody>
</table>
Review the evidence and collect details

The stage I want to reach is...

What evidence will we have? How will we collect it?

What other approaches might we use to collect evidence?

Are there any barriers preventing us from achieving this?

What evidence are we currently missing? And how might we collect this evidence?

The stage I am currently at is...

What evidence do we have? And how did we get it? How was it measured?
Decide on a policy to implement based on local factors

To get the critical buy-in from leadership to implement a new policy or program, the project lead should schedule a meeting with decision makers to present the evidence surrounding the policy options captured in the template. Depending on your insight into your city leadership's willingness to make change, you may wish to share the research you have conducted on the root causes of the problem and some of your analysis on the impact of current efforts to date.

Consider the applicability of an approach

As discussed in the previous chapter, policymakers often look for evidence of effective programs in other cities, but often the question arises of how generalizable a program is from one city to another. The Abdul Latif Jameel Poverty Action Lab (J-PAL) suggests that in reviewing evidence from another location, it is helpful to identify the specific mechanism that was used (delivery of program or service, information sharing, etc.), identify the local conditions that were in place, observe the behavior change that resulted from the mechanism, and finally to understand local context and conditions (legal or cost constraints, cultural norms, etc.). This set of presentation elements can be drawn from the list of details collected in the research template.

Education policymakers in Chicago, IL, used findings from programs in Kenya and India, in which children who had fallen behind their peers were given educational support targeted to their level of learning. The mechanism used was targeted teaching and there were similar conditions present in all three countries. Although some students had fallen behind in the curriculum, teachers were incentivized to teach grade-level materials. Considerations of how the local context in Chicago might affect implementation of a targeted teaching program included understanding how the neighborhoods that the students were from may have affected their educational outcomes and the high cost of teaching in small groups. In Chicago, Match Education provided two-on-one tutoring, which matched students with well-educated individuals who have not had formal teacher training for a lower-cost model. The results were positive. Students who were tutored performed better in math and were more likely to pass high school classes.

The "generalizability framework" proposed by J-PAL is below. Use this as a template as you consider potential policy solutions.
Once you have narrowed the policy options, discuss the questions below for each option you are considering. This step is critical, as understanding local context is so important in successful policy implementation.

Community Context Questionnaire

Local context:

- Does this option make sense in our community?
- Is this a "one size fits all" approach?
- Is any particular group absent from this approach?
- If so, is that ok?

Your answers:

Effectiveness:

- What would we expect to observe if the pilot is as effective here as in City X?

Your answers:

Timing:

- Does the timing make sense?
- Is this the right time to implement this policy change?
Where are the potential roadblocks that could affect the schedule?
Is there any way to mitigate this?
How long would it take to see an impact?

Your answers:

Implementation:

• Do we have the staff capacity to implement this?
• Are there additional partners that you can bring to the table to support implementation?
• Does this make sense given our form of government?

Your answers:

Authority:

• Does our city have the authority to enact this?
• If so, what is the appropriate mechanism?
• Are there legal barriers?
• Are there any existing preemption issues from the state or federal government?
• Can those be addressed through legislation/advocacy?
• Is there political support or opposition to this?

Your answers:

Cost:

• How much will this cost annually?
• How will we pay for it?
• Can the policy be implemented with existing funding?
  • If so, is this funding reliable?
• How would this policy option affect our city's budget in the short and long term?
• What other funding options can we consider?
• Is there an alternative that would cost less and give us similar results?
• Will any constituency be adversely affected if funding for programs that impact them is shifted to another program, policy, or initiative?

Your answers:
Establish a framework to monitor progress

Now that you have reviewed the evidence, considered local context and chosen your policy, it is time to determine how your city will monitor progress of this new approach. City staff and leaders need to establish the infrastructure for ongoing, continuous decision making based on whether the policy change is leading to the desired outcomes for residents and whether the change is meaningful and rational to front line workers. Setting arbitrary goals at the local level that conflict with goals at other levels is confusing to the individuals responsible for achieving the goals. Goals that are set too high to achieve can be demoralizing to staff.

This section includes steps to set up a venue in which City staff and leadership routinely visit key indicators to determine what is or is not working, and to make decisions in real-time. For more reading on performance management, please visit the GovEx Performance Management Getting Started Guide.

In performance management, terms such as indicator, measure, and metric may be used interchangeably. In this guide, we will use "indicator." In your work, the most important thing is to be consistent in whichever term you use. This video may be helpful in understanding this concept and communicating it to others.

Establish the fundamentals and gather your team

First, determine whether there is an established venue or regular meeting schedule during which you can discuss progress. If your city has an existing performance management structure on a related topic, adding a discussion of the progress of policy change to your agenda can be a great idea. If this will be a standalone meeting, decide how frequently the project team and decision makers will meet and put those meetings on the calendar for the entire length of the project.

Determine who will staff and attend routine meetings on City progress. These meetings may include the Mayor and/or City Manager, department head, staff who are implementing the policy change, and analysts.

Identify indicators

It is critical that indicators be an important city and community priority, as well as something the City plays a major role in addressing. There may be instances in which the City will need to reach out to or collaborate with external partners to get a more complete picture of progress on the overall policy change.
An **outcome indicator** describes the desired effect of the targeted population.

Example: Bellevue’s **family friendly neighborhoods indicator** measures the percent of residents who believe they live in a neighborhood that supports families, particularly those with children.

With your key partners, revisit your problem statement, current state, and future state exercise, and begin to identify the outcome indicators that will illustrate success. For now, choose a single top-level key performance indicator (KPI). It is critical that the KPI - the piece you will measure - be a priority for the community and something the City plays a major role in addressing.

**Output indicators** measure the process of program or service delivery.

Example: San Diego Mayor Kevin Faulconer’s **goal** to repair 1,000 miles of street by 2020.

Reviewing the administrative dataset inventory, begin to pare down the relevant programs and datasets that support your KPI. What are the measures of effectiveness for each program? These are your output indicators.

The diagram below illustrates the relationship between output and outcome indicators.

Think about **implementation indicators** as measuring steps in the program’s roll out that are necessary to obtain desired changes. Implementation outcomes can focus on the intervention, staff delivering the intervention, an organization or system, and can address feasibility, adaptability, sustainability, and cost. Two key questions to consider when developing implementation indicators are:

1. Is the intervention acceptable and appropriate to the community; and
2. Is it feasible to implement intervention X at this time with these resources?
A more extensive list with definitions of potential implementation outcomes is linked here.

Use the table below to choose the desired implementation outcomes for your pilot and to plan your measurement technique. This should include level of analysis (individual provider or consumer, organization or setting), your measurement technique (surveys, observation, interview, focus groups, administrative data analysis), and the phase when you will collect this information (early, mid, late). There may be more than one level of analysis, measurement technique, and phase of data collection.

<table>
<thead>
<tr>
<th>Implementation outcome</th>
<th>Definition of outcome</th>
<th>Level of analysis and measurement</th>
<th>Your measurement technique</th>
<th>Phase of pilot when you will collect data</th>
</tr>
</thead>
</table>

Use the space below to capture your indicator wish list.

**Indicator wish list:**

**Outcomes:**

_________________________________________________________________________

_________________________________________________________________________

**Outputs:**

_________________________________________________________________________

_________________________________________________________________________

Implementation outcomes:

_________________________________________________________________________

**Set a public, high-level goal**

The high-level goal is critical in establishing direction to galvanize the people who will be doing the work. When discussing the goal, use the Mayor's bully pulpit. Look for key milestones in City government to share the goal statement, such as the beginning of a Mayoral administration, a State of the City speech, or other public remarks.

Goals should be "SMART."

**Specific** as possible (in naming the population who will be better off, the action the city will take)

**Measurable**

**Achievable**
Results-focused

Time-bound

The goal statement should include your outcome indicator, like Chattanooga’s goal, “We will end chronic veteran homelessness by December 2016.” A diagram to help you build a SMART goal around your outcome indicator is below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Your turn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific</td>
<td>Who will be better off? What action the city will take?</td>
<td></td>
</tr>
<tr>
<td>Measurable</td>
<td>How will you measure success?</td>
<td></td>
</tr>
<tr>
<td>Achievable</td>
<td>Is the goal attainable?</td>
<td></td>
</tr>
<tr>
<td>Results-focused</td>
<td>What is the expected result?</td>
<td></td>
</tr>
<tr>
<td>Time-bound</td>
<td>When?</td>
<td></td>
</tr>
</tbody>
</table>

Set realistic, ambitious targets and timelines for each indicator

To establish a realistic and ambitious target for your goal statement, use the administrative data collected for your chosen KPI to review actual City performance in the most recent year, compared with the three or four most recent year’s worth of data. Begin to calculate summary statistics (e.g., total, minimum, average, median, maximum) to identify trends. Create cumulative and monthly charts to identify trends and anomalies. Based on your analysis of historical data, ignore the anomalies and assume the productivity trends will follow the same overall pattern from month-to-month. Finally, apply an increased productivity factor to the performance each month to forecast future progress. Based on this analysis, choose a target that inspires improvement while accounting for reality.

Many cities that are more mature in their performance management practices recognize the importance of taking a community-level approach to improving outcomes for residents. These cities are creating goal taxonomies that include measures related to public safety, housing, and even recreation. Cities drive progress on these goals by implementing strategies that engage multiple departments and collaborate with service providers in the community.

Eventually, you will develop goal statements for the outputs, in order to capture the effort to achieve the outcome contained in your goal statement. Your set of indicators should be composed of short- and interim-term supportive measures with accurate targets and relevant timelines. An example goal taxonomy from the City of Las Vegas’s Results Vegas program is below. Use this taxonomy as a model for your own suite of indicators and goal statements.
Your turn

The template below is meant to help you craft a goal statement for each supporting measure.

<table>
<thead>
<tr>
<th>Goal statement:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Departments</th>
<th>Outcome</th>
<th>Activities</th>
<th>KPI</th>
<th>Target</th>
<th>Timeframe</th>
</tr>
</thead>
</table>

**Conduct and discuss relevant analysis**

Through a routine series of meetings, continually monitor progress of KPIs, supporting indicators, and any other data collected such as qualitative data, to identify trends that will indicate whether the chosen policy is having the desired impact. These data points should drive the discussion during these meetings, pointing to opportunities for further inquiry into...
what is driving the observed trends. Analysts should be encouraged and trained to ask questions of the departments producing the data, and conduct site visits when possible to deepen their understanding of the data. Presentation of the analysis should focus on one idea at a time to keep the conversation focused on key points and specific opportunities for improvement. You may consider developing a public facing dashboard to share this progress more broadly.

A general comparison of the "status quo" data with what was observed during the pilot can provide decision makers with a quick understanding of the differences between the old and new approaches, although this will not show causality. Often, these comparisons will include operational metrics such as days or dollars saved, but remember that the impact on people will be most important. If you are working with an evaluation partner, they will support this step.

Use the space below to summarize the results of your analysis.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Target value (see section on setting targets above)</th>
<th>Pilot value (what did you observe during the pilot)</th>
<th>Historical average (if available)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Results (Who is better off? Is anyone negatively impacted? 1-2 sentences reassessing your goal statement)

Document your process and progress, including feedback from the participants, implementation partners, and the project team. Did anything unexpected occur during the pilot? Are there internal and external factors that may affect your outcomes? This is where the implementation outcomes can be can helpful. If the intervention did not go as planned, consider whether it is because the intervention was not acceptable or feasible.

Use the template below, created by Denver's Peak Academy, to capture this information. If the 30, 60, 90 day timeline does not make sense for your city, feel free to customize it.

<table>
<thead>
<tr>
<th>Current State</th>
<th>Future State</th>
<th>30 Day</th>
<th>60 Day</th>
<th>90 Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>What went well (+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What did not go well/should be changed (-)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If a question or discussion point arises that cannot be answered in the meeting, an assigned staff member should capture the question during the meeting. Afterward, the follow up items should be sent to relevant partners and the next meeting should begin with a discussion of
those items.

**Take action**

Discussions about whether your indicators are moving in the right direction and what might be driving trends, may lead to a discovery that there are not enough resources allocated to this policy or issue. There may be limited funding for staff, programming, or technology that is driving the data in the wrong direction. If City leadership is in the room, this is a great time to make the case for additional funding during the budget season. By collecting, analyzing, and discussing data on this policy routinely, you are building evidence to make the case for the right level of funding to reach the established targets.
Assess data accessibility, quality, and security

Determine accessibility and quality of data

Once you have compiled your "wish list" of indicators, it is time to determine the accessibility and quality of the data. To prevent complication, you may wish to prioritize relevant indicators for which you are already collecting data. Avoid the temptation of adopting a technology solution to collect new data at this point, such as a photo survey tool or other app. For now, you are trying to determine which datasets are relevant, accessible, and high quality. Be sure to work with your key internal partners while you are identifying your measures. Department staff who work on programs are familiar with the indicators that will accurately support the outcomes and database administrators will be valuable when discussing accessibility and quality of the data.

A brief list of considerations for the accessibility of your data is below:

- Are we currently collecting this dataset or will we be collecting it for the first time?
- How far back does the record go (time horizon)?
- Would we need new technology to collect or analyze the data?
- Can the data be collected manually or can it be automated?
- How frequently is the data produced (continuously, hourly, daily, weekly, monthly, quarterly, yearly, etc.)?
- Is the data available for the entire City population or a subset of the population?
- How granular is the data (individual level, Census block, neighborhood, citywide, etc.)?
- Does the data contain sensitive information?
- Is there a proxy measure that we can use for now?
- Is the data machine readable?

As noted by the Wilson Sheehan Lab for Economic Opportunities (LEO) at the University of Notre Dame, leveraging administrative data can significantly reduce the costs and timelines of rigorous evaluation. Cities can establish an internal data sharing agreement across departments, including language that enables administrative data to be used for research purposes. Cities can also identify external administrative data-holders such as a county, school district, police department, hospital, or another state that may have outcome data important for measuring program impact. Cities can leverage existing relationships and/or work with research institutions to develop streamlined data sharing processes and agreements with these external entities.
Evaluate the quality of your data

Quality is as important as accessibility. To evaluate data quality, you may wish to create a rubric like the one below:

<table>
<thead>
<tr>
<th>Value</th>
<th>Value Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Excellent Data Quality: The data is complete, accurate, and updated regularly.</td>
</tr>
<tr>
<td>2</td>
<td>Adequate Data Quality: The data is somewhat complete, accurate, and updated fairly regularly.</td>
</tr>
<tr>
<td>1</td>
<td>Poor Data Quality: The data is not complete, accurate, or updated regularly.</td>
</tr>
</tbody>
</table>

This is a great time to build on the data inventory that you started in the "gather information" page. Suggested additional fields to add to your data inventory template are below:

- Program
- Dataset Title
- Dataset Description
- Data Source
- Department or external partner
- Does the City already collect this data?
- What is the name of the program?
- Human-readable name of the dataset
- Should be understandable by non-technical users
- What is the original system/application/file that houses it?
- Department or external partner that maintains the data
- Is this data already collected?
- Update frequency - The file format for the dataset. Typically csv, xlsx, shapefile, txt, etc.
- Format - How often the dataset is updated
- Time range - The period of time covered in this particular dataset.
- Data use - How is this dataset commonly used?
- Data users - Who typically uses this dataset?
- Data owner's title - Title of the data owner
- Data owner's position - Data Owner's job title
- Data owner's email address - Data Owner's email address. Who manages the data and/or is responsible for granting permission to access the data? Who understands what the dataset includes and can answer questions about it?
- Data quality concerns - Describe the concerns you may have about the quality of the dataset
Division - Division where the data is maintained. If more than one division is responsible, list the primary owner of the dataset.

Sensitive data comments - Describe the issues that would prevent the city from sharing the data publicly. Common sensitivity concerns include privacy violations, security issues, or high cost or staff demands to post the data.

Publishing status - This the place to put any comments regarding the current status of the dataset.

Published link - This is the link to the published dataset on the open data portal or city website.

Review data security and privacy protection protocols

Often, a policy change also involves a change in the data that is being collected, how that data is being handled, who has access to it, and a host of other adjustments. As you take stock of the data assets that are available for your initiative, it is vital to also think through what will be done to protect that data and the privacy of the people it represents. A big part of good data security involves strong data governance practices that define and identify sensitive data and consciously work to balance the value and risk of storing such sensitive data. One way of evaluating your data comes from case law related to the US Freedom of Information Act, which we have translated to the checklist below:

1. Would disclosure result in a substantial invasion of privacy?
2. Have we considered the extent or value of the public interest and the purpose or object of the individuals seeking disclosure?
3. Is the information available from other sources?
4. Was the information given with an expectation of confidentiality?
5. Is it possible to mould relief so as to limit the invasion of individual privacy?

These risks could be mitigated using a variety of strategies, from aggregating data to obfuscating individuals, to redacting fields that may include Personally Identifiable Information (PII), or re-evaluating your data collection methods to find alternative ways of getting the information you need. These steps should be codified and managed by a data governance committee if possible. For the sensitive data that is deemed essential, create a plan around potential data breaches in order to quickly and confidently respond to emergency situations.

Proactively preparing for these situations is often the best strategy for data security, but do not forget the technical side. Involve your IT administrators in conversations about data storage and access, ensuring that they will be protected by enterprise-grade cybersecurity systems.
Assess data accessibility, quality, and security
Design implementation and evaluation

Design the implementation

Now that you have your accountability plan and key indicators, it is time to get specific about your plan for implementation. The template below will help you think through the specific mechanisms of implementing policy change.

Understanding organizations and systems is critical to understanding and making decisions about where and how interventions should be applied. A policy implemented in a single setting may show promising results, but implementing multiple policies and programs at the same time with different actors responsible for each aspect, can help ensure sustainable behavior change.

In Somerville, MA, Shape Up Somerville (SUS) is a citywide public health program that is implemented across multiple levels of influence and systems through interventions before, during, and after school to include changes to built environment such as bike lanes, regional mass transportation, and physical education equipment in schools and gyms to increase physical activity, wellness policies and school gardens, nutrition education during and after school, and healthy restaurant programs to support healthy food and healthy eating habits.

Use the template below to plan your implementation.

Policy implementation planning template:

**List the specific desired outcomes:** In the previous step, you worked with department staff to establish specific, measurable outcomes and interim indicators. Prioritize the indicators that will demonstrate progress. Use the space below to capture the desired outcomes of the policy change.

Example: Shape up Somerville began with the goal of preventing obesity in 1st through 3rd graders.

Your turn:
**Specify the target population:** Are you designing an intervention that targets only certain sites? Are you planning on implementing a program or initiative for a specific target audience? Clearly specify the population you plan to target.

If you plan to conduct a rigorous impact evaluation, as noted by the Wilson Sheehan Lab for Economic Opportunities, it is important to establish concrete, objective eligibility criteria and ensure that these criteria are applied consistently by all staff during screening and intake. It is also vital to identify the individuals who are eligible for a particular program or service, even if everyone eligible cannot be served by existing resources. This helps cities identify any unmet needs and guide future resource allocation, while also creating the possibility of a rigorous impact evaluation by identifying a potential comparison group. Finally, when conducting screening and intake, it is imperative to collect and maintain basic information (e.g., name, date of birth, gender) about all program-eligible individuals, not just those who participate in the program.

Example: In the Shape Up Somerville example, the program began by targeting 1st through 3rd graders.

Your turn:

_________________________

_________________________

**Define the location:** Where will the policy change take place? Will implementation take place at one site or multiple sites?

Example: Shape Up Somerville interventions were delivered in schools.

Your turn:

_________________________

_________________________

**Clarify implementation partners and articulate their roles:** What are the key organizations, institutions, or people responsible for implementation? The project team should be as clear and specific as possible in providing a description of the concrete activities that implementation partners are meant to carry out. Practice profiles may be a helpful tool to help define what is required of the actors who are responsible for implementing the intervention.
Example: In Somerville, mayoral leadership and engagement of multiple city agencies (public health, primary care, schools, Cambridge Health Alliance, etc.) streamlined and connected the various Shape Up Somerville initiatives and grants, which helped to keep the talent and energy focused on healthy eating and active living for all sectors of Somerville. SUS partners ultimately included schools, nonprofits, City and state agencies, and national foundations.

Your turn:

_________________________________________________________________________

_________________________________________________________________________

Describe the intervention: What are the steps, activities, or processes? Remember that the mechanism, the specific steps or process that lead to behavior change, is key to understanding the effectiveness of the policy change and sharing the results with others.

Example: Goals of Shape Up Somerville were to influence every part of an early elementary schoolchild’s day – before, during, and after- school to promote healthy eating, physical activity, and their weight status. Intervention included: food service enhancements to improve breakfast and lunch and staff professional development; walk to school activities; SUS classroom curriculum and professional development; school wellness policy development; SUS after-school curriculum and professional development; outreach and education to home through materials, forums, events; “SUS approved” restaurants; community outreach and capacity building through policy development, trainings, media placements.

Your turn:

_________________________________________________________________________

_________________________________________________________________________

Clarify timeline and milestones for delivery and evaluation: How frequently will the services/intervention be delivered? How long will the program run? What is the time to expected impacts (e.g., 12 months after program completion)?
Example: Shape Up Somerville, led by Tufts University Friedman School of Nutrition Science and Policy, conducted a quasi-experimental (nonrandomized) intervention study among 1st through 3rd grade students in Somerville (intervention) and two comparison communities for 9-months during one school year (fall 2002 – spring 2003). The study showed positive association of the intervention on change in BMI. SUS released reports summarizing evaluations, progress to date, plans for additional projects, and impacts ten and fifteen years into the initiative.

Your turn:

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

Plan your analysis: The previous section addressed establishing an accountability framework to monitor progress and implementation. Determine which indicators will be discuss through that process, who will share the data and analysis, and how feedback from those conversations will be incorporated by the project team.

Example: The Mayor’s office implemented a data-driven decision making approach, called SomerStat, which was synergistic with the approaches taken by the research and evaluation teams deployed for the specific grants.

Your turn:

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

Plan for sustainability: If the policy and program change is successful, how will the project team sustain and expand to additional sites or populations?

Example: Although most of the partnerships forged in the early years were maintained, new grants and collaborations expanded attention to older public school students, active transportation and the Green Line subway extension, the built environment, farmer’s market efforts such as “Grown in Somerville” with Union Main Street, economic development, and health disparities, as well as data collection, monitoring and surveillance.

Your turn:
Pilot planning template

If you plan to conduct a pilot, first determine the purpose of the pilot. Do you want to observe whether the policy change results in the desired behavior change? Are you concerned about feasibility, scalability, or cost? Do you want to test whether your desired results can be achieved through this policy approach? Clarify the goal of the pilot and the questions you hope to answer. This will help you identify the key indicators that you will use to measure whether the pilot is successful. Before beginning, establish a baseline of current performance and set your targets accordingly based on what you hope to accomplish through the pilot.

Next, establish the pilot plan for your project team, including milestones for team check ins to determine whether to move ahead or change course. This is separate from the meetings that will occur as part of the accountability framework. Use the space below to create your timeline and develop your meeting schedule.

<table>
<thead>
<tr>
<th>Task</th>
<th>Person responsible</th>
<th>Start date</th>
<th>Check in date</th>
<th>Deliverable</th>
</tr>
</thead>
</table>

Plan your evaluation

While you are designing the implementation, it is also time to begin to develop your plan for analysis. As noted by the Wilson Sheehan Lab for Economic Opportunities, decisions about program set up - including outreach, screening, intake, data tracking, and enrollment - can determine whether or not a rigorous impact evaluation will be possible. As discussed, city leaders may find it helpful to include evaluation partners in early conversations about program set up. During previous stages, you may have worked with a researcher to plan your proposed policy change. You should be clear about the purpose of the evaluation and develop an evaluation plan. Below are additional considerations.

Causation vs. trend analysis

In the "Establish a framework to monitor progress" stage, there was guidance on tracking trends over time. It is important to note here that monitoring data is different from analyzing a causal effect. Trend analysis will illustrate that changes are occurring and may lead to questions that could be answered by your evaluation, but trend analysis alone does not provide evidence about what is driving those changes. You may see changes in your
outcome indicators based on variables outside of the City's control. For instance, a change in federal trade policy can have an impact on employment rates in your City outside of your City's new job training and placement program.

To address causality, you must compare the outcomes of individuals who received the intervention with those who did not. Without a comparison group of similar individuals who were not exposed to the intervention, it is impossible to know which factors are responsible for the outcomes. Randomized Control Trials (RCTs), in which individuals are randomly assigned to "treatment" and "control" groups, are the gold standard in proving causality. If you can demonstrate that outcomes improved for those who received the intervention and did not improve at all or improved less for a comparison group, you can be somewhat certain that the intervention was the cause.

Examples of other, non-causal impact evaluations that are rigorous and reliable include certain quasi-experimental studies using comparison group designs, smart interrupted time series analyses that model trends over time in ways that allow estimation of intervention effects, well designed pre-post test analyses, needs assessments, implementation studies; etc. For more information on different types of evaluations, see the Sage Research Methods website.

**Look for differences in groups**

Build in time to also examine the pilot data to see if groups are experiencing different results. Reviewing performance based on outcome measures for a population in aggregate may hide the subtle ways that some people may be affected differently, so it is necessary to carefully analyze the data for disparate outcomes. For instance, the Moving to Opportunity (MTO) study that examined the impact of housing vouchers on families who lived in high-poverty neighborhoods found that children who moved before the age of 13 had better education and higher incomes as adults. However, adults did not see improved education and employment outcomes.

Disaggregating data into more specific categories of race and ethnicity can help understand trends and disparities in a more granular way, which can help decision makers target policies and interventions in a more equitable way.

Earlier in the Roadmap, we worked to identify stakeholders and who might be positively and negatively impacted by a change in policy. Use the results of that exercise to involve the community in interpreting data analysis and to gather qualitative feedback from the community to call attention to issues. For instance, an increase in youth detention may be explained by inefficiencies or lack of access to transportation.
Design implementation and evaluation
Share your story and success!

Share the results

Storytelling

An integral step in your strategy is sharing the results of your pilot or policy change with your community. This includes developing messaging around the work of your organization and creating a plan to disseminate your stories. Why tell stories about your work?

- Inform and/or understand a subject or situation
- Give needed context of data or bits of information
- Relatable stories are memorable for readers/viewers

Readers or viewers will see the information as more compelling when there is a demonstrated and relatable change or impact on themselves or their friends, neighbors, and colleagues. Stories are about people and government is fundamentally about helping people. So tell the stories of the people you and your city colleagues helped.

Keep these tips in mind as you develop your story with your team:

- What were your findings and why should anyone care? Tell your audience how the problem was solved. What has the impact been on residents and city staff to date? What was the success and were there multiple successes along the way. If you have preliminary results or data showing improvement to share, this is the time to do it.

- Who was involved and impacted? Review the list of stakeholders. How were each of them impacted by the program? Humanize your story and impact by adding additional voices. These voices can be one of the following:
  - A person or family who was positively affected by the change/success.
  - An involved third-party describing both the problem and the solution (i.e., an organization, nonprofit providers, business, trade association, sports team, etc.) who is part of the community that the government worked with on the change/success.
  - Someone from the government itself who can speak about the change/success.

- Tell more about your city. Describe your city including population, demographics, industries, etc. What are its challenges? What is it known for? What makes it unique? How is it similar or different from other cities in the US?
• Describe your city’s challenge. Write out the challenge your city is facing (as defined in your problem statement). How does it affect residents? How does this problem affect the work of city staff members?

• Add the details. Provide details on your applied research strategy. Talk about what your city has done in the past to resolve the issue. Discuss how your strategy has changed when you began to adopt this approach. Was money saved or invested?

Use this story map exercise to organize your thoughts and guarantee that you include all of the elements of a traditional story.

After you develop your messaging, create a communications/marketing and outreach strategy designed to spread your message. Your strategy should walk you through the following key activities.

1. Identify and profile your audience. When creating and disseminating your message, it is always good to think about your audience. Who exactly would be interested in what you have to say? The general population of the city? People who work in nonprofits? Business owners? It matters because not everyone who lives in a city may be the target of the information. Business owners may be more interested in data showing effects on the business district than others and so on. We will cover this later, but this step will also help you to think of the most effective way to reach your audience.

2. Define your call to action (if you have one). Spend some time considering why you are interested in telling your story. Do you simply want to update the public on your progress or celebrate your successes? Are you interested in your audience changing its behavior or supporting a specific initiative being launched by your organization? If you want to have your audience act or behave in a certain way, be specific and incorporate it in your messaging.
3. Select performance measures. Think about how you would determine if your campaign is successful and select appropriate performance measures. You will revisit these measures at the end of your campaign/communications plan implementation to determine whether you need to modify your communications and outreach strategy for the future.

4. Methods to communicate your story. There are many ways to communicate success of your project. Here are some suggestions on reaching audiences. It is important to determine which methods are the most effective for your desired audience to receive information. Do your research. (Pew Research Center has excellent studies on the reach of media, digital media, and marketing.) For example, if seniors are your target population and they are less inclined to use Instagram (that is true), you may want to consider Facebook or the nightly local news, both of which are used more often by seniors. Below is a list of some methods and tools you can use:

   i. Press releases to local newspapers and tv stations.

   ii. Short smart phone videos: A great way to engage an audience is through video. Ask one question of someone who is part of the story. Maybe there is a social worker who can discuss hunger in your city. These videos can be reused on multiple platforms.

   iii. Long-form writing.

   iv. Telling individual stories through a series of photos and short narratives for publication on Facebook or Instagram.

   v. Op-eds/opinion pieces placed in the local paper.

   vi. Email updates to your list.

   vii. Connecting with appropriate organizations that are invested in the topic and work with the community and ask them to disseminate information to their members.

   viii. Employing “Word of Mouth” (WOM) tactics by creating townhalls or free events for residents to attend in their own neighborhoods.

5. Determine the type of collateral. Usually, campaigns that target residents require several avenues to reach them. People are not always in the same place or space. Having a keen understanding of your audience will assist you with your choices on what needs to be developed. Sometimes that means images for social media, a one page flier that gives people information on attending an event or an in-depth brochure.
 Implement your strategy. Keep in mind, strategies can be fluid. Sometimes something may not turn out as expected even if during planning sessions, it was “supposed to.” It is ok. You can analyze what happened during a debrief session and once your surveys and other measurements have been finalized.

**Visualizations**

With the right visualization, you can review and share information, insights, analysis, performance, and trends, all of which is valuable to a cross-section of the public. But which visualization is right for you? To choose the right type of chart/graph, determine the type of question you want to answer. Some common chart types are below and more information can be found here.

![](chart1.png)

**Explore additional analytical techniques**

During the goal-setting phase, you established output, outcome, and implementation measures. Based on the results of your pilot, you may need to adjust your measures. With the pilot data in hand, you may have some ideas of how future analyses could be different and potentially improve the quality of your program. Take some time to brainstorm other relevant datasets that you did not have the time to pursue earlier, including messy departmental data that needs more attention or sources of public data from the state and federal government, nonprofits, and even private companies that could supplement your understanding of an issue. Using machine learning techniques, you might be able to better...
predict demand for homeless services using NOAA weather forecasts, preempt water main breaks using soil stratigraphy, or invest in economic development by monitoring real estate listing data.

Advanced analytical techniques can also help your implementation run more effectively by integrating data-informed targeting and decision tools into the process. By automating routine workflows and surfacing subtle trends, these tools can help you iterate in a more precise manner and provide key strategic guidance to front-line employees that would otherwise be unavailable. These sorts of data-science-enhanced processes can be classified as one of six project types, as explored further by the New Orleans, LA, "NOLAllytics" team. For more guidance on scoping a similar project, the GovEx advanced analytics scoping guide gives you a step-by-step overview of how to be successful.

Use the space below to list your ideas for possible advanced analytics projects by type:

<table>
<thead>
<tr>
<th>Type of project</th>
<th>Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding the needle in the haystack</td>
<td></td>
</tr>
<tr>
<td>Prioritizing for impact</td>
<td></td>
</tr>
<tr>
<td>Early warning tools</td>
<td></td>
</tr>
<tr>
<td>Better, quicker decisions</td>
<td></td>
</tr>
<tr>
<td>Optimizing resource allocation</td>
<td></td>
</tr>
<tr>
<td>Experimenting for what works</td>
<td></td>
</tr>
</tbody>
</table>

**Keep the feedback loop going**

Gather information on public sentiment about policy change through focus groups, surveys, and public meetings led by advisory group members. Note whether new information is available that can help analyze or contextualize your progress (e.g., federal or state data, reports). Share the results of your pilot and the policy change process with other cities and researchers.
Presently, there is a lot of attention and investment in evidence-based policymaking including the federal, bipartisan Commission on Evidence-Based Policymaking; the Pew Charitable Trusts reports and toolkits on How States Engage in Evidence-Based Policymaking; and the Laura and John Arnold Foundation supported Evidence-Based Policymaking Collaborative. Many of these initiatives focus on "rigorous evaluation" -- meaning randomized controlled trials (RCT) or other experimental models -- as the best kind of evidence to use. However, this body of evidence is often insufficient for the specific kinds of questions that governments can have when making a decision about policy. In this guide, we propose an approach to support governments in incorporating additional types of evidence into their decision making.

One way to understand a range of evidence is to use Nesta’s Standards of Evidence to frame and define evidence. The British nonprofit Nesta works to inject positive change into the way UK government policies and programs function. One of their key areas of work has been developing What Works Centres, organizations that collect, commission, synthesize, and disseminate evidence about intervention effectiveness across a range of social impact areas. Nesta developed the following Standards of Evidence to provide a useful way to document how different kinds of information demonstrate different levels of evidence.
The importance of potentially biased information

One challenge presented by an evidence classification that acknowledges the value of non-scientific forms of evidence is to figure out how to balance all of the pieces together when you use them. To understand how to do this, we have to think about how to position potentially biased information in decision making.

When we look at information which has not been rigorously evaluated, we accept that this information might be biased. The whole reason we conduct rigorous evaluation is to remove bias from our observations. We conduct structured trials to produce results that are consistent and generalizable. If a finding is unbiased, this accuracy — this lack of bias — can be proved because any independent tester can reproduce it when they follow an identical process.

You can look at potentially biased information as just information that is earlier on in its path to refinement, replication, and verified accuracy. A piece of information based on any one individual’s observations is likely to be biased because it is coming from just one source. Bias is reduced by gathering together lots of independent sources of information and figuring out its most common attributes.

Maybe the biased information makes a claim that is too large — it says something is true under all conditions, when it is really only true under certain conditions, or that an effect of an intervention is bigger than its true average, or that an effect lasts over time when it does not. Perhaps changing the claim to be more specific — critically reviewing the information to see if specific conditions must be met to achieve the outcomes — would make the claim more accurate.

If you tested your claim, found it did not hold up in some cases, changed it, tested it again, until your claim repeatedly held up, then you could demonstrate that the claim was no longer biased, but accurate. This process of testing, improving, testing, and validating is what we get from structured, scientific study.

With individual pieces of information -- credible hypotheses, case studies, expert opinion -- you cannot assume that kind of accuracy. At the same time, these early observations are foundational to any replicable, scientific observations. We will never get anywhere if we do not start with these pieces of information, even if they might be biased.

Combining levels of evidence to get the most detailed information for your city

It is especially important to accept different forms of evidence when you face questions that have not yet been tested by independent studies. Some of the most important questions relate to things that are very specific to your situation. You face a particular combination of
issues, actors, trends, and resources that is ultimately different from every other place in the world.

This is important, because as policy practitioners, and not scientists, you care more about your specific case than a hypothetical average, general case. You care less about the total likely range of impacts from a policy than how this single implementation will work. You want information about policies that will provide you with the best possible prediction about how they will work in your context.

By putting different kinds of evidence into the same framework, Nesta’s Standards of Evidence imply that when you cannot get rigorously tested, experimentally verified information, it is appropriate to work with what we do have. This is relevant for the municipal implementation context, because no study pulled from a literature review will account for all of the variables you face in your own context.

In the absence of having a study that predicts how an intervention works in your specific context, you will need non-scientific information to try to fill in those gaps. You will need to gather stories from residents, staff members, and other stakeholders that sit on Levels 1 or 2 of the standards of evidence.

Some of the kinds of information you will probably get more easily from people than studies include:

- how people in cities like yours reacted to an intervention in public forums
- how people who implemented an intervention in a city like yours figured out how to get it passed
- how the city communicated publicly about the apparent benefits and drawbacks of the intervention
- the political acceptability of the intervention

You can remain simultaneously aware that the information you are gathering through individual stories is biased -- not generalizable, informed by specific perspectives -- while also recognizing that having some information about something important is better than no information. Evidence from the first two evidence levels are essential building blocks of knowledge and perfectly useful when you cannot get detailed unbiased knowledge.

You have to start somewhere, and you should always start with evidence you have about your very specific conditions that you know are important for success.
Interviews with cities

GovEx held semi-structured interviews with six staff members in four cities to establish the initial steps of the Roadmap. We asked respondents to talk about an initiative or policy that they have been responsible for implementing in their city. Respondents from three cities spoke about their efforts to address homelessness and respondents from one city spoke about blight. After respondents identified the problem, they spoke about how the city prioritized this issue, the various steps involved, and barriers present.

GovEx conducted text analysis of these interviews, which revealed that "people" was the most commonly used term during these conversations, when discussing the steps to change a program or policy. This is a theme throughout this Roadmap. The first section begins with identifying the relevant people. The conversations around evidence are focused on human behavior, rather than methodology or strength of evidence.
Once we had a draft of the Roadmap, we followed up with cities on an individual basis to learn more about what would be helpful. We are grateful to the following city staff for the interviews and individual conversations:

- **Michael Baskin**, Chief Policy Officer, Chattanooga, TN
- **Melissa Bridges**, Performance and Innovation Coordinator, Little Rock, AR
- **Victoria Carreón**, Administrative Officer, Las Vegas, NV
- **Tyrone Grandstrand**, Community Development Planner, Fargo, ND
- **Tib Laughlin**, Director of General Services, Kansas City, KS
- **Tim Moreland**, Director of Performance Management and Open Data, Chattanooga, TN
- **Charles Rosendahl**, Management Analyst, Denton, TX
Thank you

- Melissa Sieben, Assistant County Administrator, Kansas City, KS
- Gina Thompson, Director of Strategic Services, Lewisville, TX

**JHU Faculty collaboration**

GovEx also convened the city contacts and faculty partners in a series of Advisory Group meetings. These meetings served to connect cities and faculty to understand one another's perspective.

- Stefan Baral, Bloomberg School of Public Health
- Ashley Berner, JHU School of Education
- Melissa Davey-Rothwell, Bloomberg School of Public Health
- Jon Links, Bloomberg School of Public Health
- Tamar Mendelson, Bloomberg School of Public Health
- Kristin Mmari, Bloomberg School of Public Health
- Keshia Pollack Porter, Bloomberg School of Public Health
- Josh Sharfstein, Bloomberg School of Public Health
- Liz Stuart, Bloomberg School of Public Health
- Lindsay Thompson, Carey Business School
- Daniel Webster, Bloomberg School of Public Health

**Partners in data and evidence-based policy**

We also spoke with partners who are experts in the field of evidence-based policy, who shared their knowledge and resources of current and future thinking in evidence-informed thinking.

- Wendy Barreno, Associate Director, Wilson Sheehan Lab for Economic Opportunities, University of Notre Dame
- Tiffany Davenport, Director of Data Partnerships, Baltimore's Promise
- Tomi Hiers, Director, Baltimore Civic Site, Annie E. Casey Foundation
- Chris Kingsley, Senior Associate, Annie E. Casey Foundation
- Kathryn Oliver, Associate Professor, London School of Hygiene and Tropical Medicine
Thank you

- Kristen Watkins, Senior Policy Associate, J-PAL

**GovEx Participants**

GovEx Analyst Miriam McKinney analyzed the interview transcripts and conducted text analysis. Senior Implementation Advisor Emily Shaw will integrate Roadmap activities with additional service delivery activities at GovEx.
References

References

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References


## University Partners:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
<th>Area(s) of expertise</th>
<th>Contact Information</th>
<th>Examples of working with non-academic decision makers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wendy P. Barreno</td>
<td>Associate Director</td>
<td>Wilson Sheehan Lab for Economic Opportunities, University of Notre Dame</td>
<td>LEO's focus areas include health, education, housing, child welfare, economic opportunity, criminal justice</td>
<td><a href="mailto:wbarreno@nd.edu">wbarreno@nd.edu</a> or <a href="mailto:leo@nd.edu">leo@nd.edu</a></td>
<td></td>
</tr>
<tr>
<td>Melissa Davey-Rothwell, PhD</td>
<td>Associate Scientist</td>
<td>Johns Hopkins Bloomberg School of Public Health</td>
<td>Health</td>
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<td>Baltimore Health Department; Maryland Department of Health; Addiction Recovery Services in DC; Executive Directors of community organizations across the US that focus on HIV, STI, substance abuse and implementation science</td>
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<td>Elizabeth Stuart</td>
<td>Associate Dean for Education and Professor, Departments of Mental Health, Biostatistics, and Health Policy and</td>
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Resources

Management

**Design-Thinking Resources:**
- Engagement Guide for Civic Tech
- Journey map

**Performance Management Resources:**
- Denver Peak Academy
- Proxy measures guide
- Talking about performance without complicating it (video)
- Setting Performance Targets guide
- Data visualization guide
- Performance management getting started guide

**Exercises:**
- Fishbone exercise
- 5 Whys

**Administrative Data:**
- The Lessons of Administrative Data (JPAL)

**Evaluation Resources:**
- Quantitative and qualitative methods (U.S. Department of Health and Human Services Agency for Healthcare Research and Quality)
- Key Steps in Outcome Management (Urban Institute)
- RCT-YES
- Sage research methods
- Best Practices for Mixed Methods Research in the Health Sciences
- ACCORD Checklist
- Pilot and implementation planning
- Benchmarking examples and proxy measures
- Seattle open data playbook
Data science scoping guide
About GovEx

GovEx helps governments use data and evidence to improve residents’ lives. We support governments in building their internal capacity to operate sustainable analytics practices which improve community outcomes in fields from public safety to economic development. GovEx has a proven track record of working in concert with partners to provide technical assistance and training at scale.

Since our launch in April 2015, GovEx has:

- Trained over 2,000 government employees in person and online in topics including data management, performance management, open data, community engagement, and analytics
- Provided technical assistance to more than 100 local governments across the globe, improving their use of data to achieve efficiencies in service delivery and better outcomes for residents

Assessed the capacity of more than 130 governmental organizations to determine how leaders, staff, and external stakeholders manage and use data.

Local governments are increasingly on the front lines of addressing large scale problems with global implications, such as climate change, public safety, and economic inequality.

While evidence-based interventions to help solve those problems are available, local government staff have limited time and capacity to find and implement research-based solutions. As a result, cities continue to work the way they always have -- making incremental improvements to programs but not always creating change at a system-level.

Through resource development and collaboration with JHU faculty, GovEx is supporting city leaders in using data and evidence to make decisions and creating lasting relationships with researchers.

The Roadmap was developed by GovEx as part of its partnership with Bloomberg Philanthropies' What Works Cities initiative.