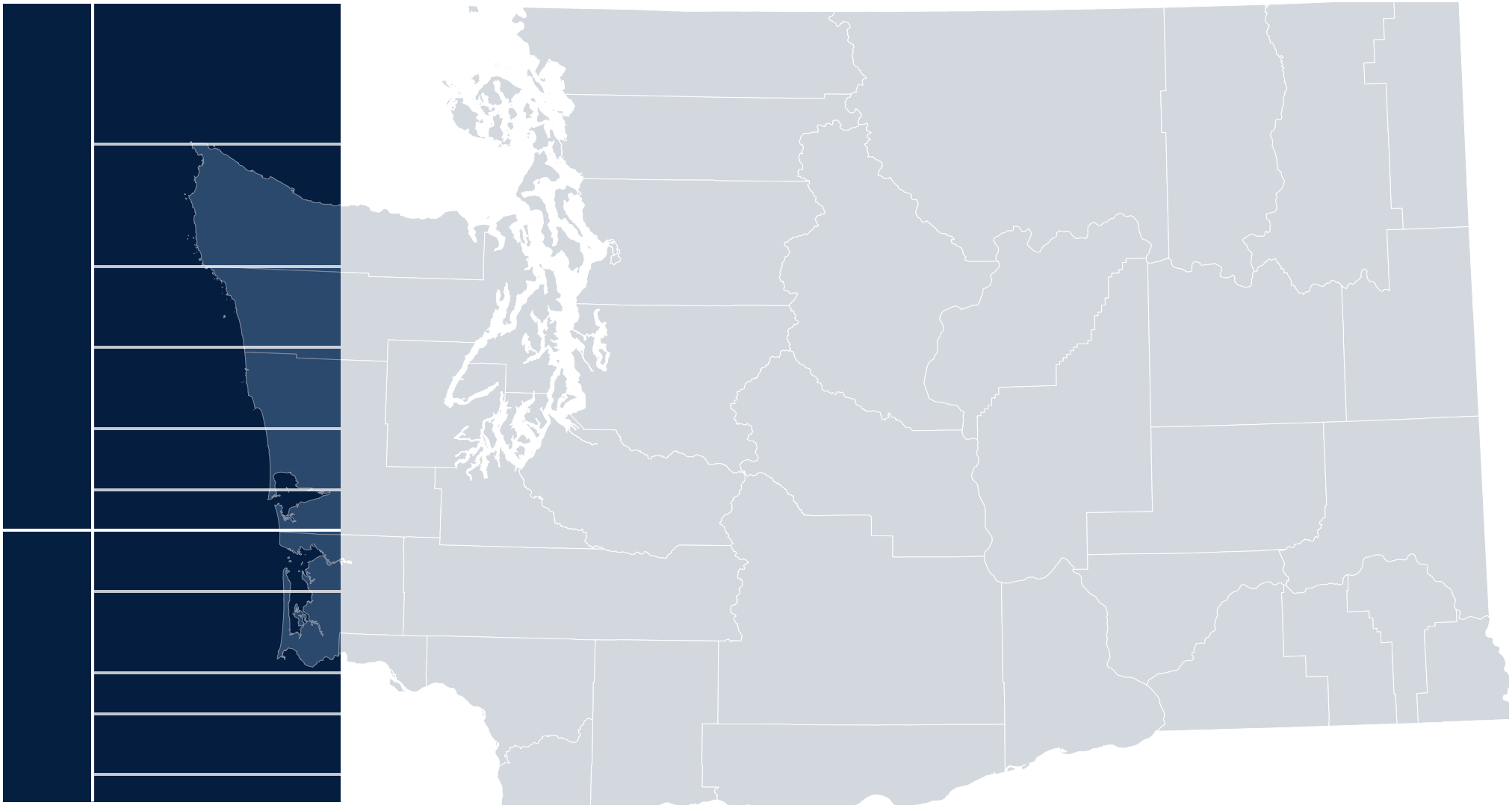

Washington State Public Health Transformation Assessment Report

for State and Local Public Agencies

September 2018

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About BERK Consulting

BERK is an interdisciplinary consultancy integrating strategy, planning, and policy development; financial and economic analysis; and facilitation, design, and communications. Founded in 1988, our passion is working in the public interest, helping public and nonprofit agencies address complex challenges and position themselves for success.

BERK's Mission

Helping Communities and Organizations Create their Best Futures.

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Executive Summary

INTRODUCTION

The governmental public health system in Washington state is made up of 35 local health jurisdictions (LHJs), the State Department of Health (DOH), the State Board of Health (SBOH), and sovereign tribal nations. Protecting the public's health is one of the state's fundamental responsibilities.

As described in *A Plan to Rebuild and Modernize Washington's Public Health System* in 2016, Washington's governmental public health system developed a vision to rebuild, modernize, and fund a 21st Century public health system. The 2016 *Plan* articulated this vision with five principles (p. 9):

1. There is a limited statewide set of core public health services, called Foundational Public Health Services (FPHS), that government is responsible for providing.
2. Core public health services are funded through dedicated revenues that are predictable, reliable and sustainable, and responsive to changes in demand and cost over time. A major tenet of this part of the vision is that these services would be funded through a combination of state funds, state and local fees, and when available and sustainable, federal grants.
3. Governmental public health services are delivered in ways that maximize the efficiency and effectiveness of the overall system.
4. Governmental public health activities are tracked and performance is evaluated using evidence-based measures.
5. Local revenue generating options are provided to address locally driven priorities that are targeted to specific community problems.

Given the magnitude of the current challenges and the transformative nature of the vision, transforming Washington's public health system will be a phased, multi-year effort. To support planning, policy making, and implementation, the FPHS Steering Committee and Technical Workgroup, along with DOH, SBOH, and the Washington State Association of Local Public Health Officials (WSALPHO), worked with BERK Consulting to conduct an assessment to:

- Understand current statewide implementation and spending on FPHS.
- Estimate the cost to fully provide FPHS statewide

Washington State's FPHS

FPHS are a subset public health services that are defined as population-based services and activities that primarily or only government must provide everywhere. FPHS are within six program areas and six crosscutting capabilities that are needed to support the programs.

Foundational programs areas:

- Environmental Public Health
- Prevention and Control of Communicable Disease and Other Notifiable Conditions
- Maternal/Child/Family Health
- Access/Linkage with Medical, Oral and Behavioral Health Care Services
- Chronic Disease, Injury, and Violence Prevention
- Vital Records

Foundational capabilities:

- Assessment (Surveillance and Epidemiology)
- Emergency Preparedness (All Hazards)
- Communication
- Policy Development and Support
- Community Partnership Development
- Business Competencies

Together, the foundational programs and capabilities are the limited statewide set of core public health services that must exist everywhere for services to work anywhere.

ASSESSMENT PROCESS

Information for the assessment was collected through two parallel processes, one for LHJs and one for DOH and SBOH. Tribal nations were not included in this assessment process because they are engaged in their own tribally-driven process to define FPHS delivery framework, including their costs and gaps.

This assessment collected information through a standardized assessment tool and all participants received robust technical assistance to support high quality responses and valid data.

This technical report summarizes the system-level results of the self-assessment completed by DOH, SBOH, and LHJs in early 2018. The assessment measured a point-in-time and covered:

- **Implementation:** the level of service provided by DOH, SBOH, and responding LHJs, including information on current capacity and expertise

- **Shared services:** current level of sharing, future willingness to share, and local knowledge required
- **Resources:** spending and staffing currently dedicated to FPHS and the estimated resources needed to fully implement FPHS

BERK received data from the Washington State Department of Health (DOH), the Washington State Board of Health (SBOH), and 29 of 35 Local Health Jurisdictions (LHJs)

BERK estimated the current spending and costs of full implementation for the six missing LHJs to ensure a system-wide assessment. However, we could not estimate qualitative responses, such as current level of implementation of FPHS, questions related to current level of sharing, willingness to share, and degree of local expertise that is required.

STUDY LIMITATIONS

As self-reported data, the information collected through this assessment has inherent limitations. These include respondent biases, an uneven understanding of the functional definitions, different financial and accounting systems with varying levels of detail, and differing resource estimation expertise.

In addition, the cost estimations in this report do not represent complete implementation costs or any possible savings from alternative service delivery models. It is likely that most respondents completed the assessment based on their current service delivery model, so any new models or other opportunities could shift the estimates of resources needed.

As with all self-reported data, there is a question of respondent biases, especially if there are perceived benefits, such as favorable future funding decisions. Several factors mitigate the effects of data limitations on the final estimate:

- As a high-level, order of magnitude estimate, accuracy at the activity-level is not expected or necessary for confidence in the final results.
- We performed some limited standardization using the data set as a whole and external data sources to correct individual inconsistencies after consulting with the responding agency.
- Using the collected data from the 29 LHJs, we estimated current spending and costs to fully implement FPHS for the six missing LHJs using statistical methods and peer LHJ comparisons.

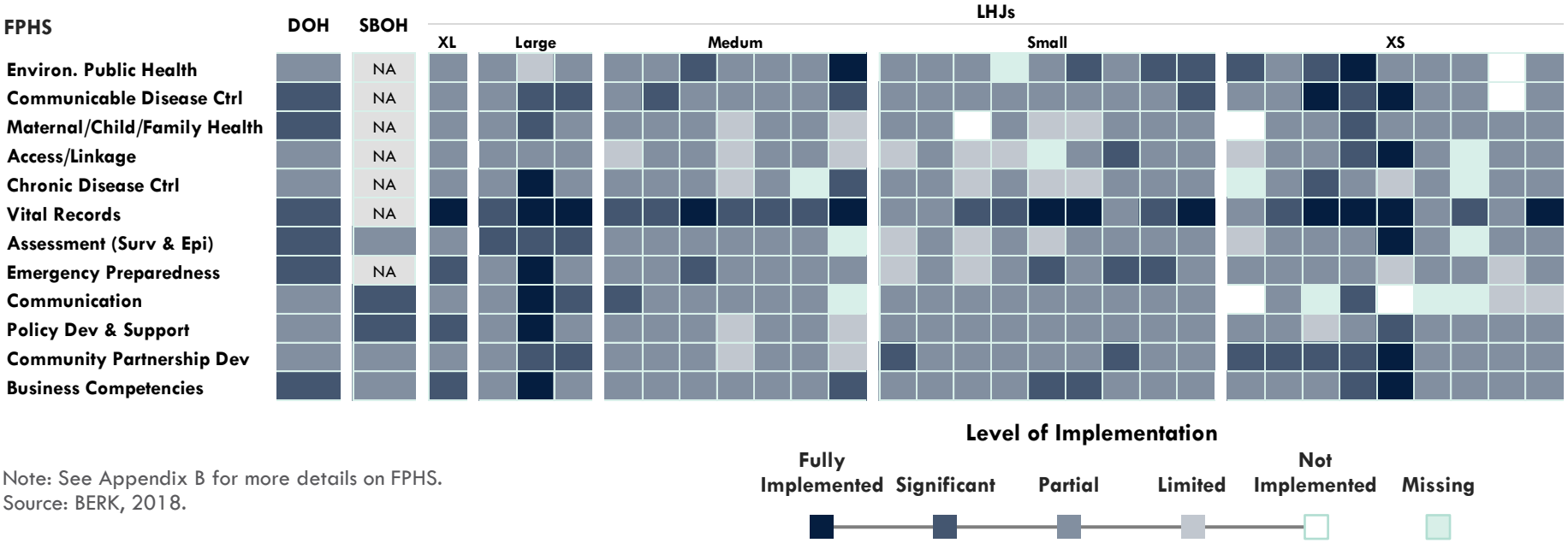
The results of the report represent a snapshot based on current knowledge of public health needs, expertise, capacity, and resources both in terms of people and dollars, which evolve in real time as

new public health issues arise. Public health's role protecting the community is highly dynamic; as the nature of disease, community needs, and the role of governmental public health continue to evolve over time, there are likely to be changes to the FPHS definitions and this needs to be factored into future assessments, cost estimates, and implementation.

PROGRAMMATIC ANALYSIS: LEVEL OF IMPLEMENTATION

Assessment participants reported current implementation of the six foundational programs and six foundational capabilities. The aggregated results provide a summary of FPHS implementation for the governmental public health system at the time of the assessment (Exhibit ES-1).

Exhibit ES-1. Current Implementation of Foundational Programs and Capabilities



Note: See Appendix B for more details on FPHS.
Source: BERK, 2018.

By comparing the rows of Exhibit ES-1, it is clear that no foundational program or capability is fully or significantly implemented across all responding agencies. This finding suggests FPHS in Washington state do not currently meet the condition of "must exist everywhere to work anywhere" – all squares would need to be dark blue for this to be the case.

COST ANALYSIS

All agencies were asked to report current spending by element for each program and capability. Agencies further broke down costs by allocating spending and full implementations cost across activities. In Exhibit ES-2, current spending (green) and the gap (gray) between current spending and full implementation systemwide are shown.

Exhibit ES- 2. Annual Current Spending, Gap, and Total Estimated Cost (in $000s)

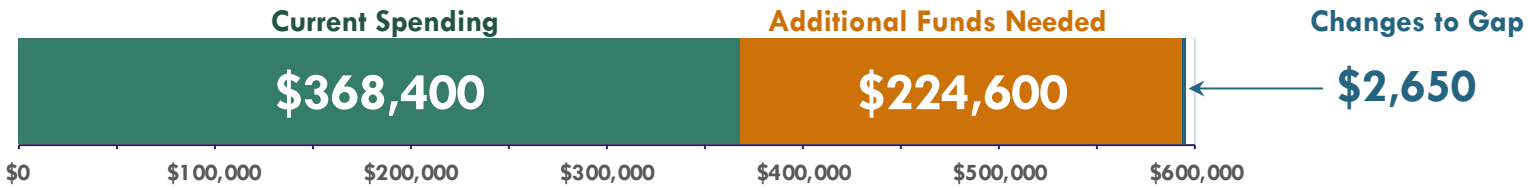
However, public health transformation is not just about filling the gap; BERK adjusted the estimated cost for systemwide funding issues applying the recommendations from the 2015 *Foundational Public Health Services: A New Vision for Washington State* along with issues identified during the assessment process.

FPHS that are currently delivered are funded using federal grants, fees, state, and local government funds. To identify the full cost to the state of implementing FPHS, BERK applied the following adjustments:

1. Local government funds used to pay for FPHS were estimated and added to the gap.
2. Costs and spending for FPHS that have fees were removed from the gap.
3. LHJ costs and spending for activities that are primarily state only were removed from the gap.
4. Costs and spending related to coordinating any associated additional important services were removed from the gap.

The additions and removals totaled about $2.6M. Exhibit ES-3 shows the additional funds needed once these changes have been made ($224.6M).

Exhibit ES-3. Annual Current Spending, Additional Funds Needed from State Government, and Changes to Gap



Source: BERK, 2018.

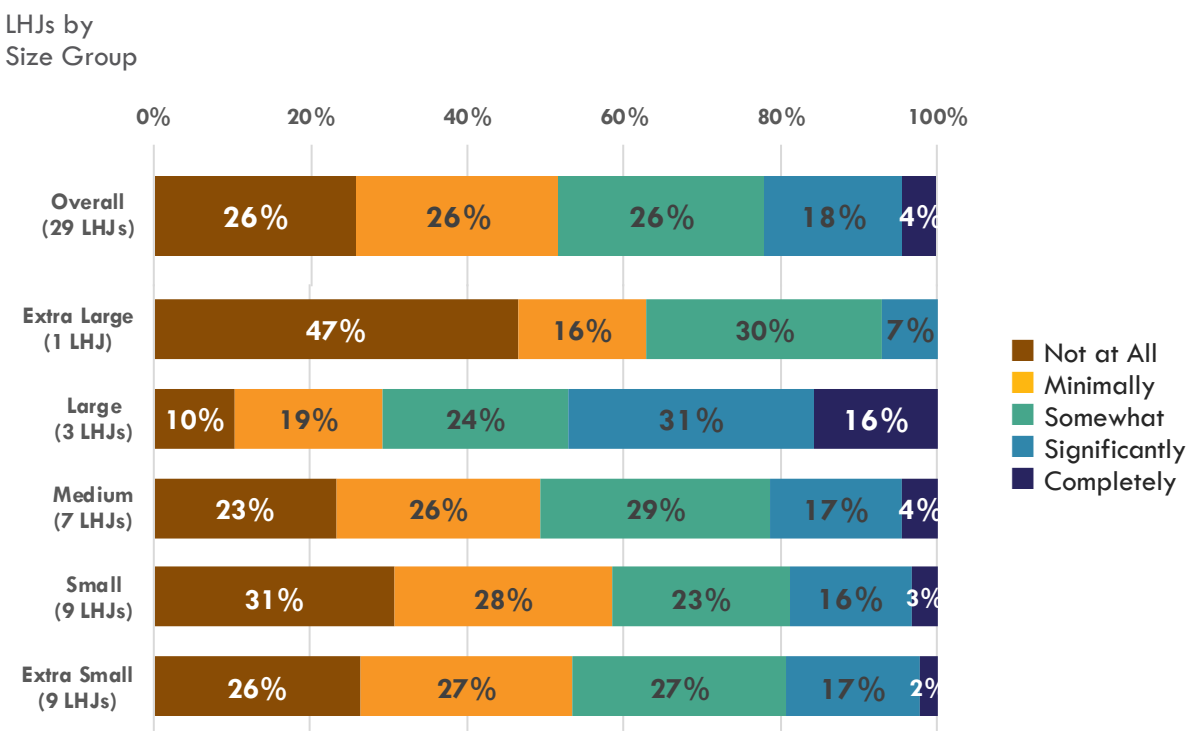
SERVICE SHARING

LHJs were asked to report current sharing and willingness to share the delivery of each element and activity. Each of the three questions around sharing were answered using a five-point Likert scale ranging from "1 – Not at all" to "5 – Completely." The three questions asked were:

- To what extent do you share this Element or Activity with another organization? (Current Sharing)
- Would you consider sharing this Element or Activity with another organization? (Willingness to Share)
- Does this Element or Activity require local expertise? (Local Expertise)

The result for current sharing are summarized in Exhibit ES-4.

Exhibit ES- 4. Current Sharing: LHJ Responses



Source: BERK, 2018.

LHJs are currently sharing the delivery of many elements of FPHS. There may also be opportunities for new service delivery models where willingness to share is high and local expertise required is minimal. However, both things do not need to be true as there are service delivery models that can account for local expertise while also sharing. In addition, information on capacity and expertise combined with information on current sharing and willingness to share could help inform the development of new service delivery models to most efficiently and effectively address all of these aspects.

SUMMARY FINDINGS

This assessment was the first attempt to collect data from DOH, SBOH, and all 35 LHJs to inform public health leaders in designing and implementing a transformed public health system to better serve the people of Washington state. While these data and findings represent the point-in-time conditions during a period of system transformation, they are useful for policy and planning and provide a baseline of the current situation to work from.

The assessment was the first time that all entities worked directly from the *Draft Functional Definitions Manual* and while the process identified some additional work to be done on the definitions, the assessment increased familiarity with the definitions across the system.

The assessment was designed to cover all activities within the FPHS framework, which resulted in a long and detailed data collection tool. Agencies found it challenging given their current workload and capacity. Future assessments might allocate more resources to assistance.

No foundational program or capability is fully or significantly implemented across all responding agencies. This finding suggests FPHS in Washington state do not currently meet the condition of "must exist everywhere, to work anywhere." There are gaps across the system in all agencies. These gaps are not uniform, nor do they appear in the same places in every organization. There are also gaps in organizations of all sizes.

LHJs reported both that there is significant sharing of current services and a willingness to share services for many FPHS. There is an opportunity to expand existing service delivery models or develop new ones.

The governmental public health system is already implementing many FPHS, albeit with wide variation statewide. Annual expenditures on the foundational programs and capabilities were reported at $368 million in year of expenditure dollars. While we did not collect data on FPHS funding sources, we know that the agencies involved in this assessment use a mix of user fees, state and local government funds, and federal grants. Current annual expenditures are approximately two-thirds of the cost of full implementation of foundational programs and capabilities ($595 million).

The preliminary estimated additional funds needed from state government for full implementation is approximately $225 million annually in 2018 dollars. This is a point-in-time, order of magnitude cost estimation based on the current service delivery model and will require ongoing analysis and refinement and could change as new services service delivery models are implemented.

TABLE OF CONTENTS

SECTION 1

Assessment Overview

BACKGROUND

The governmental public health system in Washington state is made up of 35 local health jurisdictions (LHJs), the State Department of Health (DOH), the State Board of Health (SBOH), and sovereign tribal nations. Washington state's overall public health system is much larger and includes other governmental bodies and partners, such as healthcare providers and community-based organizations. Protecting the public's health is one of the state's fundamental responsibilities. However, the governmental public health system has become inadequate and is unable to meet its basic responsibilities to protect the health and safety of people in the state. Public health leaders from DOH, SBOH, and LHJs represented by the Washington State Association of Local Public Health Officials (WSALPHO) have worked together for over six years to develop a plan to rebuild, transform, and fund the public health system.

Like public safety (fire, police), public utilities (power, water), and other public infrastructure (roads, sewers), there is a foundational level of public health services that must exist everywhere for services to work anywhere. This foundation, called the Foundational Public Health Services (FPHS), is a subset of all public health services.

FPHS work has been guided by the following assumptions:

- The FPHS framework is based on the role of the governmental public health system; it does not include public health services from other providers within the overall public health system.
- The FPHS framework defines the services that residents need to have access to or have provided to them everywhere statewide and is agnostic about which governmental public health authority provides them.

NATIONAL FPHS FRAMEWORK

In 2009, the Institute of Medicine (IOM) formed a committee to consider three topics related to population health: data and measurement, law and policy, and funding. The committee's work culminated in a report, *For the Public's Health: Investing in a Healthier Future* (2012), in which the IOM recommended a minimum package of public health services be defined. In 2013, the Public Health Leadership Forum, developed the national FPHS framework to define this "minimum package of services." The FPHS framework included foundational programs and capabilities that the group determined were needed everywhere for public health to work, and for which costs could be estimated. This national model is now stewarded by the Public Health National Center for Innovations (PHNCI). FPHS has been and continues to be adopted and localized by states across the nation, including Washington. More information on the national FPHS framework is available on the PHNCI website.

Washington State's FPHS

FPHS are a subset public health services that are defined as population-based services and activities that primarily or only government must provide everywhere. FPHS are within six program areas and six crosscutting capabilities that are needed to support the programs.

Foundational program areas:

- Environmental Public Health
- Prevention and Control of Communicable Disease and Other Notifiable Conditions
- Maternal/Child/Family Health
- Access/Linkage with Medical, Oral and Behavioral Health Care Services
- Chronic Disease, Injury, and Violence Prevention
- Vital Records

Foundational capabilities:

- Assessment (Surveillance and Epidemiology)
- Emergency Preparedness (All Hazards)
- Communication
- Policy Development and Support
- Community Partnership Development
- Business Competencies

Each foundational program and capability is broken into 48 elements that provide greater detail. In 2017, DOH, WSAPHO, and SBOH jointly issued a *Draft Functional Definitions Manual* that defined 350 activities to further clarify Washington's FPHS. For a complete overview of the entire Washington state FPHS system, please see Appendix B.

Together, the foundational programs and capabilities are the limited statewide set of core public health services that must exist everywhere for services to work anywhere.

Report Purpose and Audience

This technical report summarizes the system-level results of the self-assessment completed by DOH, SBOH, and LHJs in early 2018. The assessment measured a point-in-time and covered:

- **Implementation:** the level of service provided by DOH, SBOH, and responding LHJs, including information on current capacity and expertise
- **Shared services:** current level of sharing, future willingness to share, and local knowledge required
- **Resources:** spending and staffing currently dedicated to FPHS and the estimated resources needed to fully implement FPHS

Within the context of public health transformation in Washington state, this report presents the assessment findings for the governmental public health system (Section 2. Assessment Results) and discusses the conclusions (Section 3. Assessment Conclusions). Section 3 also presents the requested funding from the Washington State Legislature.

This report assumes familiarity with Washington's governmental public health system and FPHS efforts. Given the level of knowledge that is needed about FPHS and the functional definitions for each service, the primary audience for this report is the governmental public health system.

ASSESSMENT PROCESS

Given the magnitude of current challenges, transforming Washington state's public health system will be a phased, multi-year effort. To support implementation, the FPHS Steering Committee and Technical Workgroup, along with DOH, SBOH, and WSALPHO, worked with BERK Consulting to administer the 2017-2018 FPHS assessment. The assessment generated data to help estimate the full costs of implementing FPHS in Washington state through three questions of interest:

1. To what extent are FPHS services currently being provided?
2. What are the current resources dedicated to FPHS, including FTE?
3. What resources would be needed to fully implement FPHS?

The FPHS assessment was designed to support the public health transformation implementation work underway by the governmental public health system. To the extent possible, this process also aimed to:

- Build a shared understanding of the FPHS model and definitions, as outlined in the 2017 *Draft Functional Definitions Manual*.
- Support discussion around alignment of funding sources to FPHS priorities and funding options.
- Generate additional estimates of the costs to implement each foundational program and capability, including the cost to LHJs and the state, based on potential future funding and service delivery paradigms.

Information for the assessment was collected through two parallel processes, one for LHJs and one for DOH and SBOH. Tribal nations were not included in this assessment process because they are engaged in their own tribally-driven process to define FPHS delivery framework, including their costs and gaps.

This assessment collected information through a standardized assessment tool and all participants received robust technical assistance to support high quality responses and valid data.

The assessment process can be described in four distinct phases: tool development and pilot; technical assistance and data collection; data validation and analysis; and reporting. Exhibit 1 provides an overview of the assessment process with timeline.

Exhibit 1. 2017-2018 FPHS Cost Assessment Process Overview

Source: BERK, 2018.

Each phase is described in detail below.

TOOL DEVELOPMENT AND PILOT

To facilitate data collection from the LHJs, BERK designed an Excel-based tool in collaboration with the Steering Committee, the Technical Workgroup, and representatives from the LHJs (through a pilot process). The pilot helped ensure that the tool supported collection of the right data while still being relatively easy and efficient to use. Pilot participants were selected based on availability and LHJ characteristics, such as size and geographic location. Pilot participants reviewed and provided input on a preliminary version of the assessment tool in a workshop. To the extent possible, BERK incorporated this feedback into the final tool.

DOH is one agency with one budgeting and accounting system but has the added challenge of being a large organization serving the entire state. A modified version of the tool used for LHJs was used to collect data from DOH and SBOH.

Collection Tool

LHJ Data Collection Tool

Each LHJ received an individualized tool purpose-built for this assessment. The primary purpose of the LHJ assessment tool was to collect information from LHJs, but the tool also was designed to educate LHJs on the functional definitions that were released *Draft Functional Definitions Manual* and to provide LHJs assistance to determine the resources needed to fully implement FPHS.

Using a mixture of national, local, and proprietary data, BERK created initial estimates of the expected resources required for each LHJ to fully implement FPHS. LHJs corrected these estimates to reflect their understanding of local needs and conditions.

Washington's FPHS framework has 48 elements across 12 programs and capabilities. Three of those elements were determined in the *Draft Functional Definitions Manual* to be functions of state public health and were labeled "State Function Only" in the tool. LHJs did not report data for these three elements but did provide information on the other 45 elements.

The LHJ tool broke data collection into three sections:

TECHNICAL ASSISTANCE RESOURCES FOR LHJS

- **FPHS Assessment Website** built on Microsoft SharePoint where project materials were accessible to LHJ respondents.
- **Orientation Webinars** open to all LHJ staff participating in the FPHS assessment at any point. The orientation webinar provided an overview of the assessment process, tool, and website.
- **Assessment Process Resources** that outlined the technical assistance process, schedule, and resources.
- **Ongoing Communications** to LHJ primary contacts about the assessment process, scheduled webinars, and reminders of upcoming deadlines.
- **Instruction Guides and Tool-related Resources** that allowed LHJs to work through the materials at their own pace and find answers to questions when they needed them.
- **Individual Assistance by Phone and/or Email** to respond to LHJ questions and issues during the assessment process. An email address was created specifically for this purpose; all emails received a response within one business day.
- **Assessment FAQ Digest** provided answers to frequently asked questions and was updated regularly to reflect new issues.
- **One-on-One and Live Technical Assistance Sessions** provided to LHJ cohorts and individually in response to group questions or issues that could not be solved through typical individual assistance.
- **Topic-specific Webinars** responding to questions on an as needed basis.

1. FPHS staffing and spending information from the last completed fiscal year, fiscal year 2016, and a breakdown of staffing and spending by 45 elements.
2. A comparison between the information collected in part one and the information that each LHJ submitted to the Washington State Auditor's Office and DOH under the state Budgeting, Accounting, and Reporting System (BARS).
3. Sections for each of 45 elements requesting information on sharing and implementation along with the costs and willingness to share for full implementation of FPHS.

Most of the information collected was numeric, with qualitative information collected in the form of a 1-5 Likert scale and quantitative information as either dollar figures or staffing expressed as FTE. LHJs could provide descriptive information for responses that required greater context.

The final version of the LHJ collection tool was released on November 17, 2017. LHJs had almost two months to complete the tool with an original due date of January 16, 2018. BERK provided LHJs with multiple extensions to gather more data, and the final tool was returned at the end of March.

DOH and SBOH Data Collection Tool

DOH and SBOH both responded to a tool built around their shared budget system. DOH and SBOH provided spending and staffing information on current FPHS implementation along with the additional financial and staffing resources needed to fully implement FPHS.

In addition to financial and staffing information, BERK collected qualitative self-assessment information on current capacity and expertise/knowledge for all foundational programs and capabilities, elements, and activities. Unlike the LHJ collection tool, DOH and SBOH were not asked to provide qualitative data on sharing.

TECHNICAL ASSISTANCE AND DATA COLLECTION

BERK provided technical support and assistance to LHJs, DOH, and SBOH throughout the assessment process. Assistance included a mix of online resources and personal consultations via email and phone (see textbox for a list of technical assistance tools and resources provided).

DATA ANALYSIS

After compiling the returned results, BERK analyzed the data for completeness and validity. The resulting data set was used to estimate any missing or inconsistent data points.

Limitations

As self-reported data, the information collected through the assessment process has inherent limitations. These include respondent biases, an uneven understanding of the functional definitions, different financial and accounting systems with varying levels of detail, and differing resource estimation expertise. As with all self-reported data, there is a question of respondent biases, especially if there are perceived benefits, such as favorable future funding decisions. Additionally, the data reflect attitudes about public health transformation in general and the assessment process.

Respondents have differing levels of cost estimation backgrounds. Some areas of FPHS include new activities for governmental public health, requiring LHJs, DOH, and SBOH to create cost estimates without past comparables. This was a challenge given that the timeline for completion included the holidays and year-end activities. Additionally, the assessment tool has over 3,000 data entry points, and completing the tool was a challenge for some respondents. It was also a significant investment of resources for agencies that already feel resource constrained.

The LHJ collection tool was imperfect and while BERK attempted to address questions through technical assistance, the process involved many people across the LHJs, and we were not able to reach everyone.

By the final date for data submission, DOH, SBOH, and 29 of the 35 LHJs had completed their assessment tools. Six LHJs did not submit completed tools; efforts were made by BERK, DOH staff, and WSALPHO representatives to assist these LHJs to submit data. The LHJs that did not submit data either cited limited resources, personnel issues, or did not respond to communications.

Several factors mitigate the effects of data limitations on the final estimate:

- As a high-level, order of magnitude estimate, accuracy at the activity-level is not expected or necessary for confidence in the final results.
- We performed some limited standardization using the data set as a whole and external data sources to correct individual inconsistencies after consulting with the responding agency.
- Using the collected data from the 29 LHJs, we estimated current spending and costs to fully implement FPHS for the six missing LHJs using statistical methods and peer LHJ comparisons.

The results of the report represent a snapshot based on current knowledge of public health needs, expertise, capacity, and resources both in terms of people and dollars, which evolve in real time as new public health issues arise. Public health's role protecting the community is highly dynamic; as the

nature of disease, community needs, and the role of governmental public health continue to evolve over time, there are likely to be changes to the FPHS definitions and this needs to be factored into future assessments, cost estimates, and implementation.

Validation

Prior efforts in Washington and other states have shown that while there is some amount of random error from respondents, there are also unexpected findings that represent valid outliers. Validation is the effort of separating errors from outliers. There are three primary tools that BERK used to validate results:

- **Internal consistency**: are the data within an LHJ consistent? For example, do the labor costs make sense given the number of estimated FTE? Can an LHJ needing 10 FTE for one foundational program only need 0.5 FTE for another foundational program?
- **External consistency**: are the estimates consistent between LHJs? If most LHJs reported needing $25,000 or more to fully implement an element, could an LHJ serving 400,000 people need $2,500?
- **External validity**: are the estimates consistent with other available data? Can an LHJ that reports $100,000 in revenues to the Washington State Auditor's Office be currently spending $250,000 on FPHS?

Data were validated through several methods, some built into the assessment tool and some through post-collection analysis. Examples of built-in validation mechanisms are conditional formatting of text that turns on to alert respondents when reported totals sum to more than 100% or other logical inconsistencies.

Post-collection analysis looked at the results from each respondent and the results as a whole. BERK contacted every respondent to discuss identified questions. Some anomalous results were correct as reported and other were mistakes that were corrected. In all cases that data were changed, BERK communicated with the point-person at each LHJ during the validation call any planned changes.

Estimation

To the extent possible, BERK used the original data provided by LHJs for data analysis. However, it was necessary to estimate missing or irreconcilable results and to create estimates for the current

spending and costs of full implementation for the six missing LHJs. While the validation process attempted to identify all outliers, some final data points were not correctable, and BERK used statistical estimation methods to approximate responses. These corrections were reported to the identified point-person at each organization during validation.

REPORTING

BERK shared iterations of key exhibits with the Steering Committee, Technical Workgroup, and Project Management Team. All bodies provided feedback that was incorporated into this report.

BERK shared preliminary results with the Steering Committee in July of 2018 and issued the final version of this report in September.

SECTION 2

Assessment Results

INTERPRETING RESULTS

This section presents the assessment results in the aggregate to provide a systems level view of the current situation with respect to FPHS. Individual LHJs results are not presented in this report.

Estimates and Missing Data

BERK worked with LHJs individually to develop timelines for assessment completion and again during the validation stage, with the cutoff for validated data of April 11th, 2018. At the end of the cutoff period, BERK had completed assessments from 29 of the 35 LHJs. The six missing LHJs were:

- Chelan-Douglas
- Grant
- Klickitat
- Okanogan
- Snohomish
- Whitman

BERK developed estimates for the current spending and costs of full implementation for these six LHJs to ensure a system-wide assessment. However, we could not estimate qualitative responses, such as current level of implementation of FPHS, questions related to current level of sharing, willingness to share, and degree of local expertise that is required. Exhibits related to current level of implementation display the share of LHJs missing as these exhibits also show the share of the population served. In other exhibits of qualitative information where population is not referenced, the missing data are not presented and exhibits summarize the data received from DOH, SBOH, and the 29 LHJs.

For more information on which LHJs provided data, please see Appendix D: LHJ Demographic.

There are also some programs or capabilities that have missing data even when a completed assessment was submitted. Missing data in the assessment results could be due to:

- LHJs were unable to respond to specific items within the assessment by the cutoff date.
- Activities were designated state only functions, and LHJs were not asked to provide data for those activities.
- Activities were not designated as state only functions, but are in fact largely provided by the state, and there was some confusion as what should be reported (See Section 3. Assessment Conclusions for more discussion on this issue).

Level of Implementation

The assessment collected qualitative data regarding the current ability of governmental public health agencies to provide FPHS. Specifically, participants rated their current capacity and expertise to provide each of the foundational programs and capabilities. Participants rated capacity and expertise separately as there are some services where the organization has the expertise or knowledge to provide a service, but may not have the resources (high expertise, but low capacity), and others where the organization may have flexibility in resources but does not currently have the required expertise (low expertise, high capacity). Respondents used a scale of 1 to 5 to score their capacity and expertise.

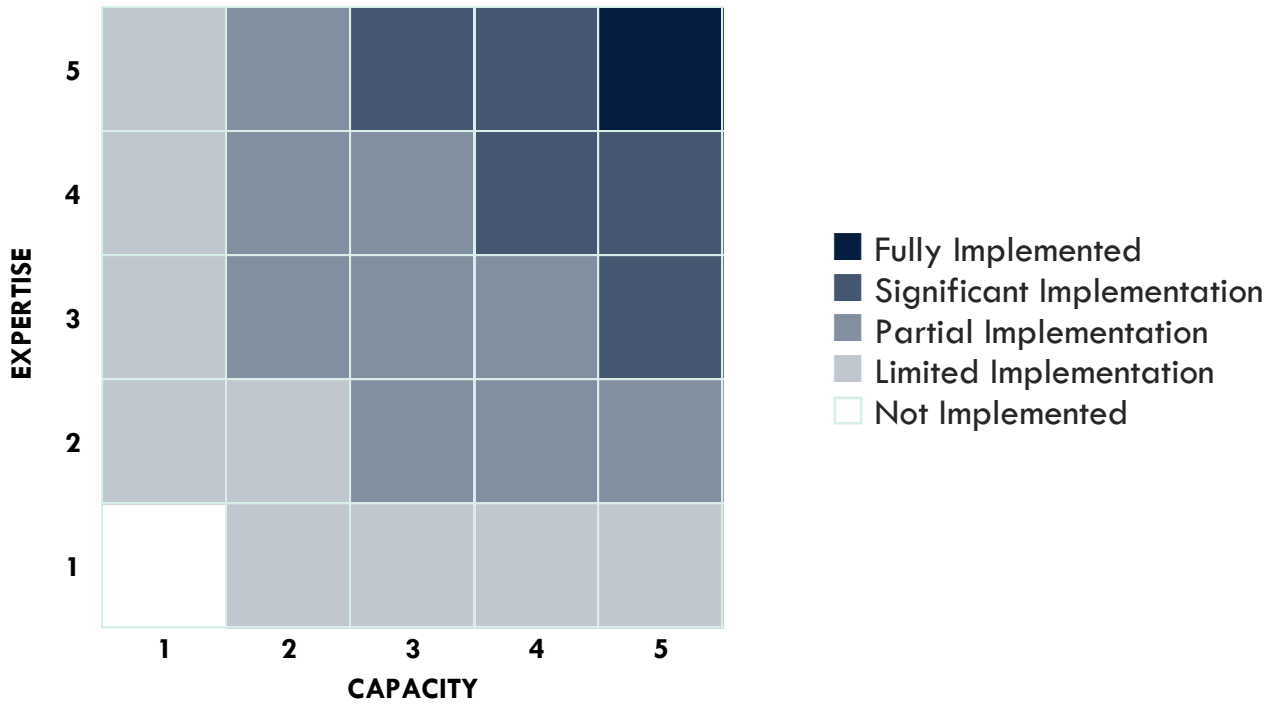
Together, the capacity and expertise self-assessment results are interpreted in this report using the grid presented in Exhibit 2 as one of five levels of implementation:

- **Fully Implemented**: Services are fully implemented with top self-assessment scores for both capacity and expertise.
- **Significant Implementation**: Services are mostly implemented with self-assessment scores for both capacity and expertise of four and five.
- **Partial Implementation**: Services are partially implemented with some gaps remaining.
- **Limited Implementation**: Services are implemented with substantial gaps remaining.
- **Not Implemented**: Services are mostly not or not at all implemented.

Exhibit 3 contains the key for these five levels of implementation used throughout this report.

By condensing two measures into one, some information is lost. However, to succinctly show level of service implementation by LHJs and by population, this combined measure provides meaningful information.

Exhibit 2. Level of Implementation Determination Grid



Source: BERK, 2018.

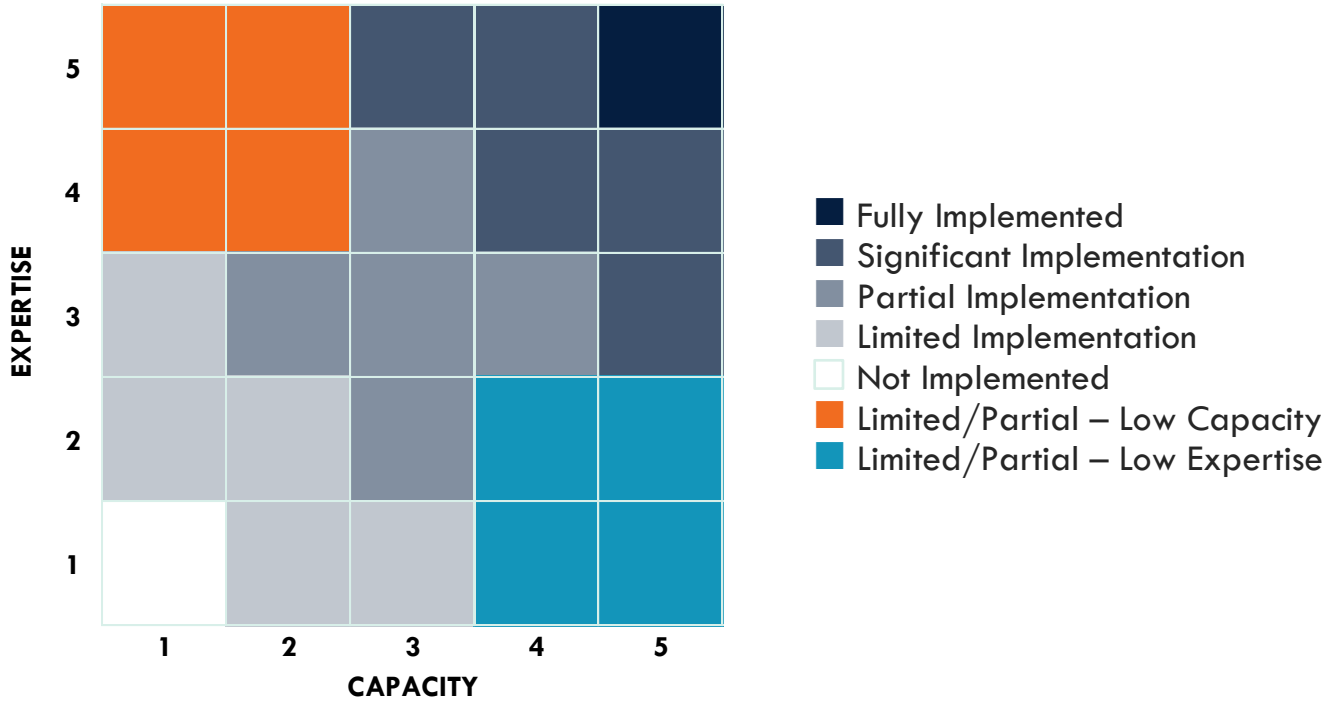
Exhibit 3. Level of Implementation Single Measure Spectrum

Source: BERK, 2018.

In addition to the general scale presented Exhibit 2, this report includes more detailed analyses using the level of implementation grid to highlight large discrepancies between capacity and expertise scores. In the detailed level of implementation scale presented in Exhibit 4, two additional levels of implementation are added:

- **Limited/Partial Implementation – Low Capacity:** A score of four or five in expertise and a low score (defined as a score of one or two) in capacity, resulting in an overall limited or partial level of implementation. Scores in this range are referred to as "low capacity" in this report.
- **Limited/Partial Implementation – Low Expertise:** A score of four or five in capacity and a low score (defined as a score of one or two) in expertise, resulting in an overall limited or partial level of implementation. Scores in this range are referred to as "low expertise" in this report.

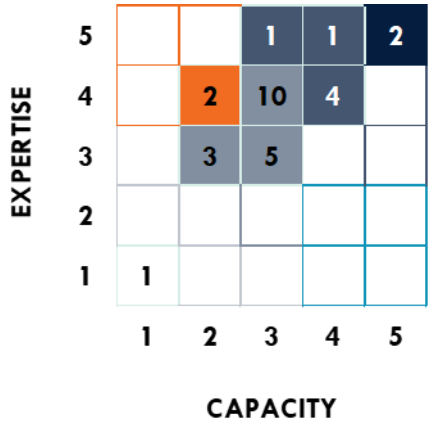
Exhibit 4. Detailed Level of Implementation Scale with Low Capacity and Low Expertise



Source: BERK, 2018.

Detailed level of implementation results, including low capacity and low expertise scores, are shown for each foundational program and capability are presented in Exhibit 5, with each square showing the number of LHJs scored at the respective level of implementation, denoted by its color.

Exhibit 5. Example Detailed Level of Implementation by Number of LHJs



Source: BERK, 2018.

Respondents were asked to provide self-assessment scores on individual elements within foundational programs and capabilities. To create an overall score for each foundational program and capability, we averaged local function element scores. Three elements were identified in the *Draft Functional Definitions Manual* as "State Only" functions that will be provided by DOH when FPHS is fully implemented. As such, these elements were not included when creating the overall implementation score and are shown with a gray bar saying "State Only Function" in exhibits to signify that data were not collected from LHJs for these elements.

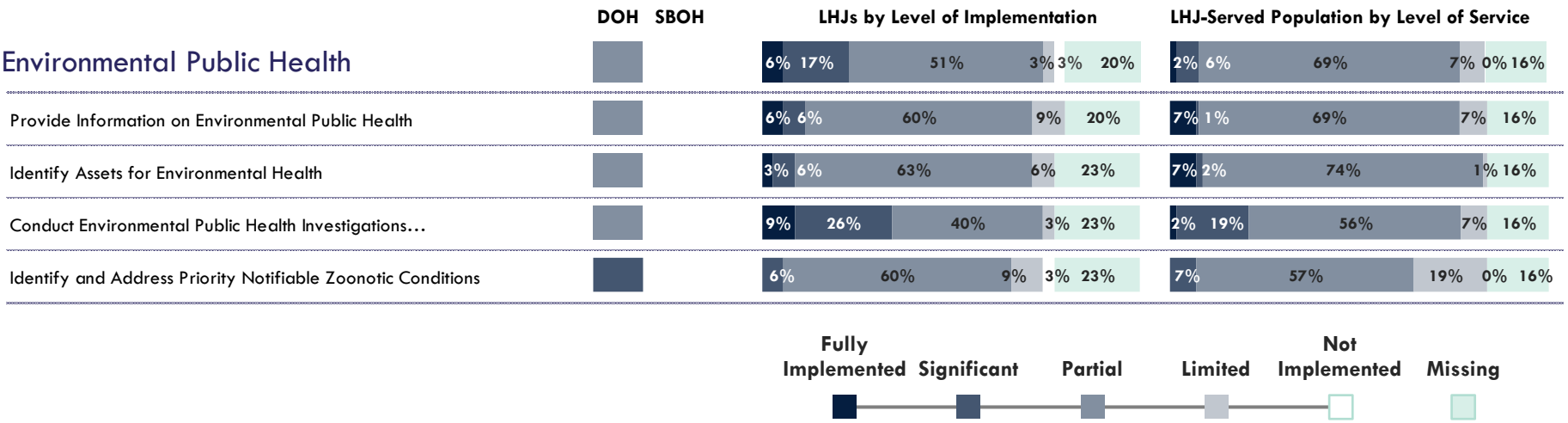
Population by Level of Service

DOH and SBOH's scores reflect their service to the entire population of Washington state, whereas LHJ scores describe service to a subset of the population. To represent the reported level of implementation for LHJ-served populations, BERK summed the populations for each LHJ by level of implementation; for example, the total population living within areas with significant implementation of a given element was aggregated from the individual LHJs that reported significant implementation. Shown irrespective of LHJ boundaries, the determination grid presented in Exhibit 2 shows level of service for LHJ-served population:

- **Population Fully Served**: the portion of population that is fully served, residing within LHJs that scored services as fully implemented.
- **Population Significantly Served**: the portion of population that is significantly served, residing within LHJs that scored services as significantly implemented, with few service gaps.
- **Population Partially Served**: the portion of population that is partially served, residing within LHJs that scored services as partially implemented, with some gaps in service.
- **Population Limitedly Served**: the portion of population that is underserved, residing within LHJs that scored services as limitedly implemented, with substantial gaps in service.
- **Population Not Served**: the portion of population that is not served, residing within LHJs that scored services as not implemented.

In Exhibit 6, level of implementation and LHJ-served population by level of service are shown together to track effects of LHJ implementation levels to level of service for the statewide population.

Exhibit 6. Example Level of Implementation and LHJ-Served Population by Level of Service



Source: BERK, 2018.

BERK did not request LHJs assess their level of implementation for the 12 FPHS programs or capabilities. Respondents were asked to provide self-assessment scores on individual elements and activities within each foundational program and capability. To create an overall score for each foundational program and capability, BERK created a weighted average of the element-level scores. Weighting was based on the level of current spending for each element.

By using current spending, that fully implemented elements with significant dedicated resources may have greater weight than elements that are not fully implemented and have lower current spending.

Sharing

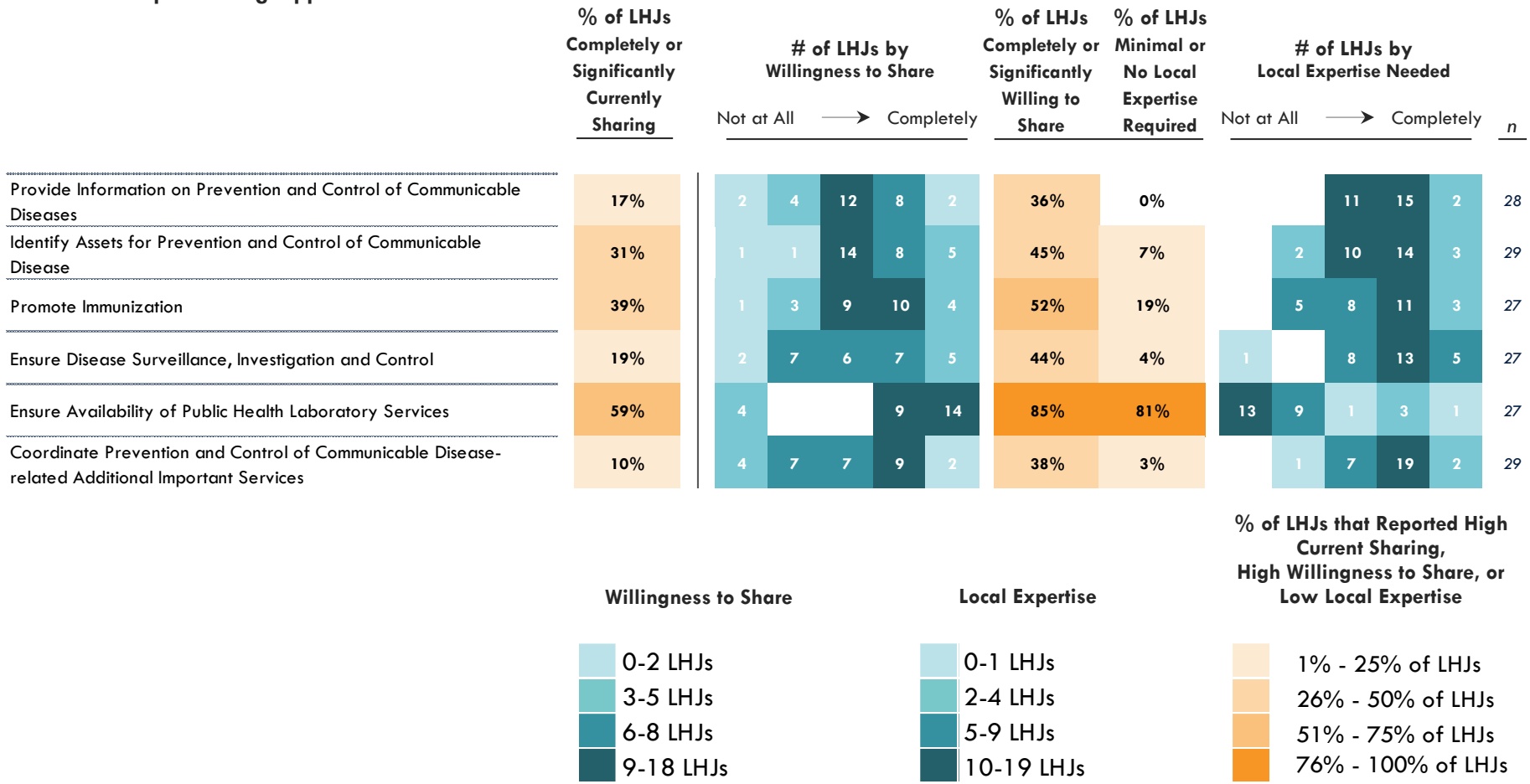
LHJs were asked to report current sharing and willingness to share the delivery of each element and activity. Each of the three questions around sharing were answered using a five-point Likert scale ranging from "1 – Not at all" to "5 – Completely." The three questions asked were:

- To what extent do you share this Element or Activity with another organization? (Current Sharing)
- Would you consider sharing this Element or Activity with another organization? (Willingness to Share)

Does this Element or Activity require local expertise? (Local Expertise)

Exhibit 7 shows the results of the self-assessment of current sharing and sharing opportunities, including local expertise.

Exhibit 7. Example Sharing Opportunities for Elements



Source: BERK, 2018.

In Exhibit 7, each row corresponds to the element described on the left side of the exhibit. The far-left column, in gold, displays the percent of LHJs that reported to be either completely or significantly currently sharing each element (a 4 or 5 on the Likert scale). In teal, the number of LHJs reporting each

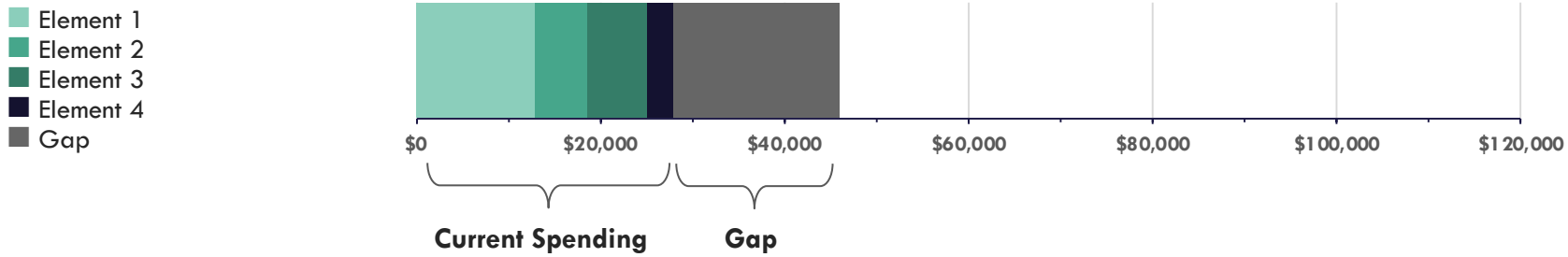
number on the Likert scale are shaded by quartile for both willingness to share and local expertise, with the darkest teal denoting larger numbers of LHJs. In the middle of the exhibit in gold, there are two columns, the left one shows what percent of LHJs report they are either "4 – significantly willing to share" or "5 – completely willing to share" the element. The right column shows what percent of LHJs report the element either requires "1 – no local expertise" or "2 – minimal local knowledge." On the far right of the exhibit the number of LHJs that responded to the questions is shown in italics under "n."

There may be opportunities for new service delivery models where willingness to share is high and local expertise required is minimal. However, both things do not need to be true as there are service delivery models that can account for local expertise while also sharing. Those opportunities are identified throughout beginning on page 34. In addition, information on capacity and expertise combined with information on current sharing and willingness to share could help inform the development of new service delivery models to most efficiently and effectively address all of these aspects.

Estimated Current Spending and Gap

All agencies were asked to report current spending by element for each program and capability. Agencies then allocated the estimated amount across activities. Current spending and the gap between current spending and full implementation are shown for each program and capability as illustrated in Exhibit 8. The gap is illustrated by the gray bar on the right-hand side.

Exhibit 8. Example Estimated Current Spending and Gap for One Foundational Program



Source: BERK, 2018.

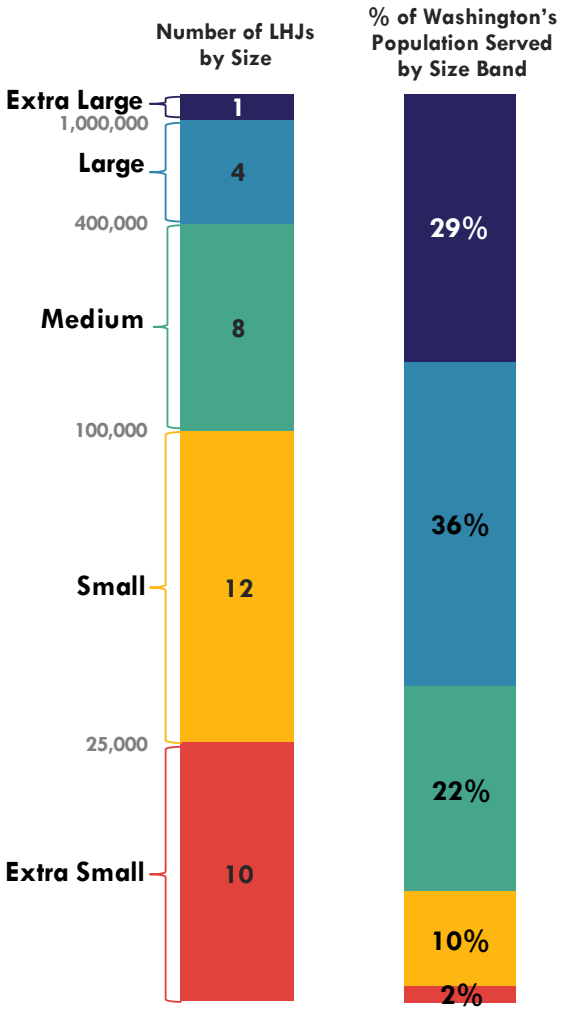
All current spending and gap graphs are displayed on the same scale for ease of comparison.

LHJ Size Bands

To encourage an honest assessment of current implementation levels, BERK assured LHJs that data would not be identified. To that end, when assessment results are presented by LHJ, LHJs are grouped by population size into the five size bands indicated in Exhibit 9. For a complete listing of LHJs in each size band and the percent of Washington's population residing within each LHJ, please see Appendix D: LHJ Demographic Information.

These size bands are used only in the programmatic analysis of the overall results in Exhibit 10 on the next page and the results for sharing in Exhibit 13 on page 35. In Exhibit 10, the order of LHJs is randomized within size bands, except where the number of LHJs within the band precludes randomization, as in the extra-large band. Public Health – Seattle & King County was consulted and allowed its data to be identifiable.

Exhibit 9. LHJ Size Bands

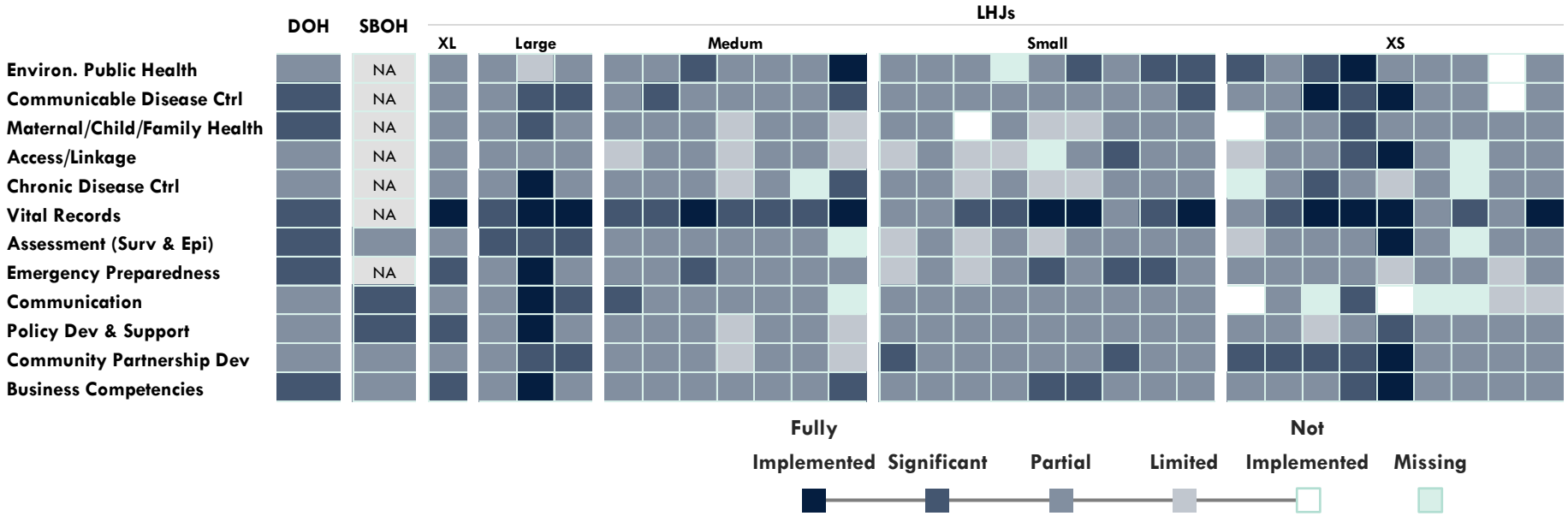


OVERALL RESULTS

Programmatic Analysis

Below are the foundational program and capability implementation levels for DOH, SBOH, and responding LHJs in randomized order within size bands.

Exhibit 10. Current Implementation of Foundational Programs and Capabilities



Note: See description of SBOH below.
Source: BERK, 2018.

No foundational program or capability is fully or significantly implemented across all responding agencies. This finding suggests FPHS in Washington state do not currently meet the condition of "must exist everywhere, to work anywhere." All squares would need to be dark blue for this to be the case.

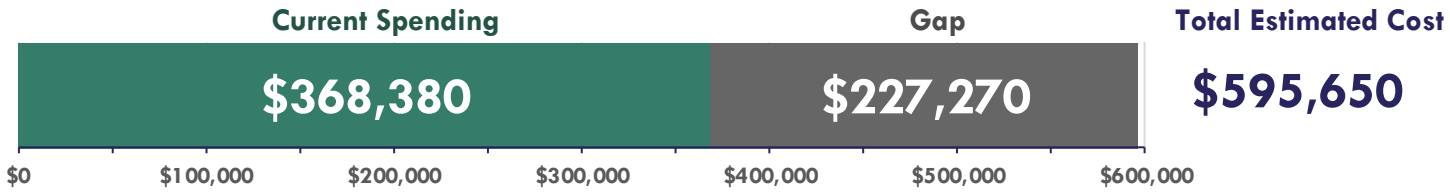
State Board of Health

Since SBOH is not a direct service provider it did not self-assess on the foundational programs. The program definitions do include some activities related to rule-making and SBOH included these activities under the Policy Development and Support capability.

Cost Analysis

Exhibit 11 and Exhibit 12 are the systemwide annual FPHS total estimated cost, current spending, and gap.

Exhibit 11. Annual FPHS Total Current Spending and Gap, in $000s



Source: BERK, 2018.

Exhibit 12. Annual FPHS Total Estimated Cost, Current Spending, and Gap by Foundational Program and Capability, in $000s

Annual FPHS Cost All Amounts in $000s	Total Estimated Cost	Current Spending	Gap
Environmental Public Health	$115,020	$76,610	$38,410
Prevention and Control of Communicable Disease & Other Notifiable Conditions	$80,900	$45,660	$35,240
Maternal/Child/Family Health	$46,080	$27,990	$18,090
Access/Linkage with Medical, Oral, and Behavioral Health Care Services	$87,850	$74,600	$13,250
Chronic Disease, Injury and Violence Prevention	$32,510	$14,550	$17,960
Vital Records	$9,670	$8,030	$1,640
Assessment (Surveillance and Epidemiology)	$43,350	$12,510	$30,840
Emergency Preparedness (All Hazards)	$19,990	$11,290	$8,700
Communication	$16,620	$6,930	$9,690
Policy Development and Support	$20,350	$11,850	$8,500
Community Partnership Development	$17,190	$7,560	$9,630
Business Competencies	$106,120	$70,800	$35,320
Total	**$595,650**	**$368,380**	**$227,270**

Source: BERK, 2018.

SHARING

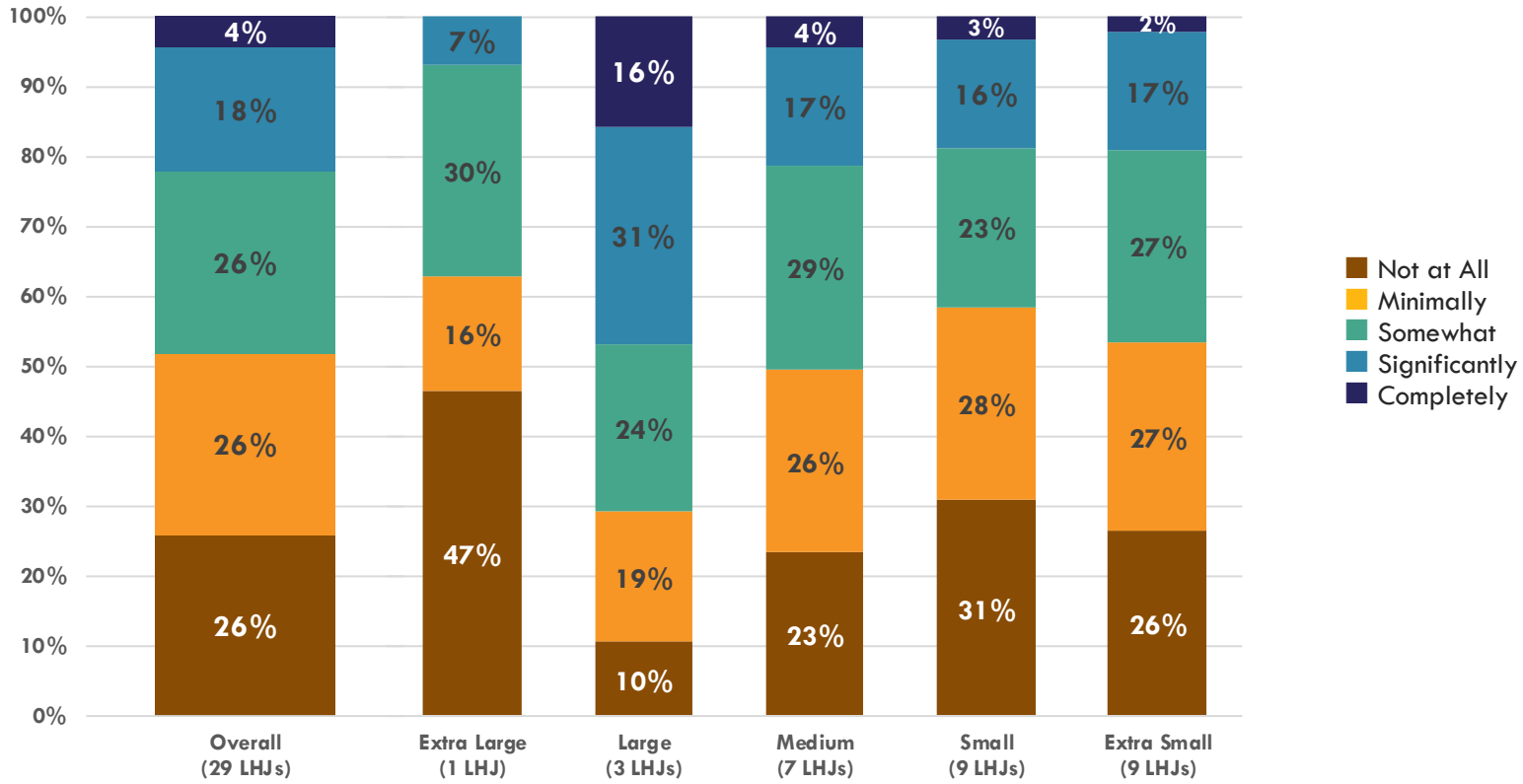
LHJs reported the extent of their current sharing and perceived opportunities to share FPHS elements and activities.

All sharing results from this assessment have the following qualifications:

- Some FPHS activities may not be suitable for sharing services.
- FPHS includes unimplemented activities for governmental public health jurisdictions, either because these activities are new or because resource restrictions have kept jurisdictions from implementing.
- There has not been an explicit goal of sharing FPHS activities.
- The data limitations discussed on page 18, including that the questions may have been interpreted differently between respondents.

With those caveats in mind, Exhibit 13 is the reported current sharing between LHJs and other public health providers for the 45 reported elements of FPHS. Exhibit 13 contains both the overall results displayed as the number of responses in each category and by LHJ size band displayed as the percentage of responses in each category.

Exhibit 13. Current Sharing: LHJ Responses "To what extent do you share this Element with another organization?"



Source: BERK, 2018.

LHJs are currently sharing the delivery of many elements of FPHS. The qualitative results from "willingness to share" and the required "local expertise" for individual FPHS elements are included in the Results by Foundational Program and Capability section below.

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RESULTS BY FOUNDATIONAL PROGRAM AND CAPABILITY

Analysis of level of implementation, population by level of service, and sharing results for each foundational program and capability are presented below. Please refer to Interpreting Results for explanations of the terms, grids, and colors used to display results. Three elements were called out in the *Draft Functional Definitions Manual* as State Only:

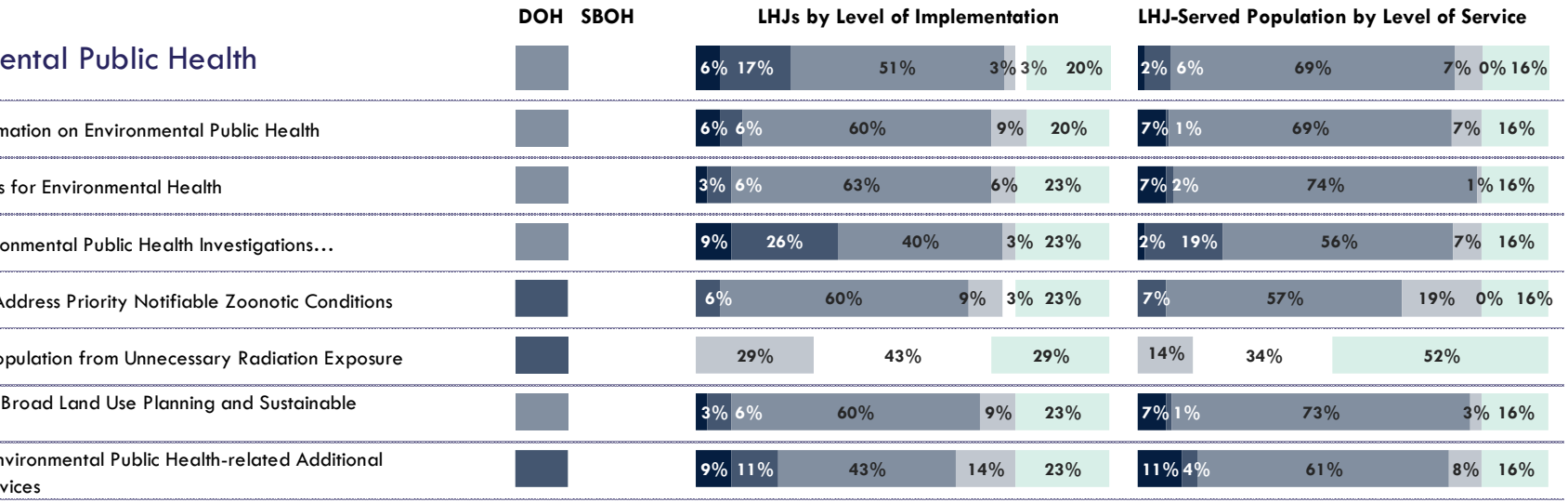
- Maternal/Child/Family Health, Element 3 – Assure Mandated Newborn Screening
- Access/Linkage with Medical, Oral, and Behavioral Health Care Services, Element 4 – Improve Patient Safety through Regulation of Health Care Facilities and Professionals
- Vital Records, Element 1 – Assure a System of Vital Records

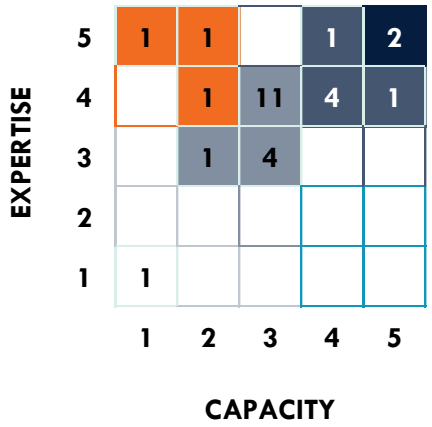
The results highlight other elements where the state is the primary provider. As this was not explicitly stated in the Manual some LHJs responded and others did not. This resulted in two elements where it appears that the state population is not well served, but where DOH is showing full implementation and in fact, the population is well served:

- Environmental Public Health, Element 5 – Protect the Population from Unnecessary Radiation Exposure
- Prevention and Control of Communicable Disease and Other Notifiable Conditions, Element 5 – Ensure Availability of Public Health Laboratory Services

This issue is discussed further in Section 3. Assessment Conclusions.

Environmental Public Health





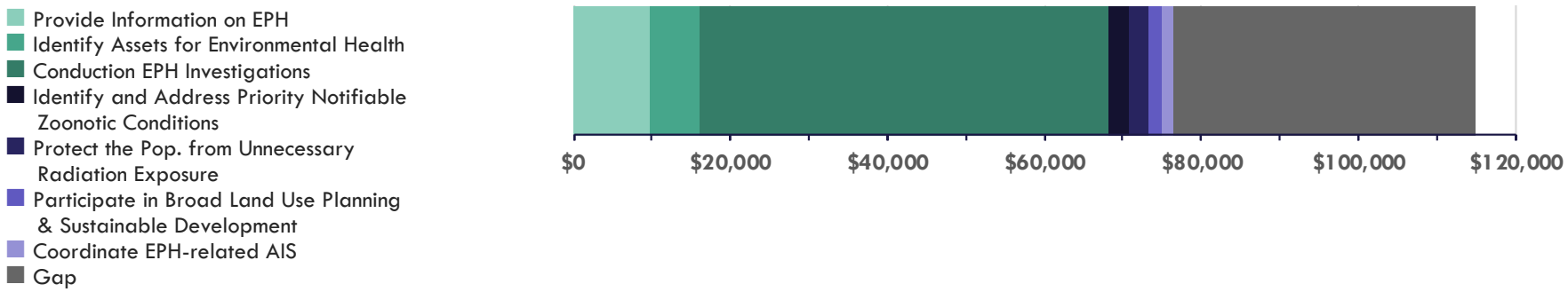
- The majority of the state population is partially served for the **Environmental Public Health** program.
- Three LHJs reported limited or partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- A large portion of LHJs did not report data for **Protect the Population from Unnecessary Radiation Exposure,** covering the majority of the state population. DOH reports significant implementation of this element and along with a subset of LHJs provides these services (see note on page 34).

Environmental Public Health

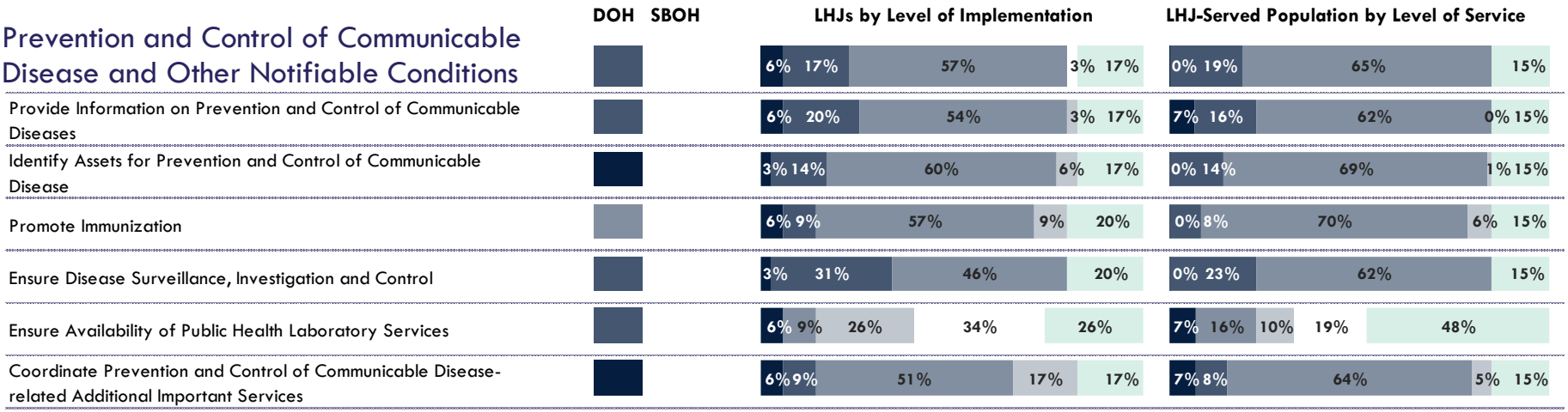
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Provide Information on Environmental Public Health	18%	1	2	16	5	4	32%	14%		4	9	13	2	28
Identify Assets for Environmental Health	19%	2	2	16	3	4	26%	0%			10	15	2	27
Conduct Environmental Public Health Investigations…	4%	2	6	14	2	3	19%	4%		1	7	12	7	27
Identify and Address Priority Notifiable Zoonotic Conditions	48%	1	2	10	9	5	52%	15%	1	3	14	8	1	27
Protect the Population from Unnecessary Radiation Exposure	48%	3	2	4	6	10	64%	68%	7	10	7	1		25
Participate in Broad Land Use Planning and Sustainable Development	26%	4	2	14	4	3	26%	4%		1	7	15	4	27
Coordinate Environmental Public Health-related Additional Important Services	0%	1	10	9	3	4	26%	7%		2	8	12	5	27

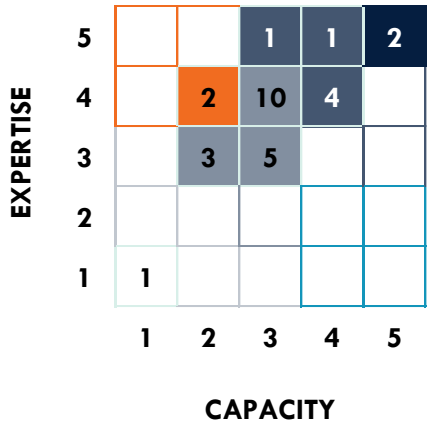
- Almost half of LHJs (48%) currently share the elements **Identify and Address Priority Notifiable Zoonotic Conditions** and **Protect the Population from Unnecessary Radiation Exposure.** Over half of LHJs also report they would be completely or significantly willing to share these two elements, with over two-thirds (68%) also reporting that minimal or no local expertise is required for the latter element (see note on page 34).
- A quarter to a third of LHJs are completely or significantly willing to share the elements **Provide Information on Environmental Public Health** and **Identify Assets for Environmental Health,** even though local expertise may be required.

Estimated Annual Current Spending and Gap (in $000s)



Prevention and Control of Communicable Disease and Other Notifiable Conditions





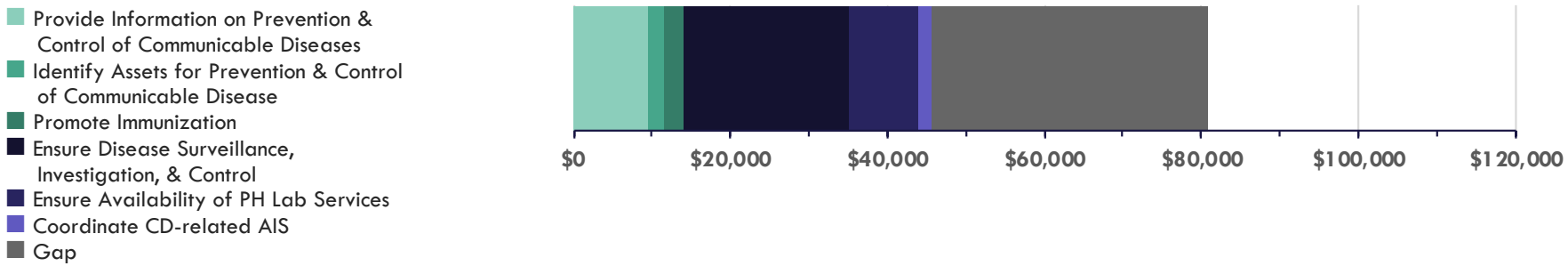
- The majority of the state population is partially served for the **Prevention and Control of Communicable Disease and Other Notifiable Conditions** program.
- Two LHJs, representing less than 1% of the state population, reported full implementation of the program.
- Two LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- More of the state population is not served for the element **Ensure Availability of Public Health Laboratory Services** than any other service level. DOH reports significant implementation of this element (see note on page 34).

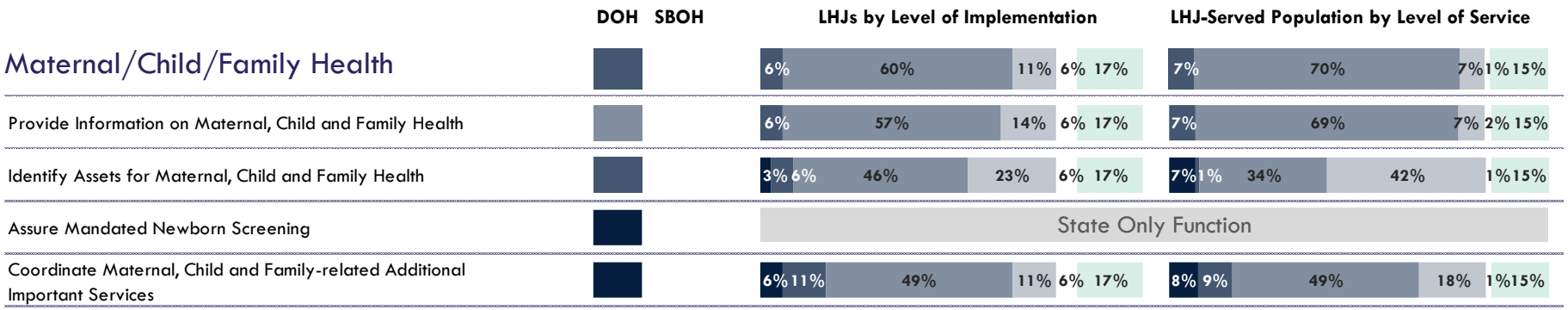
Prevention and Control of Communicable Disease and Other Notifiable Conditions

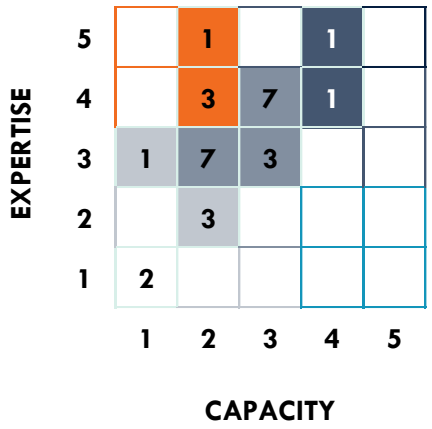
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Provide Information on Prevention and Control of Communicable Diseases	17%	2	4	12	8	2	36%	0%			11	15	2	28
Identify Assets for Prevention and Control of Communicable Disease	31%	1	1	14	8	5	45%	7%		2	10	14	3	29
Promote Immunization	39%	1	3	9	10	4	52%	19%		5	8	11	3	27
Ensure Disease Surveillance, Investigation and Control	19%	2	7	6	7	5	44%	4%	1		8	13	5	27
Ensure Availability of Public Health Laboratory Services	59%	4			9	14	85%	81%	13	9	1	3	1	27
Coordinate Prevention and Control of Communicable Disease-related Additional Important Services	10%	4	7	7	9	2	38%	3%		1	7	19	2	29

- Over a third of LHJs are either completely or significantly willing to share every element of the **Prevention and Control of Communicable Disease** program. All but one element requires a high-level of local expertise.
- The element **Ensure Availability of Public Health Laboratory Services** is currently shared by almost 60% of LHJs and has both a large percentage of LHJs that are completely or significantly willing to share the element (85%) and a large percentage of LHJs reporting the element requires no or minimal local expertise to implement (81%) (see note on page 34).

Estimated Annual Current Spending and Gap (in $000s)







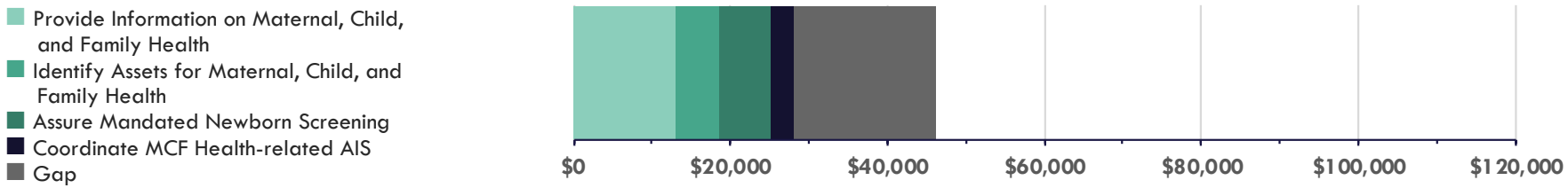
- For LHJ-provided elements, the majority of the state population is partially served for **Maternal/Child/Family Health** program overall.
- Four LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- The state population is fully served for the state only **Assure Mandated Newborn Screening** function.
- Two-thirds of the non-state only elements show that a small (less than 10%) portion of the state population is fully served.
- More of the state population is limitedly served for **Identify Assets for Maternal, Child and Family Health** than any other service level.

Maternal/Child/Family Health

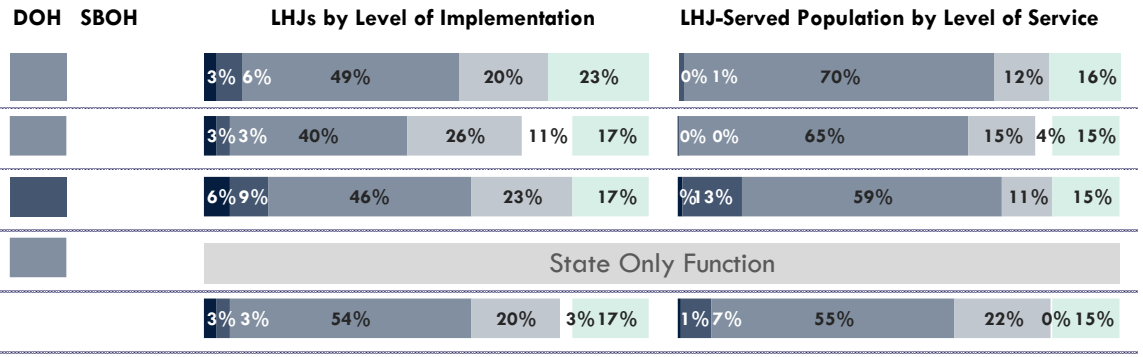
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Provide Information on Maternal, Child and Family Health	31%	1	2	9	9	8	59%	14%	2	2	13	10	2	29
Identify Assets for Maternal, Child and Family Health	21%	2	3	12	6	6	41%	3%	1		10	15	3	29
Assure Mandated Newborn Screening	State Only Function													
Coordinate Maternal, Child and Family-related Additional Important Services	14%	3	6	10	5	5	34%	0%			12	12	5	29

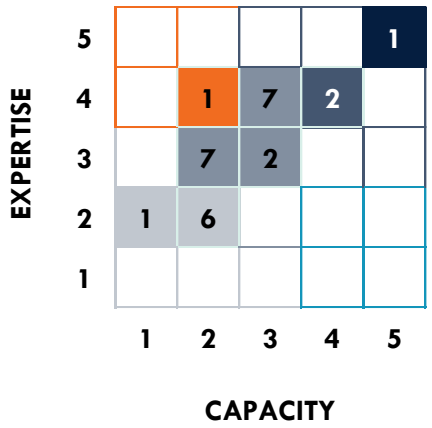
- Nine LHJs (31%) are currently sharing the element **Provide Information on Maternal, Child, and Family Health** either completely or significantly and 17 (59%) LHJs are completely or significantly willing to share, despite only a few LHJs saying that minimal or no local expertise is required.
- Over a third of LHJs, mostly representing medium to extra-large LHJs also reported they were completely or significantly willing to share the other two locally provided elements.

Estimated Annual Current Spending and Gap (in $000s)



Access/Linkage with Medical, Oral, and Behavioral Health Care Services





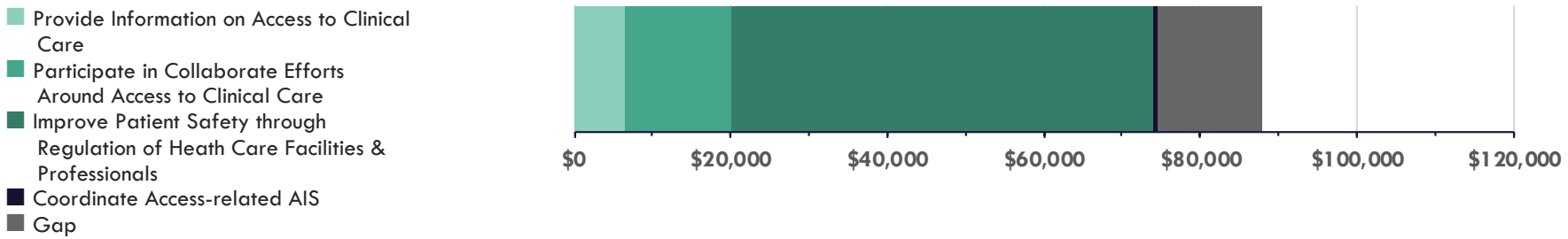
- The majority of the state population is partially served for the LHJ-provided elements of the **Access/Linkage with Medical, Oral, and Behavioral Health Care Services** program.
- One LHJ reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation, covering less than 1% of the state population.
- The state population is partially served for the state only element **Improve Patient Safety through Regulation of Health Care Facilities and Professionals**.

Access/Linkage with Medical, Oral, and Behavioral Health Care Services

	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Provide Information on Access to Clinical Care	34%	1	3	7	14	4	62%	17%	1	4	13	11		29
Participate in Collaborative Efforts Around Access to Clinical Care	38%	2	5	6	12	4	55%	7%		2	9	14	4	29
Improve Patient Safety through Regulation of Health Care Facilities and Professionals	State Only Function													
Coordinate Access to Clinical Care-related Additional Important Services	10%	3	6	12	4	4	28%	7%		2	8	14	5	29

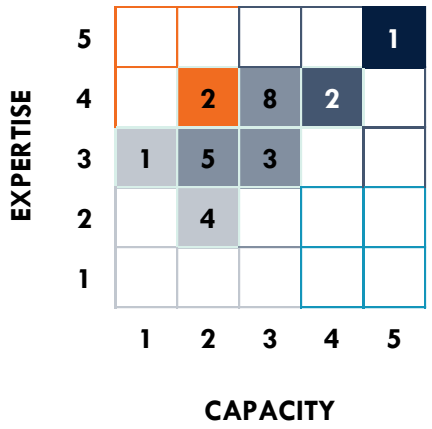
- Over a third of LHJs are already sharing and over half of LHJs are either completely or significantly willing to share the elements **Provide Information on Access to Clinical Care** (62%) and **Participate in Collaborative Efforts Around Access to Clinical Care** (55%), though many report that a high level of local expertise is also required.
- Only 10%, of LHJs report current sharing of the element **Coordinate Access to Clinical Care-related Additional Important Services,** though over a quarter of all LHJs (28%) report an interest in completely or significantly sharing the element.

Estimated Annual Current Spending and Gap (in $000s)



Chronic Disease and Injury and Violence Prevention

	DOH	SBOH	LHJs by Level of Implementation					LHJ-Served Population by Level of Service				
			3%	6%	51%	14%	26%	7%	2%	68%	7%	17%
Provide Information on Chronic Disease and Injury and Violence Prevention			3%	3%	54%	23%	17%	7%	0%	70%	8%	15%
Identify Assets for Chronic Disease and Injury and Violence Prevention			3%	3%	54%	20%	20%	7%	6%	70%	2%	15%
Coordinate Chronic Disease and Injury and Violence Prevention-related AIS			6%	3%	57%	17%	17%	8%	1%	70%	6%	15%



- The majority of the state population is partially served for the **Chronic Disease and Injury and Violence Prevention** program.
- Two LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation, covering 7% of the state population.

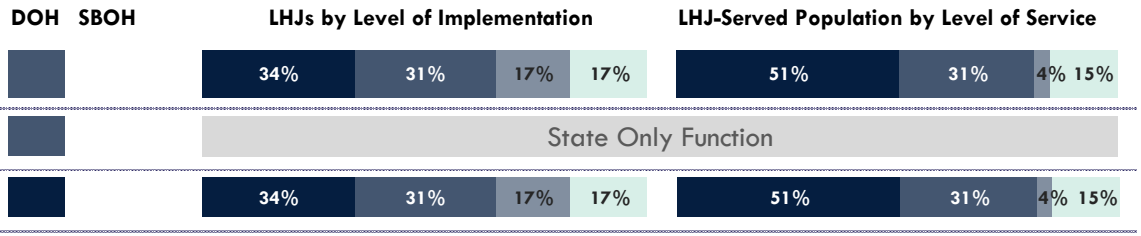
Chronic Disease and Injury and Violence Prevention

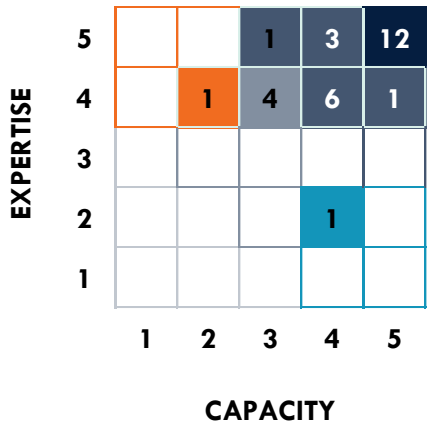
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Provide Information on Chronic Disease and Injury and Violence Prevention	14%	1	4	10	10	3	46%	7%	1	1	18	6	2	28
Identify Assets for Chronic Disease and Injury and Violence Prevention	21%	1	3	13	9	2	39%	11%		3	10	13	2	28
Coordinate Chronic Disease and Injury and Violence Prevention-related AIS	14%	5	7	9	6	2	28%	7%		2	7	15	5	29

- Over 75% of LHJs provide these elements locally without sharing.
- Almost 50% of LHJs reported they were completely of significantly willing to share **Provide Information on Chronic Disease and Injury and Violence Prevention** (46%).

Estimated Annual Current Spending and Gap (in $000s)

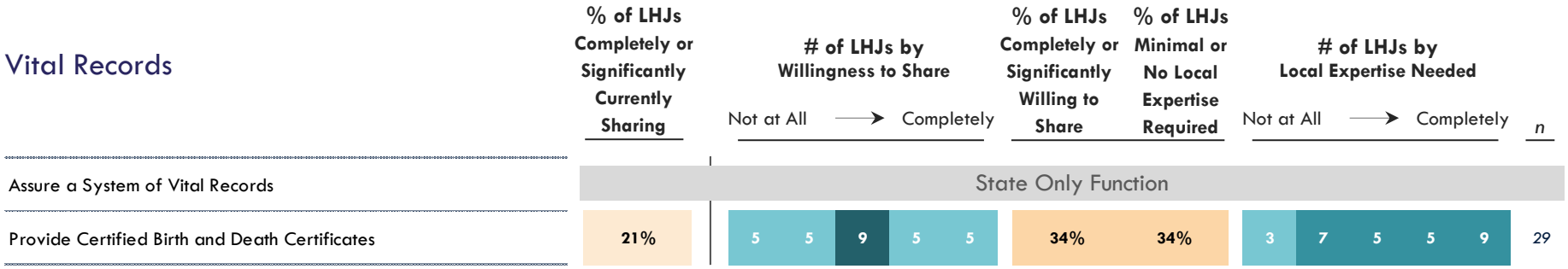
Vital Records





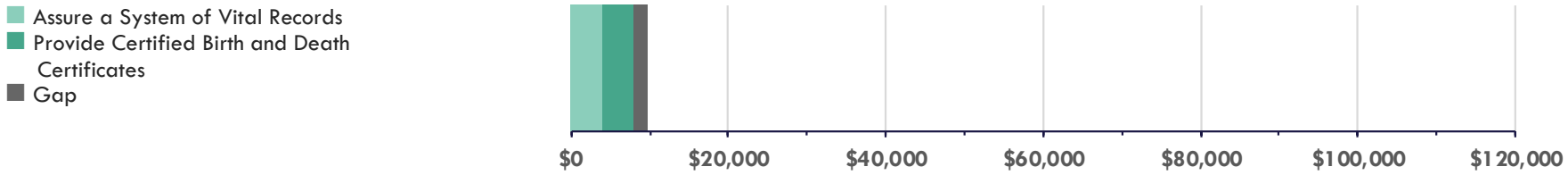
- For the LHJ-provided element, the majority of the state population is fully served, with 12 LHJs reporting full implementation. Over 80% of the state population is significantly or fully served for the element.
- For the state only **Assure a System of Vital Records** function, the state population is significantly served.
- One LHJ reported partial implementation – low capacity, with high expertise results, and one reported partial implementation – low expertise, with high capacity results.

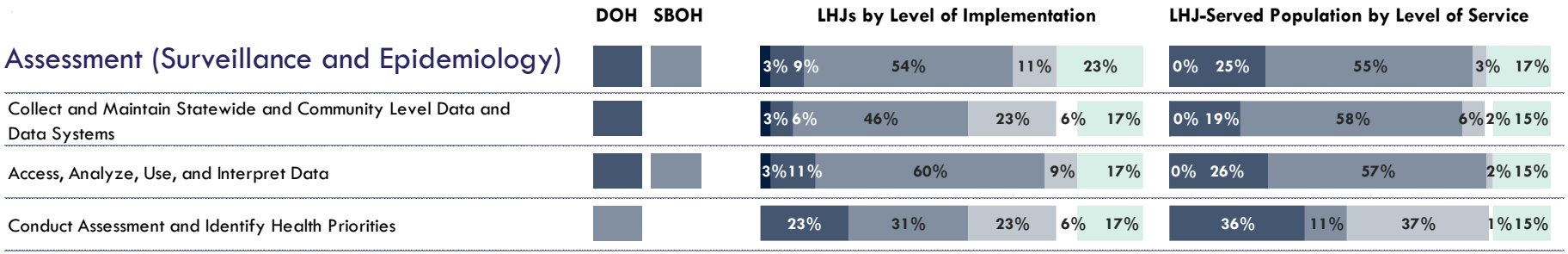
Vital Records

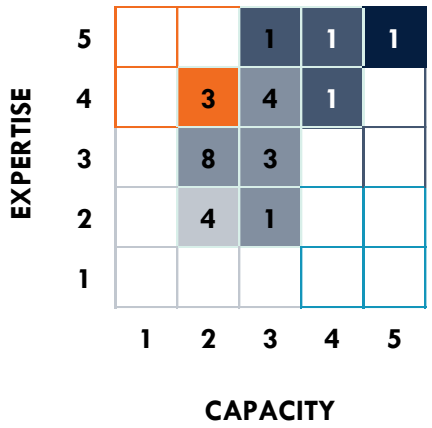


- **Assuring a System of Vital Records** is a function carried out by the state, but **Providing Certified Birth and Death Certificates** is currently a function provided locally.
- 21% of LHJs report that they currently share this element either significantly or completely and just over a third (34%) report they would be willing to share.

Estimated Current Spending and Gap (in $000s)







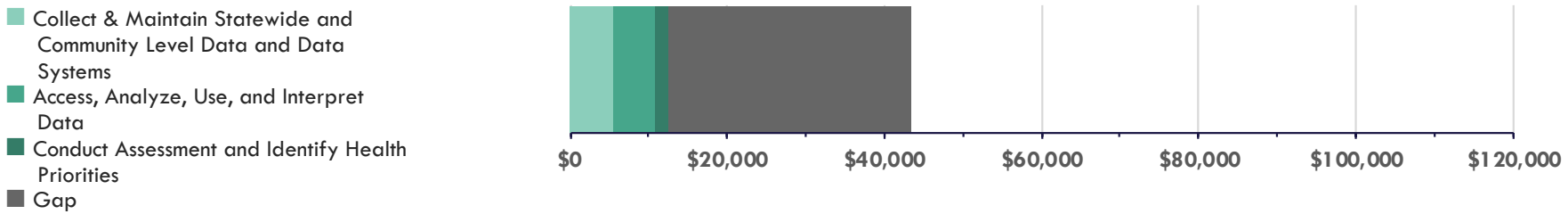
- The majority of the state population is partially served for the **Assessment (Surveillance and Epidemiology)** capability.
- Three LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- For the element **Conduct Assessment and Identify Health Priorities**, as much of the state population is significantly served as is limitedly served. DOH reported partial implementation for this element.

Assessment (Surveillance and Epidemiology)

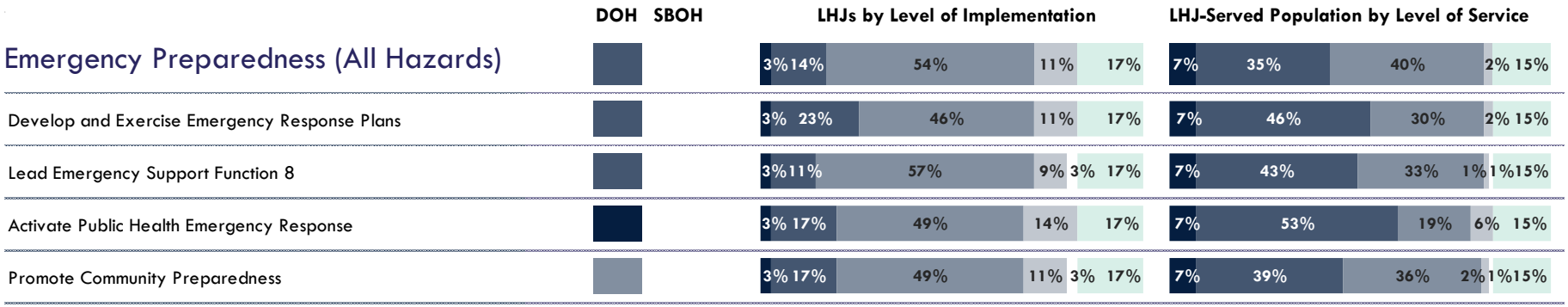
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Collect and Maintain Statewide and Community Level Data and Data Systems	24%		5	5	12	7	66%	24%	1	6	15	7		29
Access, Analyze, Use, and Interpret Data	17%	1	4	9	10	5	52%	7%	1	1	13	13	1	29
Conduct Assessment and Identify Health Priorities	21%	1	3	9	13	3	55%	7%	1	1	11	11	5	29

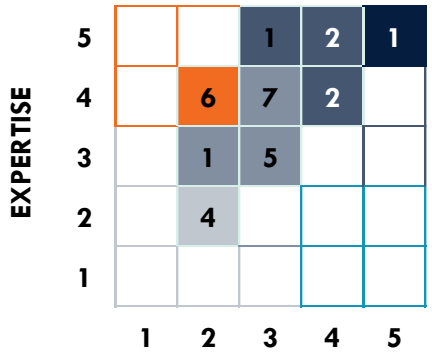
- Assessment's elements are currently minimally shared, with under 25% of LHJs reporting that they significantly or completely share each element.
- A third of LHJs report they are completely or significantly willing to share **Collecting and Maintaining Statewide and Community Level Data and Data Systems**. Currently the state takes a large role in this element.
- Just over 50% of LHJs report they are completely or significantly willing to share the elements **Access, Analyze, Use, and Interpret Data** as well as **Conduct Assessments and Identify Health Priorities,** though only 7% of LHJs report that these elements would require little or no local expertise.

Estimated Annual Current Spending and Gap (in $000s)



Emergency Preparedness (All Hazards)





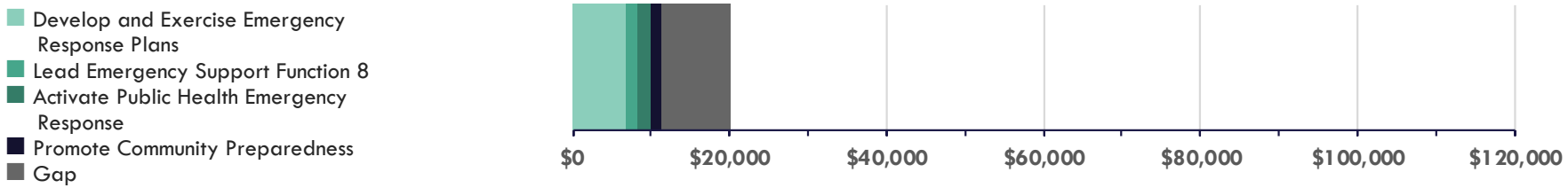
- More of the state population (42%) is significantly or fully served for the **Emergency Preparedness (All Hazards)** capability than any other service level, with 40% of the state population partially served.
- Six LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation for the capability, covering 7% of the state population.

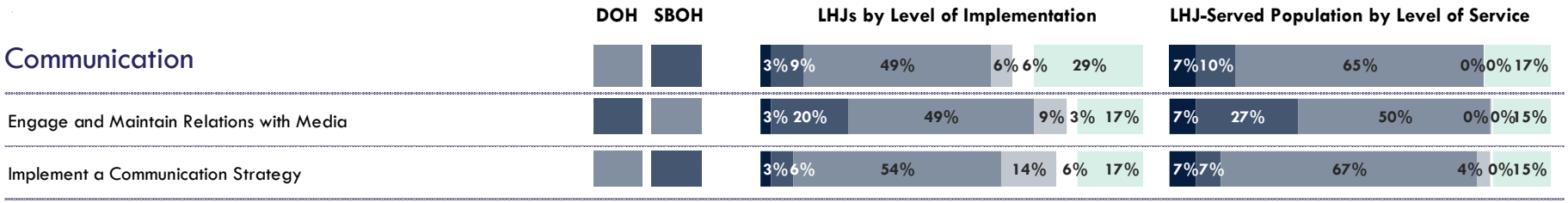
Emergency Preparedness (All Hazards)

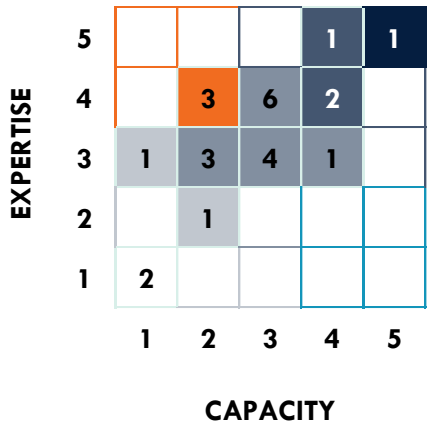
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share: Not at All				Completely	% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed: Not at All			Completely	*n*
Develop and Exercise Emergency Response Plans	34%	1	3	9	13	3	55%	0%		8	14	7	*29*
Lead Emergency Support Function 8	34%	4	7	7	8	3	38%	3%	1	6	13	9	*29*
Activate Public Health Emergency Response	38%	2	8	7	9	3	41%	7%	2	7	15	5	*29*
Promote Community Preparedness	41%		8	8	7	6	45%	10%	3	5	16	5	*29*

- Over a third of LHJs share each element of Emergency Preparedness.
- The greatest opportunity for sharing is with the element **Develop and Exercise Emergency Response Plans.** Over 55% of LHJs report they are completely or significantly willing to share the element despite all LHJs reporting this element requires a high-level of local expertise.
- Between a third and a half of LHJs are completely or significantly willing to share the other elements in this FPHS capability, while also noting the high-level of local expertise required for each element.

Estimated Annual Current Spending and Gap (in $000s)







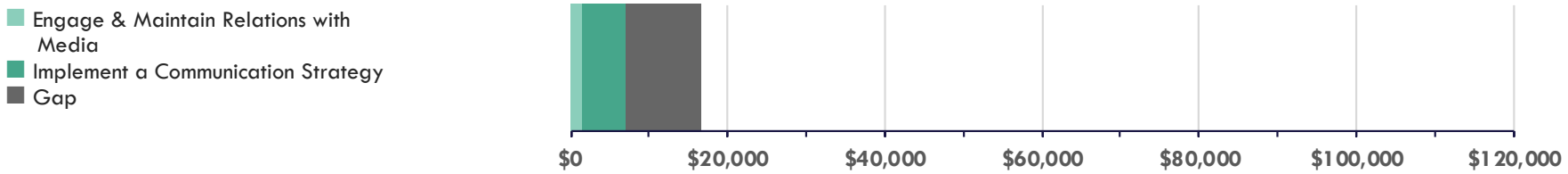
- The majority of the state population is partially served for the **Communicatio**n capability.
- SBOH reports significant implementation for the **Communication** capability, and for the element **Implement a Communication Strategy**. DOH reports significant implementation for the element **Engage and Maintain Relations with Media**.
- Three LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation for the capability, covering 7% of the state population.

Communication

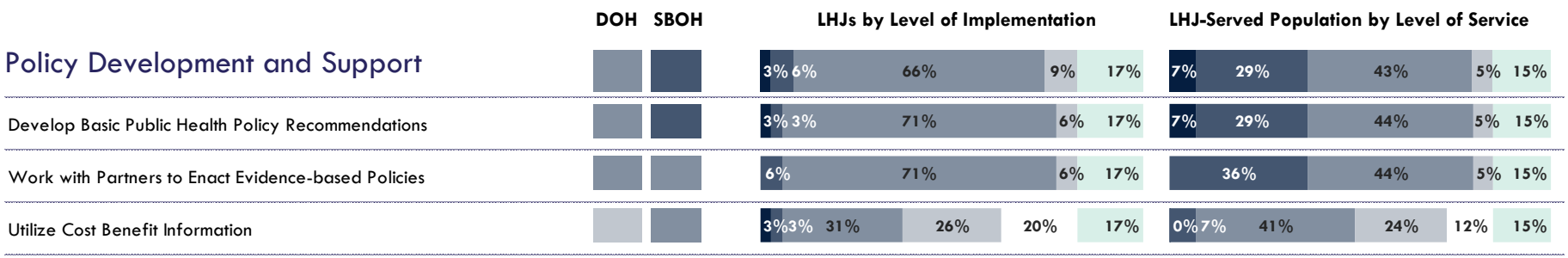
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)				*n*
Engage and Maintain Relations with Media	14%	3	8	12	5	1	21%	0%		8	13	8	29
Implement a Communication Strategy	10%	1	4	15	7	2	31%	7%	2	10	13	4	29

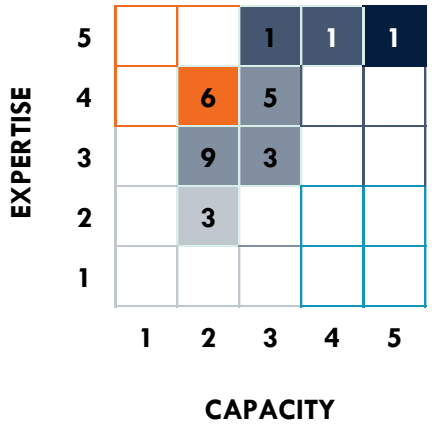
- A small number of LHJs reported they currently completely or significantly share the **Communication** elements.
- More LHJs are willing to share **Implementing a Communication Strategy** (31%) versus **Engaging and Maintaining Relations with Media** (21%). A larger share of extra-large and large LHJs have a willingness to share **Implementation of a Communication Strategy** (67%) compared to extra-small to medium LHJs (less than 50%).
- All LHJs reported a high-level of local expertise was required to **Engage and Maintain Relations with Media.**

Estimated Annual Current Spending and Gap (in $000s)



Policy Development and Support





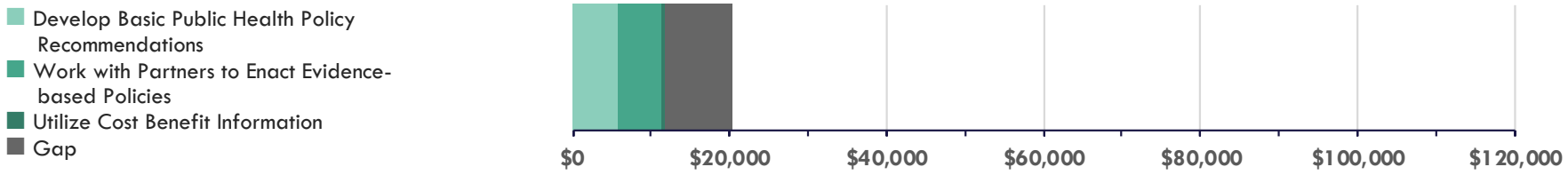
- The majority of the state population is partially served for the **Policy Development and Support** capability.
- SBOH reports significant implementation for the **Policy Development and Support** capability.
- Six LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation for the capability, covering 7% of the state population.

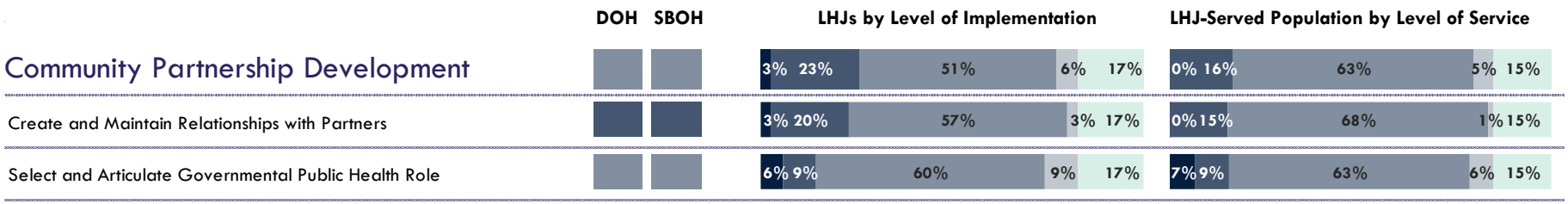
Policy Development and Support

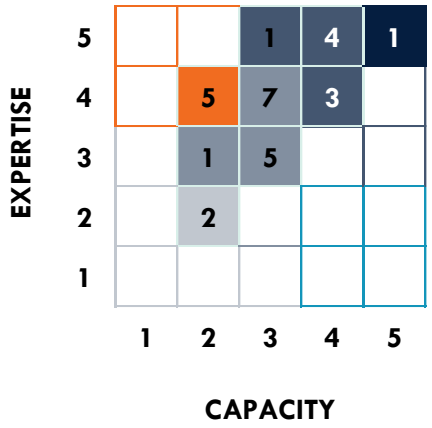
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Develop Basic Public Health Policy Recommendations	17%		2	18	5	4	31%	10%		3	8	16	2	29
Work with Partners to Enact Evidence-based Policies	24%		3	13	8	5	45%	3%		1	8	18	2	29
Utilize Cost Benefit Information	17%	1	2	7	12	7	66%	21%	2	4	15	4	4	29

- Two-thirds of LHJs would be completely or significantly willing to share **Utilize Cost Benefit Information** with 100% of extra-large and large LHJs reporting a willingness to share, 86% of medium LHJs, 44% of small LHJs, and 56% of extra-small LHJs.
- Almost a quarter of LHJs report they are currently completely or significantly sharing **Work with Partners to Enact Evidence-based Policies** and 45% of LHJs would be completely or significantly willing to share the element.

Estimated Annual Current Spending and Gap (in $000s)







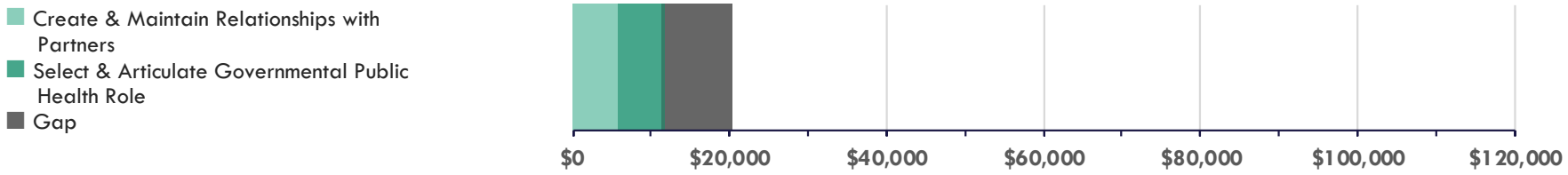
- The majority of the state population is partially served for the **Community Partnership Development** capability.
- Five LHJs reported partial implementation – low capacity, with high expertise results. No LHJs reported limited or partial implementation due to low expertise.
- One LHJ reported full implementation for the capability, covering less than 1% of the state population.

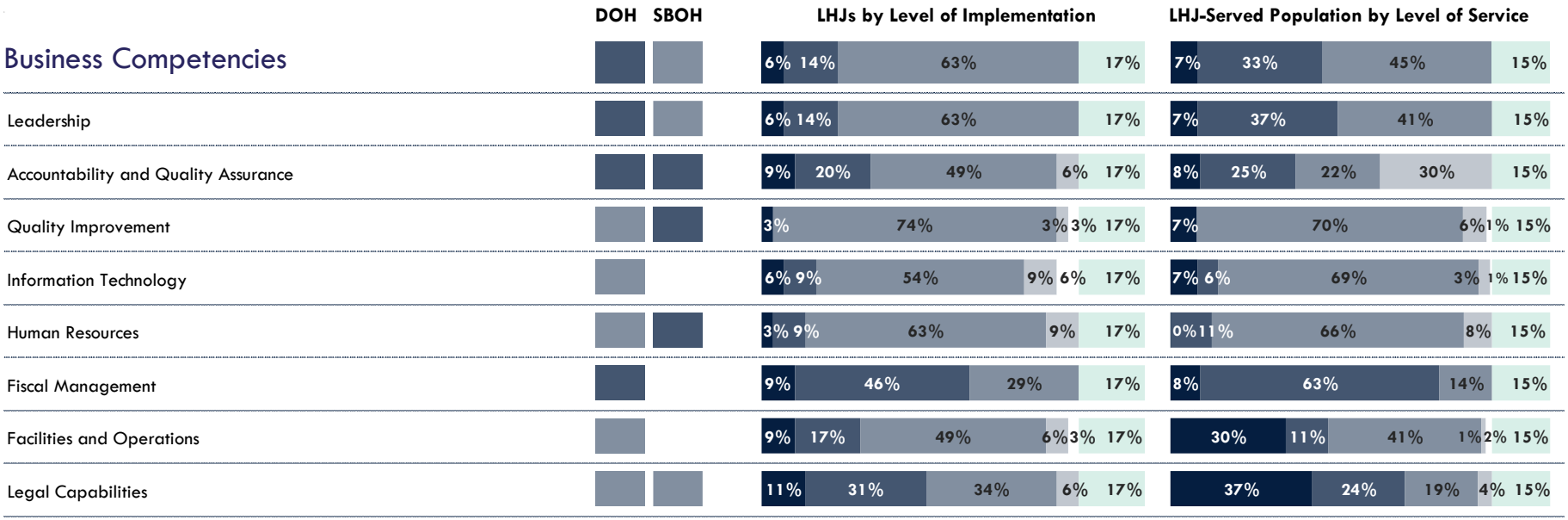
Community Partnership Development

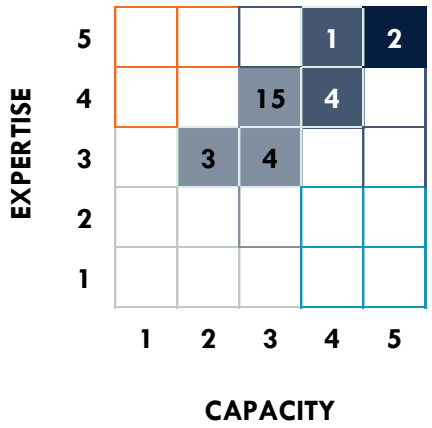
	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)				% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)				*n*
Create and Maintain Relationships with Partners	31%		10	9	6	4	34%	0%		6	16	7	29
Select and Articulate Governmental Public Health Role	14%	3	8	7	1	4	22%	3%	1	5	14	9	29

- 31% of LHJs report they currently completely or significantly share the element **Create and Maintain Relationships with Partners** which is similar to the share of LHJs that would be willing to share this element (34%). This element was also noted as having a high level of local expertise required.
- The element **Select and Articulate Governmental Public Health Role** was reported to be narrowly shared currently (14%) and not many LHJs would be willing to completely or significantly share the element (22%).

Estimated Annual Current Spending and Gap (in $000s)







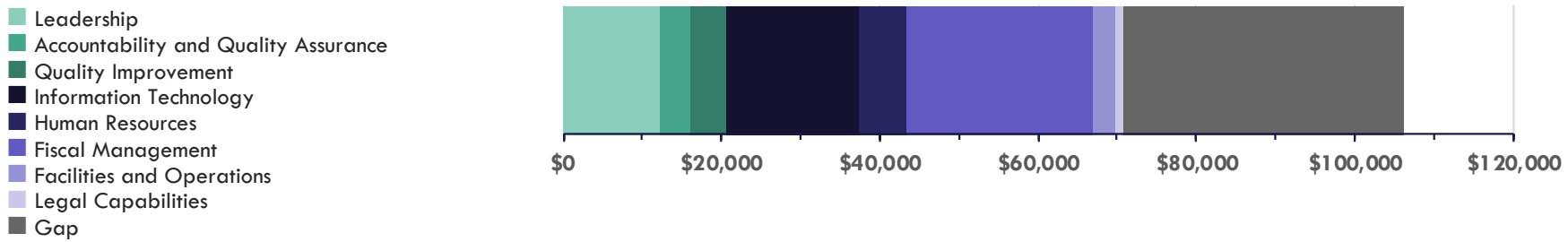
- More of the state population (45%) is partially served for the **Business Competencies** capability than any other service level, with 40% significantly or fully served.
- Two LHJs reported full implementation, covering 7% of the state population.
- For the elements **Fiscal Management and Legal Capabilities,** the majority of the state population is significantly or fully served.
- For the elements **Leadership, Accountability** and **Quality Assurance, and Facilities and Operations,** more of the state population is significantly or fully served than any other service level.

Business Competencies

	% of LHJs Completely or Significantly Currently Sharing	# of LHJs by Willingness to Share (Not at All → Completely)					% of LHJs Completely or Significantly Willing to Share	% of LHJs Minimal or No Local Expertise Required	# of LHJs by Local Expertise Needed (Not at All → Completely)					*n*
Leadership	3%	6	8	11	3	1	14%	0%			5	17	7	29
Accountability and Quality Assurance	3%	7	7	9	5	1	21%	10%		3	4	12	10	29
Quality Improvement	3%	2	9	12	2	4	21%	17%		5	6	15	3	29
Information Technology	21%	1	5	11	9	3	41%	31%	1	8	7	11	2	29
Human Resources	7%	5	5	16	1	2	10%	17%	2	3	6	12	6	29
Fiscal Management	7%	12	7	6	2	2	14%	10%		3	5	10	11	29
Facilities and Operations	21%	14	3	4	4	4	28%	10%	1	2	6	10	10	29
Legal Capabilities	17%	8	6	8	5	2	24%	7%		2	9	11	7	29

- The **Business Competency** element that LHJs are most willing to share is **Information Technology,** with 41% of LHJs reporting they are significantly or completely willing to share. This is one of five elements that Medium LHJs are more willing to share, with over 50% of LHJs reporting a complete or significant level of willingness to share.
- In addition to Information Technology, **Facilities and Operations** is another element with 21% of LHJs currently completely or significantly sharing. Though, not that many more LHJs would be willing to completely or significantly share (28%).

Estimated Annual Current Spending and Gap (in $000s)



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SECTION 3

Assessment Conclusions

This section presents the final cost estimates and covers some of the questions raised by the assessment along with any proposed next steps.

FUNDING FPHS STATEWIDE

Section 2 presents information on current spending, estimates of the costs to fully implement FPHS across the system, and the gap between current spending and full implementation, however, public health transformation is not just about filling the gap.

In 2014-2015, the FPHS Policy Workgroup comprised of elected officials from city, county, state, and tribal government; statewide associations; and public health leaders recommended that:

> State funding for public health should ensure that the costs of *Foundational Public Health Services* are covered in every community. Because *Foundational Public Health Services* are needed in every community to protect the health of Washingtonians, the state should have the primary responsibility for funding FPHS. The state should fund all FPHS provided by the state and local jurisdictions that are neither (1) funded by dedicated federal grants nor (2) paid for by locally-collected fees.
>
> A New Vision for Washington State, January 2015, page 7

This recommendation made it clear that public health transformation was not simply about filling a funding gap. In addition to defining the governmental public health system and the FPHS that it is responsible to provide statewide, transforming the public health system also included clarifying and defining funding roles – state government should fund FPHS that need to be present statewide everywhere in order to work anywhere, and local government and others should fund local priorities to address local needs.

FPHS that are currently delivered are funded using a variety of sources, including federal grants, fees, and state and local government funds. To identify the full cost to the state of implementing FPHS, these other funds needed to be accounted for:

1. Local government funds were being used to pay for some FPHS. So, this amount was estimated and added to the gap.
2. Because the Policy recommendations specifically excluded FPHS that have fees, costs and spending for these programs were removed from the gap.
3. LHJ costs and spending for activities that are primarily state only were removed from the gap.
4. Costs and spending related to coordinating any associated additional important services were removed from the gap.

Section 2 uses the reported estimates from respondents and the estimates created by BERK as outlined in Section 1 to establish the gap. The process can be summarized as:

Total Estimated Cost – Current Spending = Gap

Section 3 adjusts the gap based on the policy recommendation and some issues that were identified after the assessment. These changes were vetted by the Technical Workgroup. The result of these adjustments is the total additional funds needed from state government for FPHS. It is summarized as:

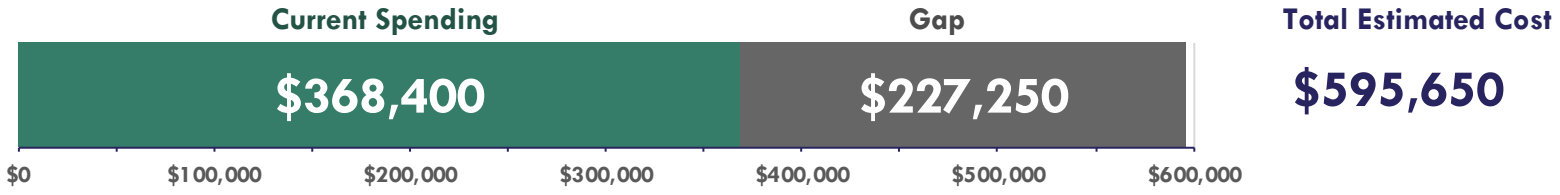
Gap + Changes = Additional Funds Needed from State Government

The following tables display the calculations and the text explains the methods used.

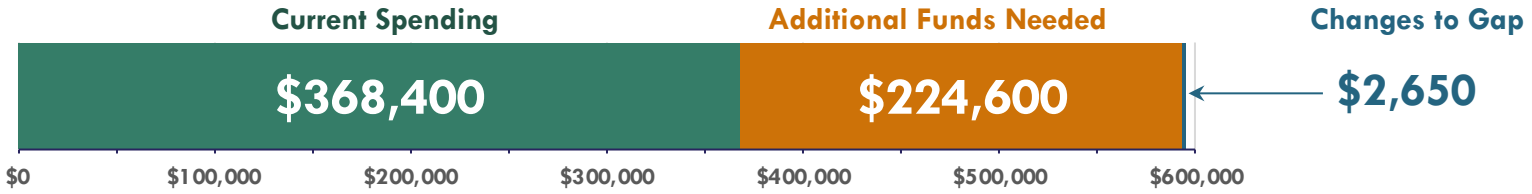
Exhibit 14 summarizes the results followed by a detailed description of the steps.

Exhibit 14. Updated Cost Estimates, in $000s

Step 1. Annual Current Spending, Gap, and Total Estimated Cost



Step 2. Annual Current Spending, Additional Funds Needed from State Government, and Change to Gap



Source: BERK, 2018.

Cost Estimation Step 1: Total Estimated Cost, Current Spending, and Gap in Funding

As reported in Section 2, below are estimates for current spending, the costs to fully implement FPHS across all entities in the system (except tribal), and the gap between current spending and full implementation.

Exhibit 15. Cost Estimate Step 1: Annual FPHS Total Estimated Cost, Current Spending, and Gap, in $000s

Foundational Program or Capability	Total Estimated Cost	Current Spending	Gap
Environmental Public Health	$115,000	$76,600	$38,400
Prevention and Control of Communicable Disease & Other Notifiable Conditions	$80,900	$45,650	$35,250
Maternal/Child/Family Health	$46,100	$28,000	$18,100
Access/Linkage with Medical, Oral, and Behavioral Health Care Services	$87,850	$74,600	$13,250
Chronic Disease, Injury and Violence Prevention	$32,500	$14,550	$17,950
Vital Records	$9,650	$8,050	$1,650
Assessment (Surveillance and Epidemiology)	$43,350	$12,500	$30,850
Emergency Preparedness (All Hazards)	$20,000	$11,300	$8,700
Communication	$16,600	$6,950	$9,700
Policy Development and Support	$20,350	$11,850	$8,500
Community Partnership Development	$17,200	$7,550	$9,650
Business Competencies	$106,100	$70,800	$35,300
Total	**$595,650**	**$368,400**	**$227,250**

Source: BERK, 2018.

Cost Estimation Step 2: Changes to the Funding Gap

At the direction of the FPHS Steering Committee and Technical Workgroup, BERK made four adjustments to the gap to identify the additional funds needed from state government:

Adjustments related to the policy recommendation

1. Fee-supported programs
2. Replace local government contributions

Adjustments related to issues that were identified after the assessment

3. Primarily state only activities
4. Coordination activities

Fee-Supported Programs

Some FPHS activities are supported by fees paid by the recipients of those services (see textbox). The 2014-2015 FPHS Policy Workgroup concluded that setting fees and making choices about subsidizing them with local tax dollars is a local decision and rightly so. They believed that this should continue and not be part of what state government is asked to pay for in FPHS. They agreed that this same concept should apply to state-level programs that are fee-based. Some fees are set by local government/agencies and others by state government/agencies. The conclusion was that the entity that sets the fee has the responsibility to fund costs not covered by the fee or find other ways to mitigate those costs.

Six fee-based elements were identified. The costs and spending associated with them were entirely removed from the gap for four of the elements. The two elements that were not removed entirely were in Environmental Public Health. The Steering Committee concluded that some of the activities in these elements were not services to individuals that should be covered by fees paid and instead these activities should be funded like other FPHS, by state government. Specifically, this included 30% of conducting investigations and 5% of protecting the public from radiation exposure protection. For these two elements all but 30% and 5% respectively was removed from the gap.

FEE-BASED ELEMENTS

Environmental Public Health: Conduct environmental public health investigations, inspections, sampling, laboratory analysis and oversight to protect food, recreational water, drinking water and liquid and solid waste systems in accordance with local, state, and federal laws and regulations.

Environmental Public Health: Protect the population from unnecessary radiation exposure in accordance with local, state and federal laws and regulations.

Maternal, Child and Family Health: Assure mandated newborn screening done by the state public health lab to test every infant born in Washington to detect and prevent the developmental impairments and life-threatening illnesses associated with congenital disorders that are specified by the State Board of Health (state only).

Access/Linkage with Medical, Oral and Behavioral Health Care Services: Improve patient safety through inspection and licensing of health care facilities and licensing, monitoring and discipline of health care providers (state only).

Vital Records: In compliance with state law and in concert with local, state and national groups, assure a system of vital records (state only).

Vital Records: Provide certified birth and death certificates in compliance with state law and rule.

Replace Local Government Contributions

Public Health BARS's data was used to estimate local government funds that are used to fund FPHS that are currently being delivered by local health jurisdictions. This amount was added to the gap.

Primarily State Only Activities

Currently, six elements are provided primarily or entirely by DOH. Two of these elements are not fee supported. For these two elements any reported LHJ gap data was subtracted from the overall gap.

Coordination Activities

Five of the six FPHS programs include an element for coordinating that program with any associated additional important services. Currently these elements do not have functional definitions on which to base reliable cost estimates and were removed from the gap.

Step 2 Conclusion

Exhibit 16 shows the changes made to the gap each for program and capability by type of change.

Exhibit 16. Cost Estimate Step 2: Changes to the Gap to Determine the Annual Additional Funds Needed from State Government, in $000s

Foundational Program or Capability	Changes to the Gap to Determine Additional Funds Needed from State Government			
	Fee-Supported Programs	Primarily State Only Activities	Coordination Activities	Replace Local Government Contributions to FPHS
Environmental Public Health	$2,950		($2,100)	$0
Prevention and Control of Communicable Disease & Other Notifiable Conditions			($1,650)	$4,350
Maternal/Child/Family Health			($3,250)	$1,000
Access/Linkage with Medical, Oral, and Behavioral Health Care Services	($2,700)		($4,050)	$0
Chronic Disease, Injury and Violence Prevention			($4,400)	$200
Vital Records	($1,650)			$0
Assessment (Surveillance and Epidemiology)		($5,450)		$5,000
Emergency Preparedness (All Hazards)				$100
Communication				**
Policy Development and Support				**
Community Partnership Development				**
Business Competencies				$10,100
Total	**($1,350)**	**($6,550)**	**($15,500)**	**$20,756**

Note: **Public Health BARS's data prior to 2017 included an expenditure code for administration/policy development, but not separate codes for the FPHS capacities of policy development partnership and communication. It was assumed that expenditures for these activities were included under the administration/policy code. Due to this limitation, costs from these elements are included in Business Competencies.
Source: BERK, 2018.

Exhibit 17 contains the annual total estimated cost and current spending as reported during the assessment, the gap between the total estimated cost, and the additional funds needed from state government resulting from the changes to the gap outlined above.

Exhibit 17. Cost Estimate Step 2: Final Annual Total Estimated Cost, Current Spending, Gap, and Additional Funds Needed from State Government, in $000s

Foundational Program or Capability	Total Estimated Cost	Current Spending	Gap	Additional Funds Needed from State Government
Environmental Public Health	$115,000	$76,600	$38,400	**$39,250**
Prevention and Control of Communicable Disease & Other Notifiable Conditions	$80,900	$45,650	$35,250	**$36,850**
Maternal/Child/Family Health	$46,100	$28,000	$18,100	**$15,800**
Access/Linkage with Medical, Oral, and Behavioral Health Care Services	$87,850	$74,600	$13,250	**$6,550**
Chronic Disease, Injury and Violence Prevention	$32,500	$14,550	$17,950	**$13,700**
Vital Records	$9,650	$8,050	$1,650	**$0**
Assessment (Surveillance and Epidemiology)	$43,350	$12,500	$30,850	**$30,400**
Emergency Preparedness (All Hazards)	$20,000	$11,300	$8,700	**$8,800**
Communication	$16,600	$6,950	$9,700	**$9,700**
Policy Development and Support	$20,350	$11,850	$8,500	**$8,500**
Community Partnership Development	$17,200	$7,550	$9,650	**$9,650**
Business Competencies	$106,100	$70,800	$35,300	**$45,450**
Total	**$595,650**	**$368,400**	**$227,250**	**$224,600**

Source: BERK, 2018.

Intended Use

The cost figures in this report provide a level of magnitude estimate. In addition to the limitations discussed on page 18, the cost estimations in this report have some acknowledged limitations in that they do not represent complete implementation costs or any possible savings from alternative service delivery models. It is likely that most respondents completed the assessment based on their current service delivery model, so any new models or other opportunities could shift the estimates of resources needed. We cannot quantify the additional costs from implementation; however, many implementation costs are one time or short-term costs while any savings from changes in service delivery models would

be on-going. Implementation costs would need to be substantial to outweigh long-term savings from service delivery models.

The intent of this level of magnitude estimate was to provide a system-level estimate at a given point in time to inform public health leaders in designing and implementing a transformed public health system to better serve the people of Washington state. This will occur in a phased, multi-biennia process that includes development of new service delivery models to deliver FPHS everywhere with the right mix of specialized expertise and local knowledge and/or local presence while maximizing the efficiency and effectiveness of the overall system.

QUESTIONS RAISED BY THE ASSESSMENT

Functional Definitions Manual

Issue: The version of the Manual published ahead of the Assessment listed three state only functions:

- Maternal/Child/Family Health 3 – Assure Mandated Newborn Screening
- Access/Linkage with Medical, Oral, and Behavioral Health Care Services 4 – Improve Patient Safety through Regulation of Health Care Facilities and Professionals
- Vital Records 1 – Assure a System of Vital Records

There are other definitions that are primarily state only functions, including Assessment element 1 and Prevention and Control of Communicable Disease 1b (Develop and maintain up-to-date electronic statewide Immunization Information System) and 5 (Ensure Availability of Public Health Laboratory Services).

Next Step: More discussion and work are needed to clarify and finalize the *Functional Definitions Manual*.

SUMMARY FINDINGS

This assessment was the first attempt to collect data from DOH, SBOH, and all 35 LHJs to inform public health leaders in designing and implementing a transformed public health system to better serve the people of Washington state. While these data and findings represent the point-in-time conditions during a period of system transformation, they are useful for policy and planning and provide a baseline of the current situation to work from.

The assessment was the first time that all entities worked directly from the *Draft Functional Definitions Manual* and while the process identified some additional work to be done on the definitions, the assessment increased familiarity with the definitions across the system.

The assessment was designed to cover all activities within the FPHS framework, which resulted in a long and detailed data collection tool. Agencies found it challenging given their current workload and capacity. Future assessments might allocate more resources to assistance.

No foundational program or capability is fully or significantly implemented across all responding agencies. This finding suggests FPHS in Washington state do not currently meet the condition of "must exist everywhere, to work anywhere." There are gaps across the system in all agencies. These gaps are not uniform, nor do they appear in the same places in every organization. There are also gaps in organizations of all sizes.

LHJs reported both that there is significant sharing of current services and a willingness to share services for many FPHS. There is an opportunity to expand existing service delivery models or develop new ones.

The governmental public health system is already implementing many FPHS, albeit with wide variation statewide. Annual expenditures on the foundational programs and capabilities were reported at $368 million in year of expenditure dollars. While we did not collect data on FPHS funding sources, we know that the agencies involved in this assessment use a mix of user fees, state and local government funds, and federal grants. Current annual expenditures are approximately two-thirds of the cost of full implementation of foundational programs and capabilities ($595 million).

The preliminary estimated additional funds needed from state government for full implementation is approximately $225 million annually in 2018 dollars. This is a point-in-time, order of magnitude cost estimation based on the current service delivery model and will require ongoing analysis and refinement and could change as new services service delivery models are implemented.

APPENDICES

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Appendix A: Glossary and Acronyms

Glossary

Ability to: Capacity and expertise to implement an activity, element and/or foundational program or capability, as needed.

Activities: Components of the definitions that further describe the work of the governmental public health system in implementing elements. There are 350 activities which are intended to be as discreet as possible, defining as few actions as possible per statement) and begin with a verb identifying the action to be taken. They are denoted by lowercase lettered and individually assigned to one Element, which are also individually assigned to one foundational program or capability.

Additional Important Services (AIS): These are services that are critical locally and do not necessarily need to be provided by governmental public health statewide because they are a shared responsibility of local, state and federal governmental public health and other partners.

Assure[1]**:** The dictionary definition implies the removal of doubt and suspense from a person's mind; in the context of the FPHS definitions, this means that it is foundational for the governmental public health system to invest time and resources as needed to make sure that the service is available to the community, generally as provided by partner organizations. The service may already be provided by a partner organization or governmental public health may coordinate with partners to get them to provide the service. If no other organization is willing or able to provide the service, governmental public health may decide to become the provider of the services and seek the necessary funds for the service.

[1] PHAB definition of Assurance: "The process of determining that services necessary to achieve agreed upon goals are provided, either by encouraging actions by other entities (public or private sector), by requiring such action through regulation, or by providing services directly." (Institute of Medicine, *The Future of Public Health*. Washington, DC: National Academy Press; 1988.)
http://www.phaboard.org/wp-content/uploads/FINAL_PHAB-Acronyms-and-Glossary-of-Terms-Version-1.5.pdf.

Capacity: Staff with the necessary expertise and associated resources to provide the activity, element and/or foundational program or capability.

Element: Components of the definitions that further describe the work of the governmental public health system in implementing foundational program or capability. There are 48 Elements which are Numbered and individually assigned to one foundational program or capability.

Ensure: The dictionary definition implies a virtual guarantee. In the context of the FPHS definitions, this means that the governmental public health system provides the service to the community.

Expertise: The appropriate knowledge and skills necessary to provide the activity, element and/or foundational program or capability.

Foundational Capabilities: The crosscutting capacity and expertise needed to support public health programs.

Foundational Programs: The subset of services in each public health program area that are defined as foundational.

Foundational Public Health Services (FPHS): A limited statewide set of core public health services that include foundational programs and capabilities that (1) must be available to all people in Washington, and (2) meet one or more of the following criteria:

- Services for which governmental public health is the only or primary provider of the service statewide,
- Population-based services (versus individual services) that are focused on prevention, and
- Services that are mandated by federal or state laws.

Functional Definition: Definitions that describe "what" FPHS provides for Washington's communities, but not "how" governmental public health should provide it,

- Are agnostic to which governmental public health provider should provide it,
- Are reduced to discreet activities (define as few actions as possible per statement) and begin with a verb identifying the action to be taken, and
- Align with existing guidelines and regulations.

Notifiable Conditions: Selected diseases and conditions for which Washington state **health care providers**, **health care facilities**, **laboratories**, **veterinarians**, food service establishments, child day care facilities and schools are **legally required** to notify public health authorities at their local health jurisdiction (LHJ) of suspected or confirmed cases. The full current list of notifiable conditions is available here: https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/NotifiableConditions.

Public Health Accreditation Standards: A set of standards defined by the Public Health Accreditation Board (PHAB) to support assessment of the quality and performance of all public health authorities in the United States. Authorities that meet these standards through a vetting process with PHAB can become accredited.

Surge Capacity: The staffing and resources necessary to provide the implement the activity, element and/or foundational program or capability in annually-expected (one year) events that lead to demand increases.

Washington Governmental Public Health System: All governmental public health authorities, which currently include the Washington State Department of Health (DOH), Washington State Board of Health (SBOH), 35 local health jurisdictions (LHJ) and Tribal Nations.

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Appendix B: Washington State FPHS Framework

Foundational Type (2)	Foundational Program or Capability (12)	Element (48)	Activities (350)
Programs	Environmental Public Health	Provide Information on Environmental Public Health	10
		Identify Assets for Environmental Health	9
		Conduct Environmental Public Health Investigations, Inspections, Sampling, Lab Analysis, and Oversight	17
		Identify and Address Priority Notifiable Zoonotic Conditions	6
		Protect the Population from Unnecessary Radiation Exposure	11
		Participate in Broad Land Use Planning and Sustainable Development	6
		Coordinate Environmental Public Health-related Additional Important Services	2
	Prevention and Control of Communicable Disease and Other Notifiable Conditions	Provide Information on Prevention and Control of Communicable Diseases	14
		Identify Assets for Prevention and Control of Communicable Disease	6
		Promote Immunization	8
		Ensure Disease Surveillance, Investigation and Control	27
		Ensure Availability of Public Health Laboratory Services	10
		Coordinate Prevention and Control of Communicable Disease-related Additional Important Services	2
	Maternal/Child/Family Health	Provide Information on Maternal, Child and Family Health	12
		Identify Assets for Maternal, Child and Family Health	9
		Assure Mandated Newborn Screening	4
		Coordinate Maternal, Child and Family-related Additional Important Services	2
	Access/Linkage with Medical, Oral, and Behavioral Health Care Services	Provide Information on Access to Clinical Care	11
		Participate in Collaborative Efforts Around Access to Clinical Care	11
		Improve Patient Safety through Regulation of Health Care Facilities and Professionals	10
		Coordinate Access to Clinical Care-related Additional Important Services	2
	Chronic Disease, Injury and Violence Prevention	Provide Information on Chronic Disease and Injury and Violence Prevention	12
		Identify Assets for Chronic Disease and Injury and Violence Prevention	8
		Coordinate Chronic Disease and Injury and Violence Prevention-related Additional Important Services	2
	Vital Records	Assure a System of Vital Records	9
		Provide Certified Birth and Death Certificates	3
Capabilities	Assessment (Surveillance and Epidemiology)	Collect and Maintain Statewide and Community Level Data and Data Systems	12
		Access, Analyze, Use, and Interpret Data	11
		Conduct Assessment and Identify Health Priorities	4
	Emergency Preparedness (All Hazards)	Develop and Exercise Emergency Response Plans	7
		Lead Emergency Support Function 8	3
		Activate Public Health Emergency Response	6
		Promote Community Preparedness	3
	Communication	Engage and Maintain Relations with Media	2
		Implement a Communication Strategy	13
	Policy Development and Support	Develop Basic Public Health Policy Recommendations	5
		Work with Partners to Enact Evidence-based Policies	10
		Utilize Cost Benefit Information	2
	Community Partnership Dev.	Create and Maintain Relationships with Partners	2
		Select and Articulate Governmental Public Health Role	3
	Business Competencies	Leadership	6
		Accountability and Quality Assurance	2
		Quality Improvement	11
		Information Technology	4
		Human Resources	9
		Fiscal Management	6
		Facilities and Operations	4
		Legal Capabilities	2

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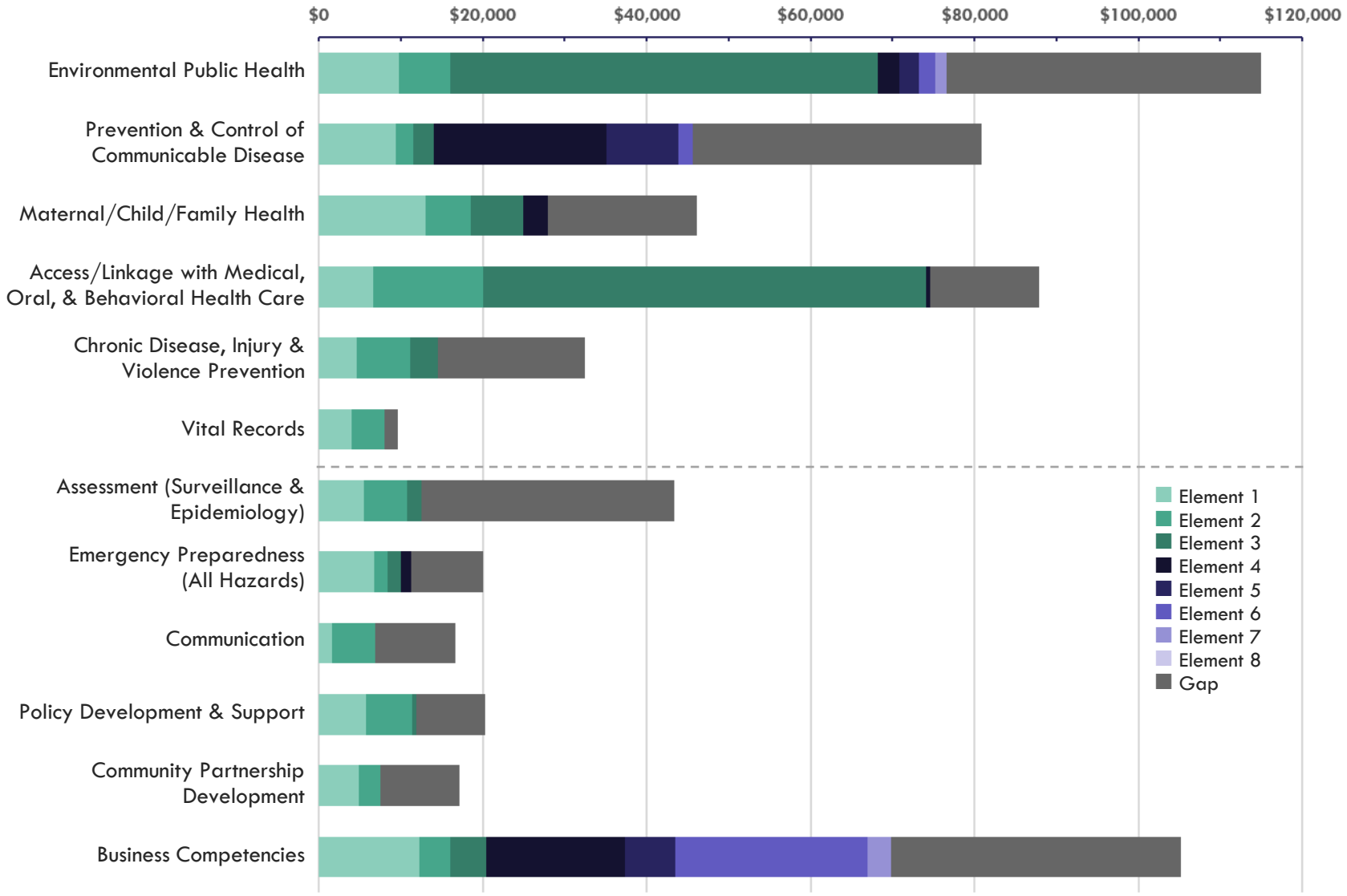
Appendix C: Detailed Cost Estimate Results

Exhibit 18. Annual Current Spending and Gap by Foundational Program and Capability, in $000s



Source: BERK, 2018.

Exhibit 19. Annual FPHS Total Estimated Cost, Current Spending, Gap, and Additional Funds Needed from State Government, in $000s

		Annual FPHS Cost All Amounts in $000s	Total Estimated Cost	Current Spending	Gap	Add'l Funds Needed from State Government
		Environmental Public Health	**$115,020**	**$76,610**	**$38,410**	**$39,240**
	1	Provide Information on Environmental Public Health	$16,500	$9,740	$6,760	
	2	Identify Assets for Environmental Health	$11,030	$6,250	$4,780	
*	3	Conduct Environmental Public Health Investigations, Inspections, Sampling, Lab Analysis, and Oversight	$68,900	$52,230	$20,670	
	4	Identify and Address Priority Notifiable Zoonotic Conditions	$5,490	$2,610	$2,880	
*‡	5	Protect the Population from Unnecessary Radiation Exposure	$3,590	$2,360	$180	
	6	Participate in Broad Land Use Planning and Sustainable Development	$5,950	$1,980	$3,970	
X	7	Coordinate Environmental Public Health-related Additional Important Services	$3,560	$1,440	$0	
		Prevention and Control of Communicable Disease and Other Notifiable Conditions	**$80,900**	**$45,660**	**$35,240**	**$36,858**
†	1	Provide Information on Prevention and Control of Communicable Diseases	$12,840	$9,410	$3,430	
	2	Identify Assets for Prevention and Control of Communicable Disease	$5,020	$2,170	$2,850	
	3	Promote Immunization	$7,290	$2,500	$4,790	
	4	Ensure Disease Surveillance, Investigation and Control	$41,140	$21,060	$20,080	
‡	5	Ensure Availability of Public Health Laboratory Services	$11,220	$8,790	$2,430	
X	6	Coordinate Prevention and Control of Communicable Disease-related Additional Important Services	$3,390	$1,730	$1,660	
		Maternal/Child/Family Health	**$46,080**	**$27,990**	**$18,090**	**$15,813**
	1	Provide Information on Maternal, Child and Family Health	$18,080	$13,020	$5,060	
	2	Identify Assets for Maternal, Child and Family Health	$15,260	$5,500	$9,760	
*‡	3	Assure Mandated Newborn Screening	$6,470	$6,470	$0	
X	4	Coordinate Maternal, Child and Family-related Additional Important Services	$6,270	$3,000	$3,270	
		Access/Linkage with Medical, Oral, and Behavioral Health Care Services	**$87,850**	**$74,600**	**$13,250**	**$6,530**
	1	Provide Information on Access to Clinical Care	$9,740	$6,590	$3,150	
	2	Participate in Collaborative Efforts Around Access to Clinical Care	$16,850	$13,470	$3,380	
*‡	3	Improve Patient Safety through Regulation of Health Care Facilities and Professionals	$56,750	$54,070	$2,680	
X	4	Coordinate Access to Clinical Care-related Additional Important Services	$4,510	$470	$4,040	
		Chronic Disease, Injury and Violence Prevention	**$32,510**	**$14,550**	**$17,960**	**$13,718**
	1	Provide Information on Chronic Disease and Injury and Violence Prevention	$11,720	$4,600	$7,120	
	2	Identify Assets for Chronic Disease and Injury and Violence Prevention	$12,930	$6,510	$6,420	
X	3	Coordinate Chronic Disease and Injury and Violence Prevention-related Additional Important Services	$7,860	$3,440	$4,420	

	Annual FPHS Cost All Amounts in $000s		Total Estimated Cost	Current Spending	Gap	Add'l Funds Needed from State Government
*	**Vital Records**		**$9,670**	**$8,030**	**$1,640**	**$0**
*‡	1	Assure a System of Vital Records	$4,560	$4,010	$550	
*	2	Provide Certified Birth and Death Certificates	$5,110	$4,020	$1,090	
	Assessment (Surveillance and Epidemiology)		**$43,350**	**$12,510**	**$30,840**	**$30,397**
‡	1	Collect and Maintain Statewide and Community Level Data and Data Systems	$25,110	$5,540	$19,570	
	2	Access, Analyze, Use, and Interpret Data	$13,510	$5,290	$8,220	
	3	Conduct Assessment and Identify Health Priorities	$4,730	$1,680	$3,050	
	Emergency Preparedness (All Hazards)		**$19,990**	**$11,290**	**$8,700**	**$8,783**
	1	Develop and Exercise Emergency Response Plans	$8,420	$6,770	$1,650	
	2	Lead Emergency Support Function 8	$4,000	$1,560	$2,440	
	3	Activate Public Health Emergency Response	$4,090	$1,730	$2,360	
	4	Promote Community Preparedness	$3,480	$1,230	$2,250	
	Communication		**$16,620**	**$6,930**	**$9,690**	**$9,690**
	1	Engage and Maintain Relations with Media	$3,800	$1,560	$2,240	
	2	Implement a Communication Strategy	$12,820	$5,370	$7,450	
	Policy Development and Support		**$20,350**	**$11,850**	**$8,500**	**$8,500**
	1	Develop Basic Public Health Policy Recommendations	$8,660	$5,700	$2,960	
	2	Work with Partners to Enact Evidence-based Policies	$9,720	$5,650	$4,070	
	3	Utilize Cost Benefit Information	$1,970	$500	$1,470	
	Community Partnership Development		**$17,190**	**$7,560**	**$9,630**	**$9,630**
	1	Create and Maintain Relationships with Partners	$10,710	$4,820	$5,890	
	2	Select and Articulate Governmental Public Health Role	$6,480	$2,740	$3,740	
	Business Competencies		**$106,120**	**$70,800**	**$35,320**	**$45,444**
	1	Leadership	$14,210	$12,230	$1,980	
	2	Accountability and Quality Assurance	$5,390	$3,800	$1,590	
	3	Quality Improvement	$7,860	$4,450	$3,410	
	4	Information Technology	$33,690	$16,930	$16,760	
	5	Human Resources	$9,550	$6,050	$3,500	
	6	Fiscal Management	$27,200	$23,430	$3,770	
	7	Facilities and Operations	$6,280	$3,000	$3,280	
	8	Legal Capabilities	$1,940	$910	$1,030	
	Total		**$595,650**	**$368,380**	**$227,270**	**$224,601**

Annual FPHS Cost Table Notes

* Fee-Supported Elements. In Environmental Public Health, a portion of the two fee-supported Elements were identified as work that is not appropriate to be supported by the fees and thus should be supported by state governmental funds. The portion to be supported by state governmental funds are: Conduct Investigations at 30% of total cost and Radiation Exposure Protection at 5% of total cost. These costs were added to the gap as part of determining the Additional Funds needed from State Government.

† Currently, within in this element, one activity was identified as provided only by DOH. It is activity b, "Develop and maintain up-to-date electronic statewide Immunization Information System (IIS)." So LHJ data (total cost and current spending) for this activity were subtracted from the gap. The method: For LHJs, in both total cost and current spending, this activity represented 2% of the overall cost for this Element. So that amount was subtracted from the gap as part of determining the Additional Funds Needed from State Government.

‡ Currently, six elements are provided primarily or entirely by DOH. Two of these elements are not fee supported. For these two elements any reported LHJ gap data was subtracted as part of determining the Additional Funds Needed from State Government.

X Currently these Elements do not have functional definitions on which to base reliable cost estimates, so gaps were removed from the Additional Funds Needed from State Government.

** Public Health BARS's data was used to estimate local government contribution. Public Health BARS's data prior to 2017 included an expenditure code for administration / policy development, but not separate codes for each of these elements. Due to this limitations costs from these Elements were included in Business Competencies.

Source: BERK, 2018.

Appendix D: LHJ Demographic Information

Exhibit 20. LHJ Population and Assessment Data by Size Band

LHJ Short Name	2018 Population	2018 % of State Population	Provided Assessment Data
Extra Large Size Band: Over 1,000,000 in Population			
Seattle and King County	2,190,200	29.5%	Yes
Extra Large Total	**2,190,200**	**29.5%**	**1 of 1**
Large Size Band: 400,000-1,000,000 in Population			
Clark	479,500	6.5%	Yes
Snohomish	805,120	10.8%	No
Spokane	507,950	6.8%	Yes
Tacoma-Pierce	872,220	11.7%	Yes
Large Total	**2,664,790**	**35.9%**	**3 of 4**
Medium Size Band: 100,000-400,000 in Population			
Benton-Franklin	289,960	3.9%	Yes
Chelan-Douglas	119,920	1.6%	No
Cowlitz	107,310	1.4%	Yes
Kitsap	267,120	3.6%	Yes
Skagit	126,520	1.7%	Yes
Thurston	281,700	3.8%	Yes
Whatcom	220,350	3.0%	Yes
Yakima	254,500	3.4%	Yes
Medium Total	**1,667,380**	**22.4%**	**7 of 8**
Small Size Band: 25,000-100,000 in Population			
Clallam	75,130	1.0%	Yes
Grant	97,350	1.3%	No
Grays Harbor	73,610	1.0%	Yes
Island	83,860	1.1%	Yes
Jefferson	31,590	0.4%	Yes
Kittitas	45,600	0.6%	Yes
Lewis	78,380	1.1%	Yes
Mason	64,020	0.9%	Yes
Northeast Tri County	66,350	0.9%	Yes
Okanogan	42,490	0.6%	No
Walla Walla	61,800	0.8%	Yes
Whitman	49,210	0.7%	No
Small Total	**769,390**	**10.4%**	**9 of 12**
Extra Small Size Band: Under 25,000 in Population			
Adams	20,020	0.3%	Yes
Asotin	22,420	0.3%	Yes
Columbia	4,150	0.1%	Yes
Garfield	2,210	0.0%	Yes
Klickitat	21,980	0.3%	No
Lincoln	10,810	0.1%	Yes
Pacific	21,420	0.3%	Yes
San Juan	16,810	0.2%	Yes
Skamania	11,890	0.2%	Yes
Wahkiakum	4,100	0.1%	Yes
Extra Small Total	**135,810**	**1.8%**	**9 of 10**

Notes: The statewide population was estimated at 7,427,570 in April 2018. 29 of the 35 LHJs returned completed assessment tools before the cutoff date.

Sources: Population from Washington State Office of Financial Management, 2018; BERK, 2018.