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FOUNDATIONAL PUBLIC HEALTH SERVICES
IN WASHINGTON STATE

2017-2019 INVESTMENT REPORT

STATE FISCAL YEAR 2019 (SFY19)

MARCH 2020

FOUNDATIONAL PUBLIC HEALTH SERVICES IN WASHINGTON STATE

2017-2019 Investment Report State Fiscal Year 2019 (SFY19)

DOH publication number – 820-NonDOH

ACKNOWLEDGMENTS

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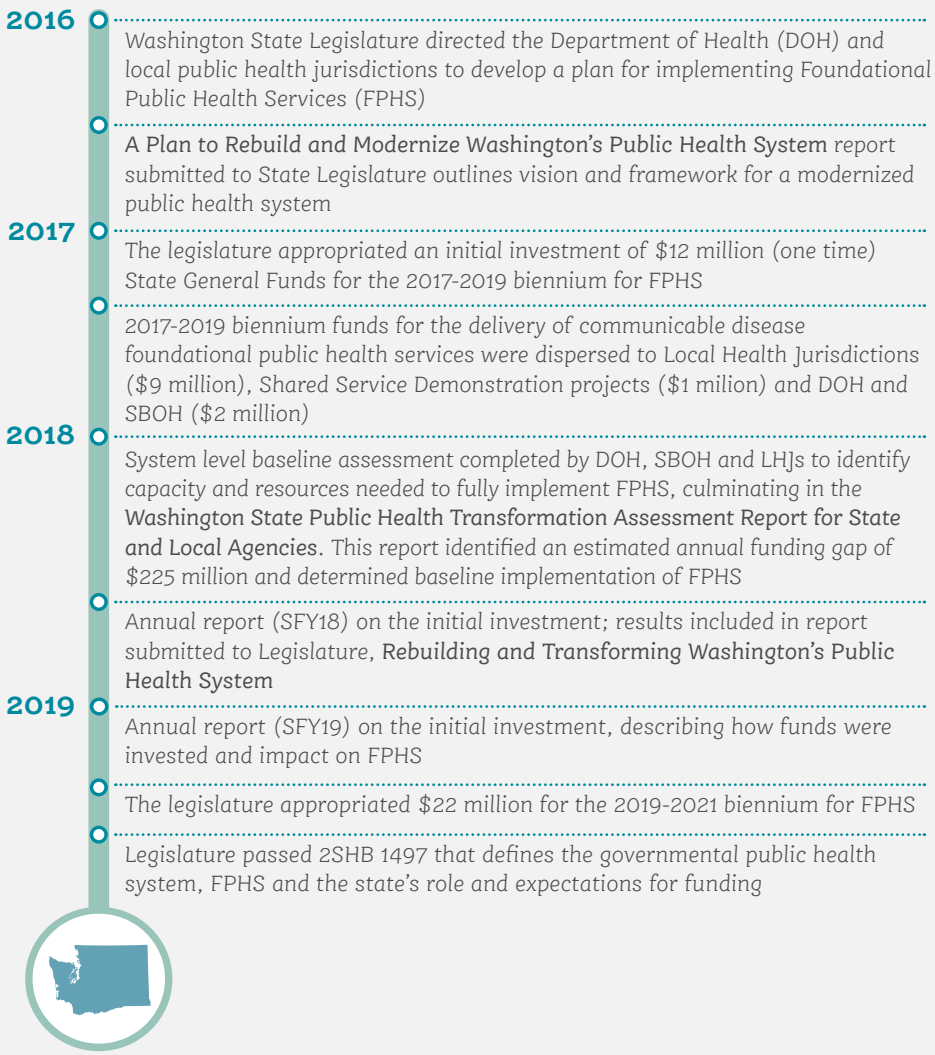
PURPOSE OF THIS REPORT

The purpose of this report is to share progress in the implementation of Foundation Public Health Services (FPHS) in Washington State, at a given point in time - after the close of state Fiscal Year 2019 (SFY19). The report is for public health leaders in Washington State for monitoring how the funds were spent, progress in implementing FPHS statewide and sharing of service delivery, impact of the investment, and descriptions of what changed in the system and for the people of Washington State. This information can be used in making and evaluating funding decisions, designing and evaluating new service delivery models and continuously improving the quality, consistency, efficiency, effectiveness and equitable provisions of FPHS statewide.

There are two sections in this report. The first section focuses on data from the SFY19 Annual Reports submitted by agencies who received FPHS specific dollars. The second part of this report focuses on the accountability metrics selected by the FPHS Steering Committee as indicators of the impact of new funding for FPHS.

This report is the first report tying annual reporting by agencies back to the baseline assessment to see changes in the implementation of FPHS across Washington State through new ways of visualizing these data. The intention is to issue a new updated report routinely in the future to check progress.

Figure 1: Foundational Public Health Services Select Highlights in Washington



For more details on the Chronology of Funding for the Governmental Public Health System in Washington State, see Appendix A.

BACKGROUND

In response to pressing public health needs, Washington is embarking on an urgent and innovative effort to modernize its public health system. The 2017 legislature appropriated $12 million as a one-time initial investment in Foundational Public Health Services (FPHS) for the 2017-2019 biennium (July 2017-June 2019). The FPHS Steering Committee, comprised of representation from the four parts of the governmental public health system (Local Health Jurisdictions [LHJs], Department of Health [DOH], State Board of Health [SBOH] and sovereign tribal nations and Indian health programs) focused this investment on providing foundational communicable disease services and the foundational cross-cutting capabilities of assessment, emergency preparedness and response, communications, policy, partnering, business functions and information technology that support this. The funds were allocated as follows:

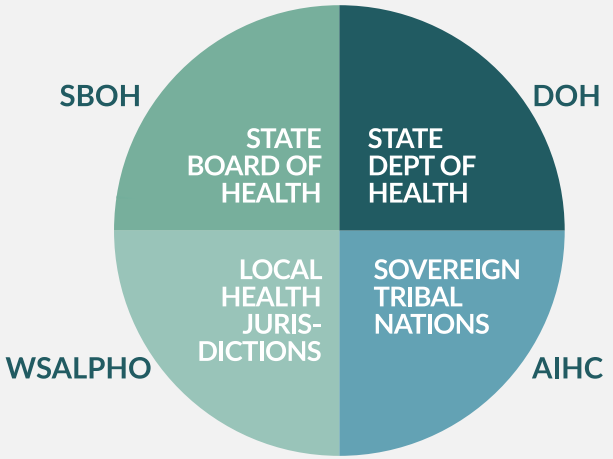
- $9 million to LHJs for Reinforcing Capacity
- $1 million to LHJS for new shared service demonstration projects
- $2 million to DOH/SBOH for infrastructure projects = $12 million

The 2018 legislature appropriated an additional $3 million as a one-time investment in SFY19 to Public Health – Seattle-King County (PHSKC) for communicable disease efforts.

FPHS Baseline Assessment

An extensive FPHS Baseline Assessment was conducted for the first time with three of the four parts of the governmental public health system – DOH, LHJs and SBOH and the results were published in 2018. Based on calendar year 2016 data, the report provided significant baseline information on the level of FPHS implementation (both capacity and expertise), sharing of service delivery (current and willingness to) and estimated costs (total cost to implement, current spending, and funding gap), using existing structures and models at the time. Tribes were not included in the baseline assessment because they were engaged in their own tribally driven process to define FPHS delivery framework, including costs and gaps analysis.

Figure 2: FPHS Steering Committee



LHJs are represented by the Washington State Association of Local Public Health Officials (WSALPHO) and the American Indian Health Commission (AIHC) participates on behalf of sovereign tribal nations and Indian health programs

Summary findings from the baseline report include:

- Although the governmental public health system is implementing much of FPHS, no foundational program or capability is being implemented fully or significantly across the statewide system
- LHJs reported significant sharing in the delivery of services
- There is wide variability in where the gaps are across agencies and across the statewide system
- Baseline expenditures for FPHS was estimated at $368 million in a year, approximately two-thirds of the cost of full FPHS implementation
- The estimated additional funds needed from state government for full FPHS implementation is $225 million annually (in 2018 dollars)

SECTION 1: STATE FISCAL YEAR 2019 ANNUAL REPORTS

Agencies receiving FPHS funding are required to submit annual reports describing how they invested the dollars they received, their level of capacity and expertise for delivery of FPHS, and their level of current sharing in the delivery of services and interest in sharing in the delivery of services in the future.

GUIDING QUESTIONS

There are three essential questions guiding the FPHS SFY19 annual report analysis:

- To what degree the FPHS Communicable Disease areas and Cross-Cutting Capabilities are currently implemented across the state?
- How has dedicated funding impacted implementation of FPHS ? (comparing SFY19 to baseline)
- How has participation in shared service demonstration projects (SSPs) impacted implementation of FPHS? (Unable to analyze this question with current data)

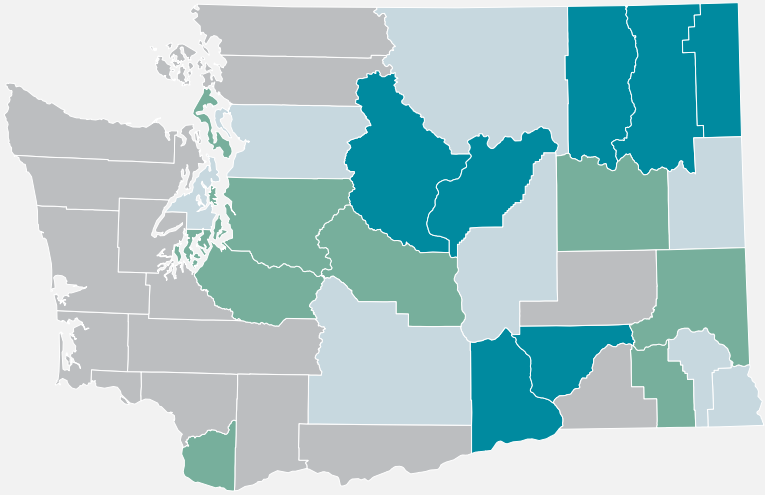
DATA COLLECTION

Reports were received from all 35 LHJs, three shared service demonstration projects (SSPs), DOH, SBOH, and an additional report was received from Seattle-King County for their additional $3 million. Submitting annual reports to DOH was a condition of receiving SFY20 FPHS funding. Please note: Data on the FPHS elements were not collected or analyzed exactly as they are defined in the FPHS Functional Definitions Manual, so for purposes of this report they will be referred to as 'areas'. For example, some FPHS elements were combined, such as CD Data and CD Planning into CD Data and Planning; and some elements were split up, such as Disease Investigation being split into general, STI, Hep C and TB.

ANALYTICAL APPROACH

The primary approach to the SFY19 report data is descriptive, addressing:

Figure 3: Washington State Local Health Jurisdictions



- How funds were invested
- To what degree the FPHS areas of Prevention and Control of Communicable Disease and Other Notifiable Conditions are implemented (calculated measure based on self-assessed capacity & expertise). Communicable Disease areas include:
  - Data & Planning
  - Promote Immunizations
  - Disease Investigation:
    - General Communicable Disease
    - Syphilis, gonorrhea and HIV (shortened to STI in some figures)

        - Hepatitis C (shortened to Hep C in some figures)
        - Tuberculosis
    - Public Health Lab
- To what degree the FPHS Cross-Cutting Capabilities are implemented (calculated measure based on self-assessed capacity and expertise). Cross-Cutting Capabilities include:
    - Epidemiology & Surveillance
    - Community Health Assessment & Community Health Improvement Plan
    - Emergency Preparedness
    - Communications
    - Policy Development
    - Community Partnership Development
    - Business Competencies
    - Information Technology
- The level of current sharing in the delivery of services occurring and the level of interest in sharing in the delivery services in the future
- Themes and important narratives related to changes in the delivery of and access to FPHS services

Additionally, there is some comparative analysis about the level of implementation

- Changes in level of implementation from the baseline assessment in the areas where funding was invested in SFY19

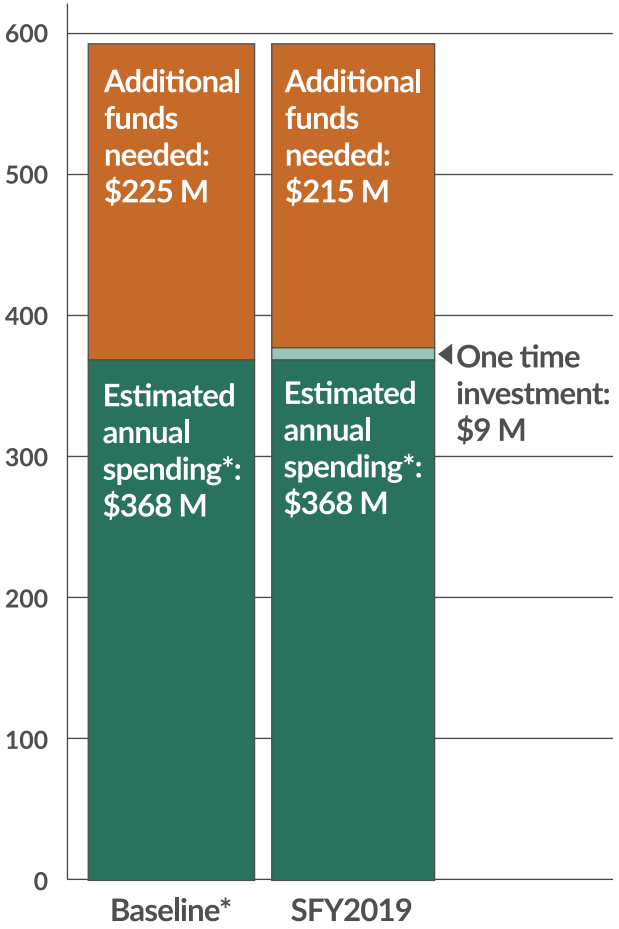
SFY19 DATA ANALYSIS

How Funds Were Invested

In the 2018 Washington State Public Health Transformation Assessment Report for State and Local Public Agencies (baseline), there was a cost estimate of current spending on FPHS and an analysis of how much more would be needed from the Washington State Government in order to fully implement public health services across the state.

The estimated annual funding gap for FPHS services was identified as $225 million. Figure 4 shows that of that $225 million gap, the SFY19 investment of $9 million leaves still leaves a significant funding gap of $216 million.

Figure 4: Foundational Public Health Services Estimated Annual Spending, SFY19 FPHS Investment and Additional Funds Needed, in Millions

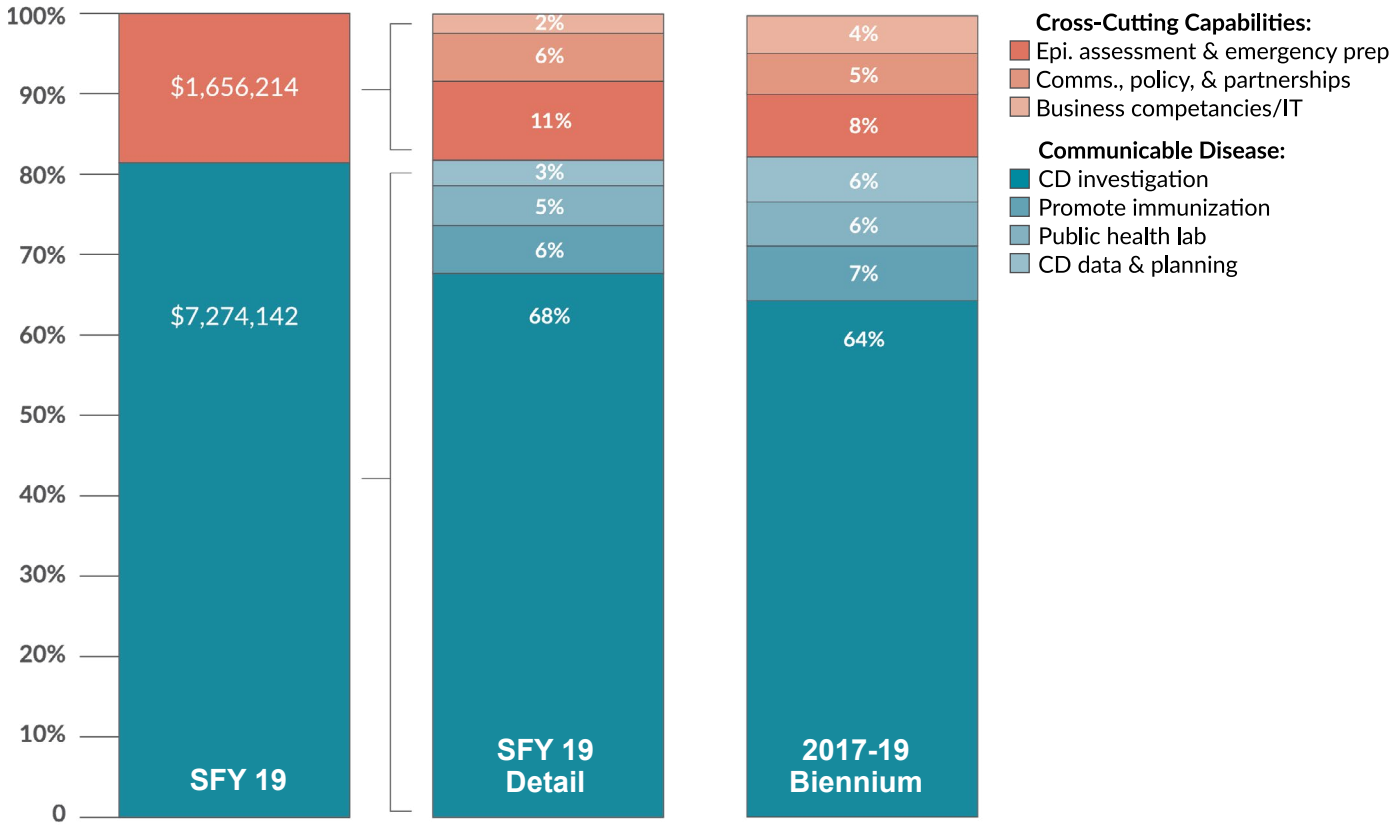


*Berk (2018) Washington State Public Health Transformation Assessment Report

According to the SFY19 reports, across 35 LHJs, three SSPs, DOH and SBOH, a total of $8,930,356 was spent on the communicable disease program areas and cross-cutting capabilities. The majority was spent on communicable disease investigation ($6,046,008). Analysis of how FPHS funds were invested includes data from all reports received: LHJs (including the $3mil allocated directly to PHSKC), DOH, SBOH, and shared service project providers.

Figure 5 depicts the dollar amount and percentage of FPHS funds invested in Prevention and Control of Communicable Disease and Other Notifiable Conditions and Cross-Cutting Capabilities (left column), and the percent of funds spent in each FPHS category in detail, in SFY2019 only (center column) and the 2017-2019 biennium (right column). Some of the capabilities have been grouped for these graphs: Business Competencies and Information Technology; Communications, Policy Development and Partnership Development; Epidemiology and Surveillance, Assessment, and Emergency Preparedness; and all the communicable disease investigation categories were grouped. See Appendix B-E for details on how these dollars were invested for each element and capability by LHJs, DOH and SSPs.

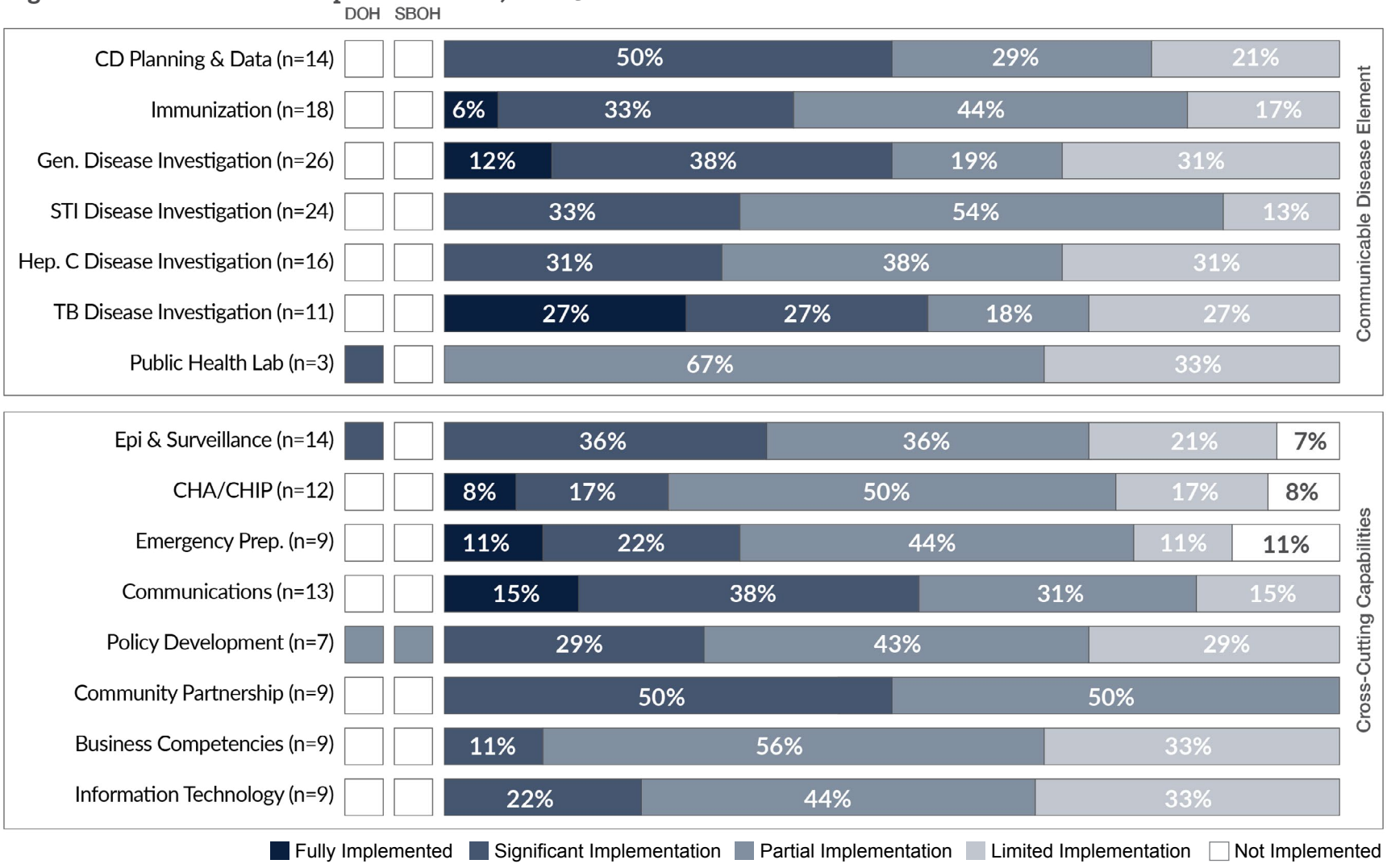
Figure 5: FPHS Spending, SFY19 and 2017-19 Biennium
Out of $8,930,356 including additional $3,000,000 to Seattle-King



Level of Implementation

Agencies self-assessed their capacity and expertise for seven areas related to Prevention and Control of Communicable Disease and Other Notifiable Conditions, as well as eight cross-cutting capabilities. Level of implementation is a calculated measure based on self-assessed capacity and expertise. Agencies only assessed themselves in areas where they spent FPHS-specific dollars; thus, these data do not represent all agencies, in all areas. The number of agencies reporting for each area is indicated in parentheses. Analysis of implementation includes data from: LHJs (including the $3mil allocated directly to PHSKC), DOH and SBOH. Level of implementation does not include data from the SSP providers.

Figure 6: Level of FPHS Implementation, SFY19



Sharing

LHJs reported how much they currently share in the delivery of services with other agencies and their willingness to share in the delivery of services with other agencies. Agencies only assessed themselves in areas where they spent FPHS-specific dollars; thus, these data do not represent all agencies, in all areas. The number of agencies reporting for each area is indicated in parentheses. Analysis of sharing services includes data from: LHJs (including the $3mil allocated directly to PHSKC). Analysis of sharing does not include data from DOH, SBOH or the SSP providers.

Figure 7: Current Level of Sharing by Local Health Jurisdictions Who Reported Investment, SFY19

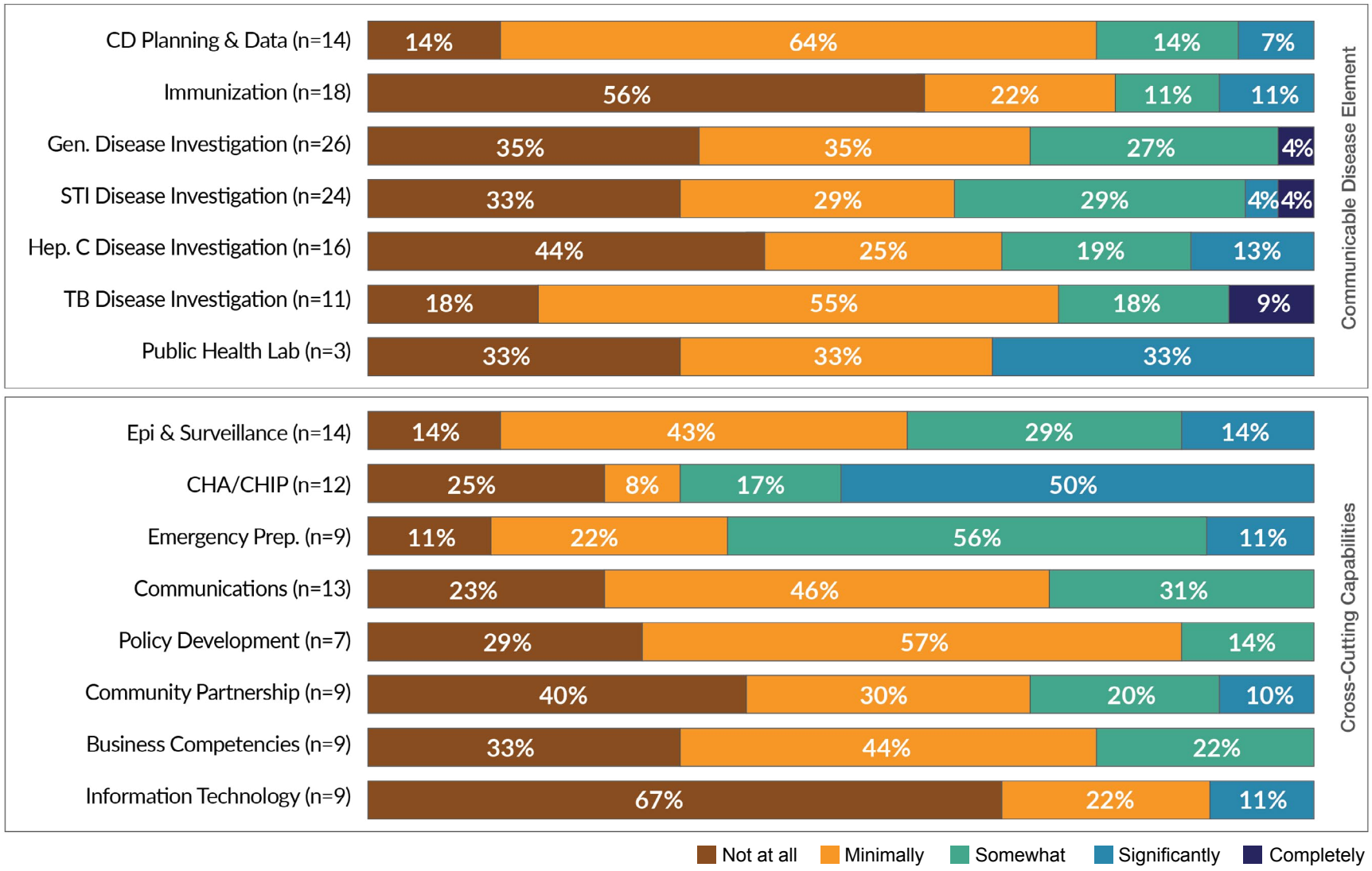
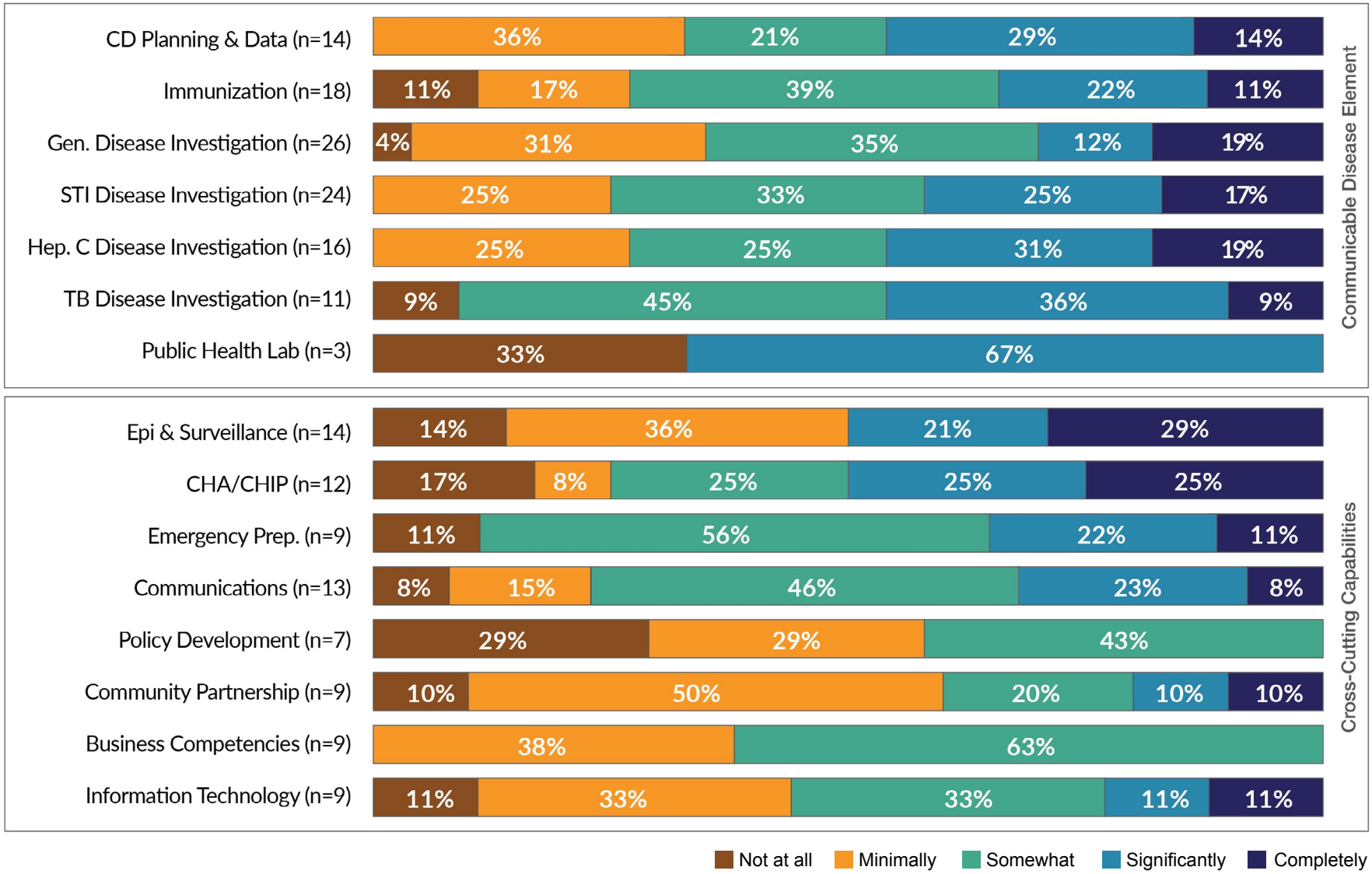


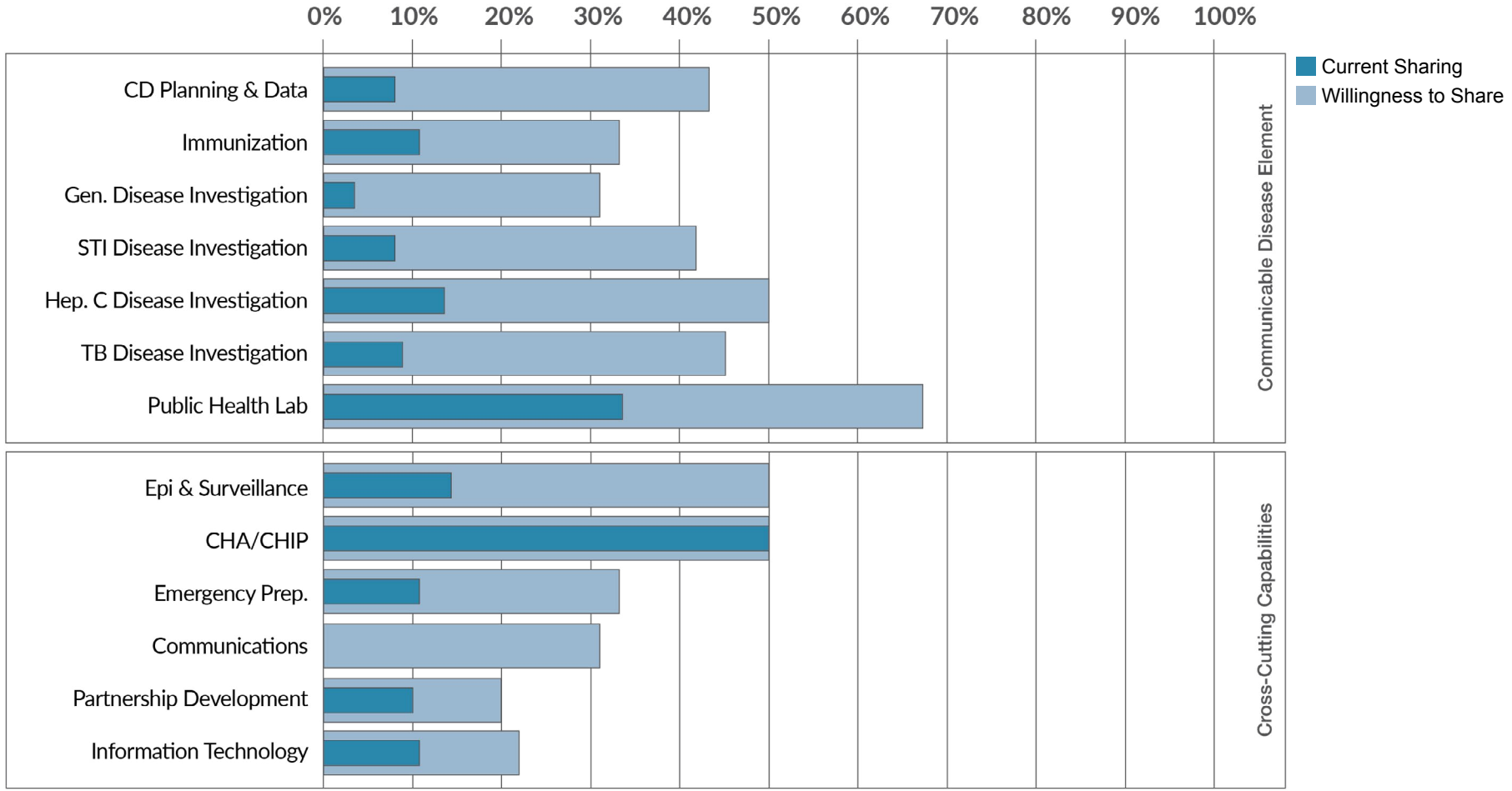
Figure 8: Willingness to Share by Local Health Jurisdictions Who Reported Investment, SFY19



Comparison of Current Sharing to Willingness to Share

To understand opportunities for sharing in the delivery of services across jurisdictions, the below chart shows the percentage of agencies who are currently completely or significantly sharing in the delivery of these services with another agency compared to those who are willing to share in the delivery of these services with another agency. There are opportunities to develop and implement shared service delivery models for all of the FPHS assessed. Agencies only assessed themselves in areas where they spent FPHS-specific dollars; thus, these data do not represent all agencies, in all areas.

Figure 9: Percent of LHJs Completely or Significantly Sharing Compared to Completely or Significantly Willing to Share, Among LHJs Who Invested, SFY19



For the cross-cutting capabilities of policy development and business competencies, no LHJs reported completely or significantly current sharing or willingness to share, so they are not represented on this graph.

Summary of Qualitative Data

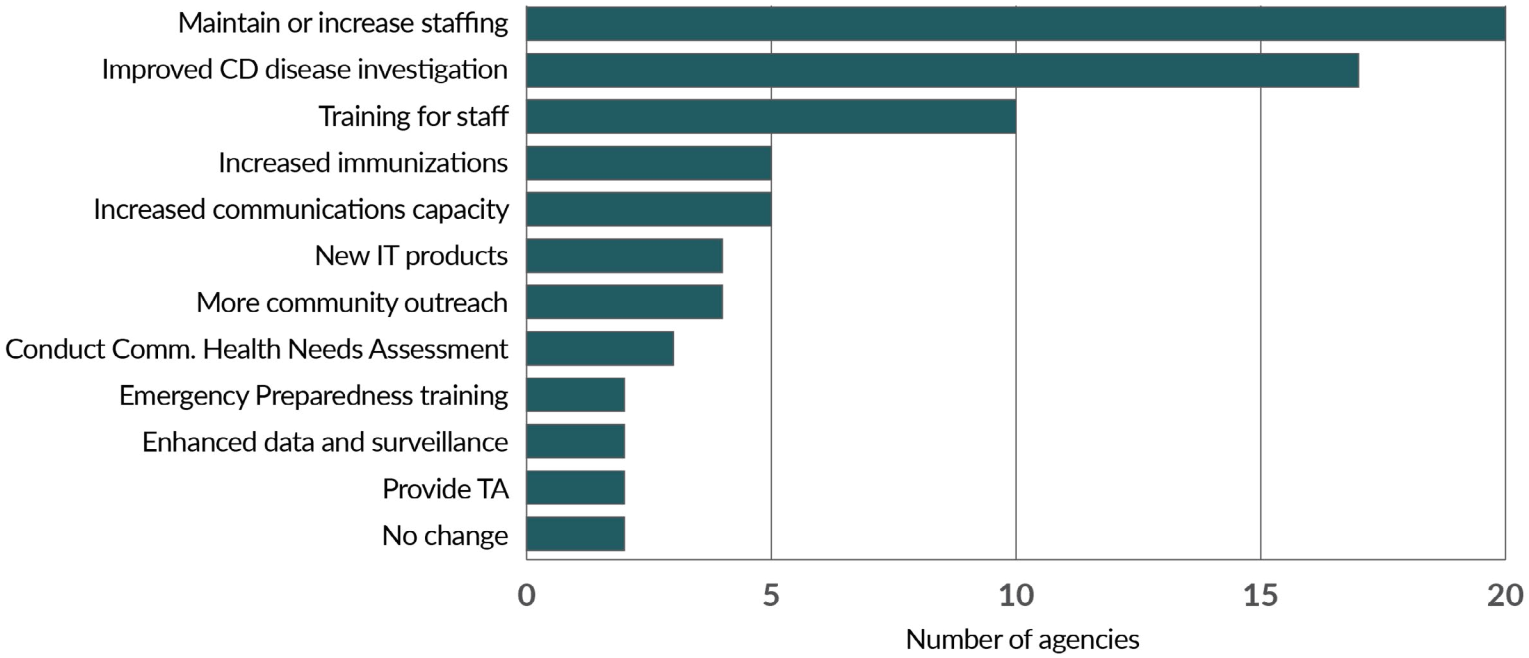
Agencies reported on two open-ended questions: "In the LAST year, what has changed in the capacity, expertise or structure of how FPHS are delivered in your jurisdiction?" and "In the LAST year, what has changed for the people of your jurisdiction about the FPHS available to them?" Using Dedoose analytical software,[1] Rede staff identified codes and looked for common themes in the responses.

The data below represents 40 reports with qualitative data, including:

- 35 Local Health Jurisdictions
- 2 State Agencies (DOH, SBOH)
- 3 Shared Service Demonstration Projects (leads: PHSKC, Spokane, Tacoma)

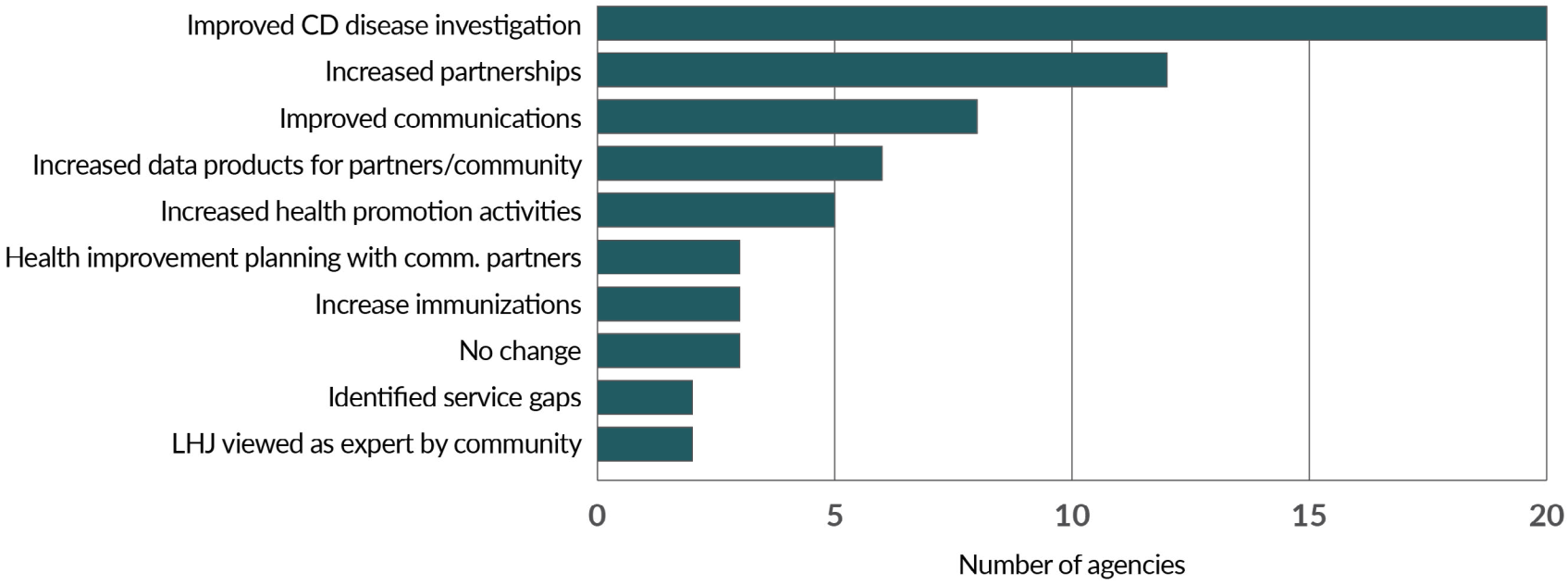
Figures 10 and 11 show the themes identified across reports and the number of jurisdictions that reported on that theme for each question. See appendix F for direct quotes from agencies.

Figure 10: What has Changed in the Capacity, Expertise, or Structure of How FPHS are Delivered in Your Jurisdiction? SFY19



1. *Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC www.dedoose.com.*

Figure 11: What has Changed for the People of Your Jurisdiction about the FPHS Available to Them, SFY19



Highlights: What has changed in the capacity, expertise or structure of how FPHS are delivered in your jurisdiction?

Adams County conducted a thorough countywide Community Health Needs Assessment which has been invaluable in helping them to utilize the data in their strategic planning.

Clallam County saw a slight increase in gastrointestinal reportable disease and was able to complete investigations for all cases as well as train new staff with limited CD experience.

Lewis County increased their capacity to respond more proactively to nearby Communicable Disease risks. During the measles outbreak to their south and north, they utilized FPHS funds to support daily situational awareness meetings and support associated disease investigations.

San Juan County funded staff time to lead county-wide Community Health Improvement Plan efforts around immunization rate improvement.

Spokane County's Disease Investigator Services (DIS) capacity increased by 1.0 FTE. This increase allowed for lower DIS caseloads, which resulted in a 30% reduction in the number of days to close a case

Thurston County worked with their emergency preparedness staff to build an outbreak response plan and increase response capacity for disease outbreak response.

Whitman County is better positioned to complete basic communicable disease reports and to respond to potential outbreaks.

Highlights: What has changed for the people of your jurisdiction about the FPHS available to them?

Cowlitz County has been able to increase capacity for investigations and follow up to patients with STDs and partners.

Kitsap County increased access to HIV and Hep C screening for high risk injection drug users as a part of syringe exchange and increased public health capacity to perform timely Hep C case investigations.

Lincoln County's communicable disease staff have received training to enhance their capability to receive reports, investigate cases and contain outbreaks. They have also improved relationships with neighboring jurisdictions for enhanced capability and provided surge support when needed. This has allowed LCHD to respond to 100% of notifiable conditions reports received.

Seattle-King County was able to provide a more timely response to reports of healthcare associated infections in acute care facilities and long term care facilities as well as reports of infection control breaches. This allowed them to ensure patients were made aware of their exposures in a more timely fashion and that appropriate infection control measures were implemented to prevent spread of infections, keeping patients at these facilities safe.

Tacoma-Pierce County's strengthened immunization promotion to the public and outreach to medical providers has helped improve immunization coverage rates in schools.

Walla Walla County was more responsive on CD investigations and reporting; as with follow up with providers and clients.

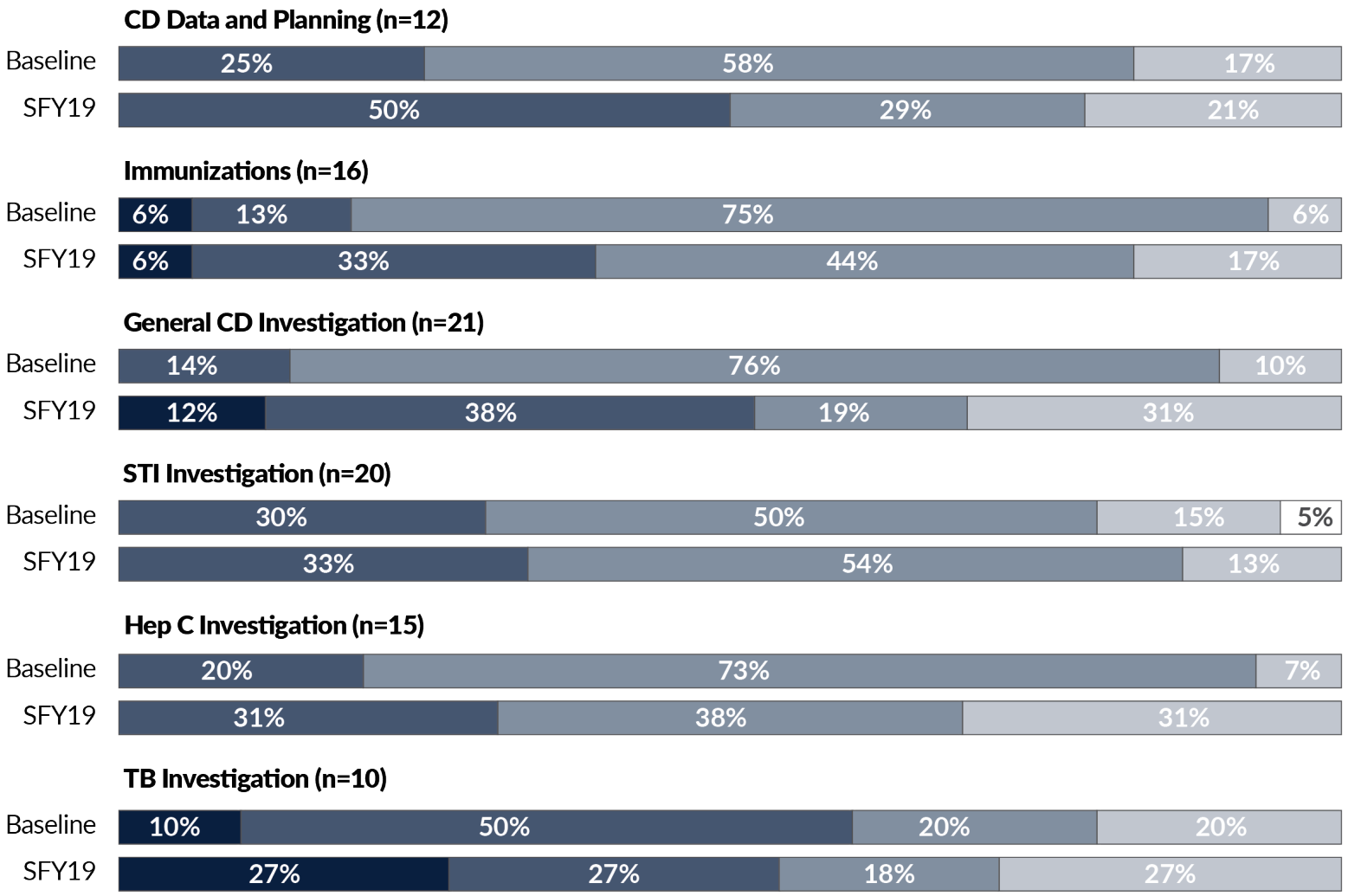
Comparison of Implementation Levels to Baseline

Agencies self-assessed their capacity and expertise for seven areas related to the Prevention and Control of Communicable Disease and Other Notifiable Conditions, as well as eight cross-cutting capabilities. Level of implementation is a calculated measure based on self-assessed capacity and expertise. Agencies only assessed themselves in areas where they spent FPHS-specific dollars; thus, these data do not represent all agencies, in all areas. The number of agencies reporting for each area is indicated in parentheses.

Comparison of levels of implementation includes data from: LHJs (including the $3mil allocated directly to PHSKC). Comparisons do not include DOH, SBOH or the SSP providers.

Level of implementation for the public health lab is not included since it is a centralized service provided by DOH with support from Public Health Seattle King County.

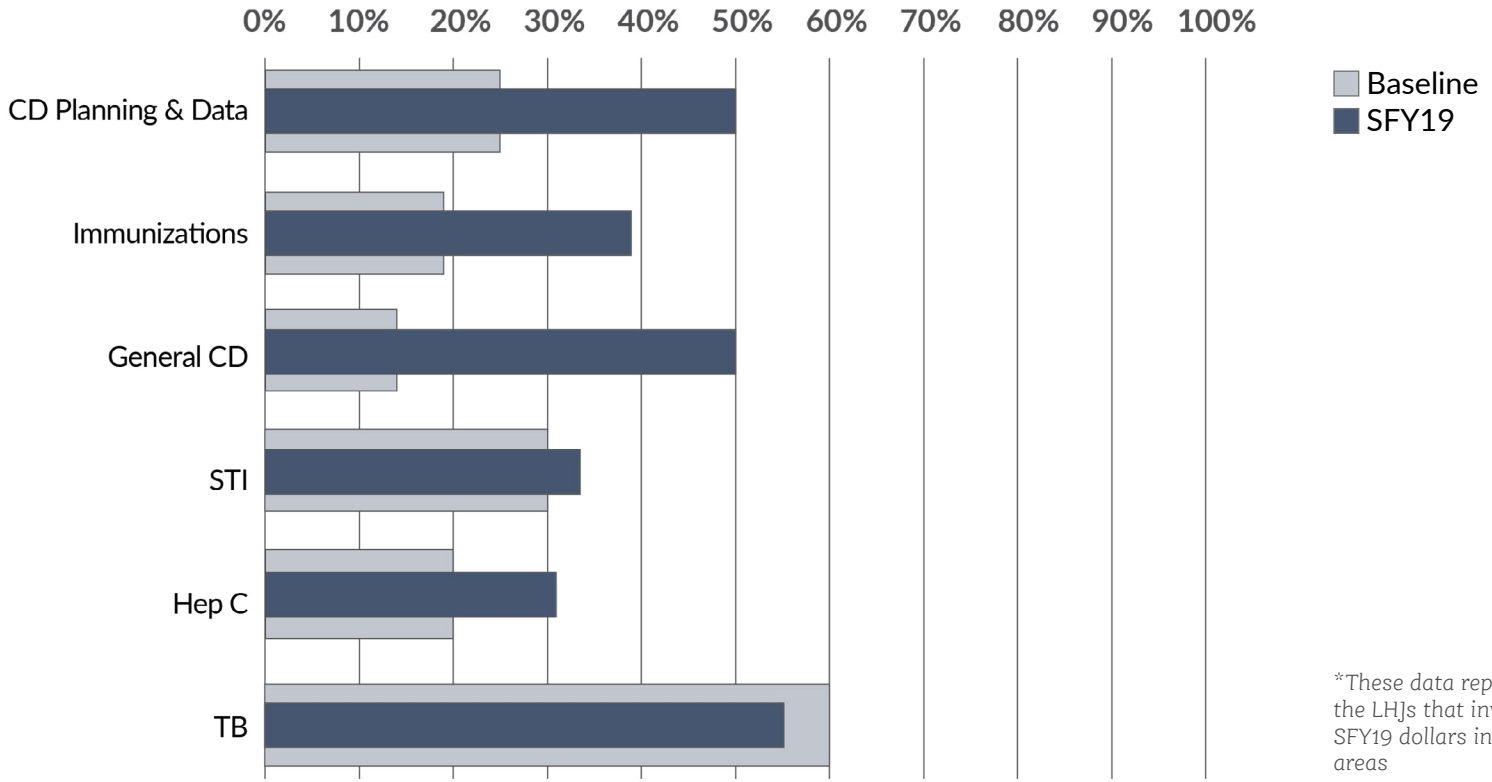
Figure 12: Level of Implementation per Communicable Disease Areas Comparing Baseline* to SFY19



**'Baseline' represents baseline data for jurisdictions that invested FPHS specific dollars in SFY19. 'SFY19' represents the jurisdictions that invested FPHS dollars in that element/capability in SFY19. Because jurisdictions only assessed themselves in areas they invested SFY19 FPHS specific dollars, the number of jurisdictions is different for each element/capability and is indicated in parenthesis*

To better visualize changes between baseline and SFY19, the percent of LHJs who reported that they are significantly or fully implementing the FPHS areas were grouped for comparison. In all areas except TB Disease Investigation, there was an increase in implementation from baseline.

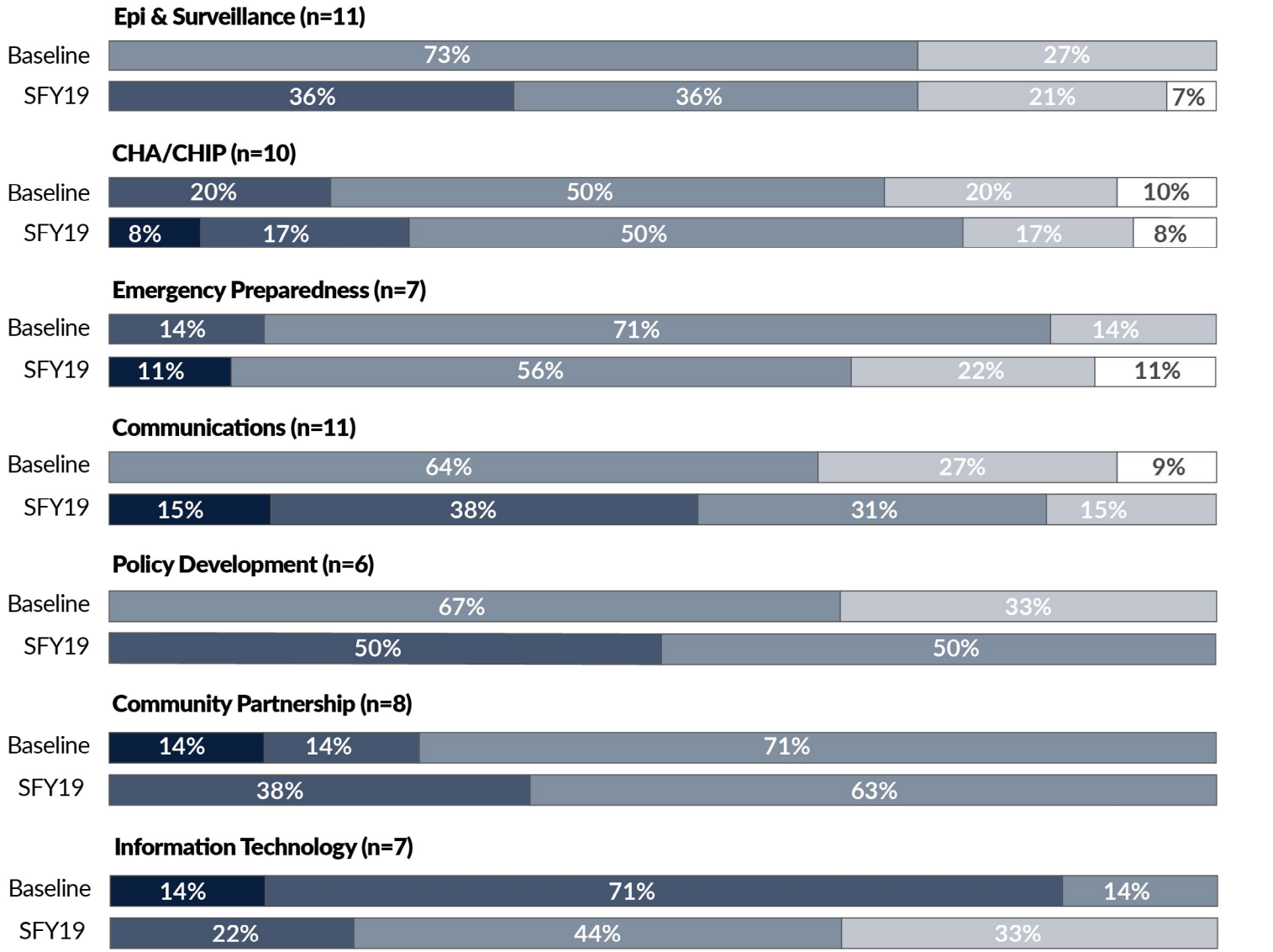
Figure 13: Changes in Significantly & Fully Implemented Communicable Disease Program Areas for reporting LHJs, baseline to SFY19



*These data represent the LHJs that invested SFY19 dollars in these areas

Baseline data for Business Competencies were collected differently so there are no data for comparison to SFY19.

Figure 14: Level of Implementation per Cross-Cutting Capabilities, Comparing Baseline* to SFY19

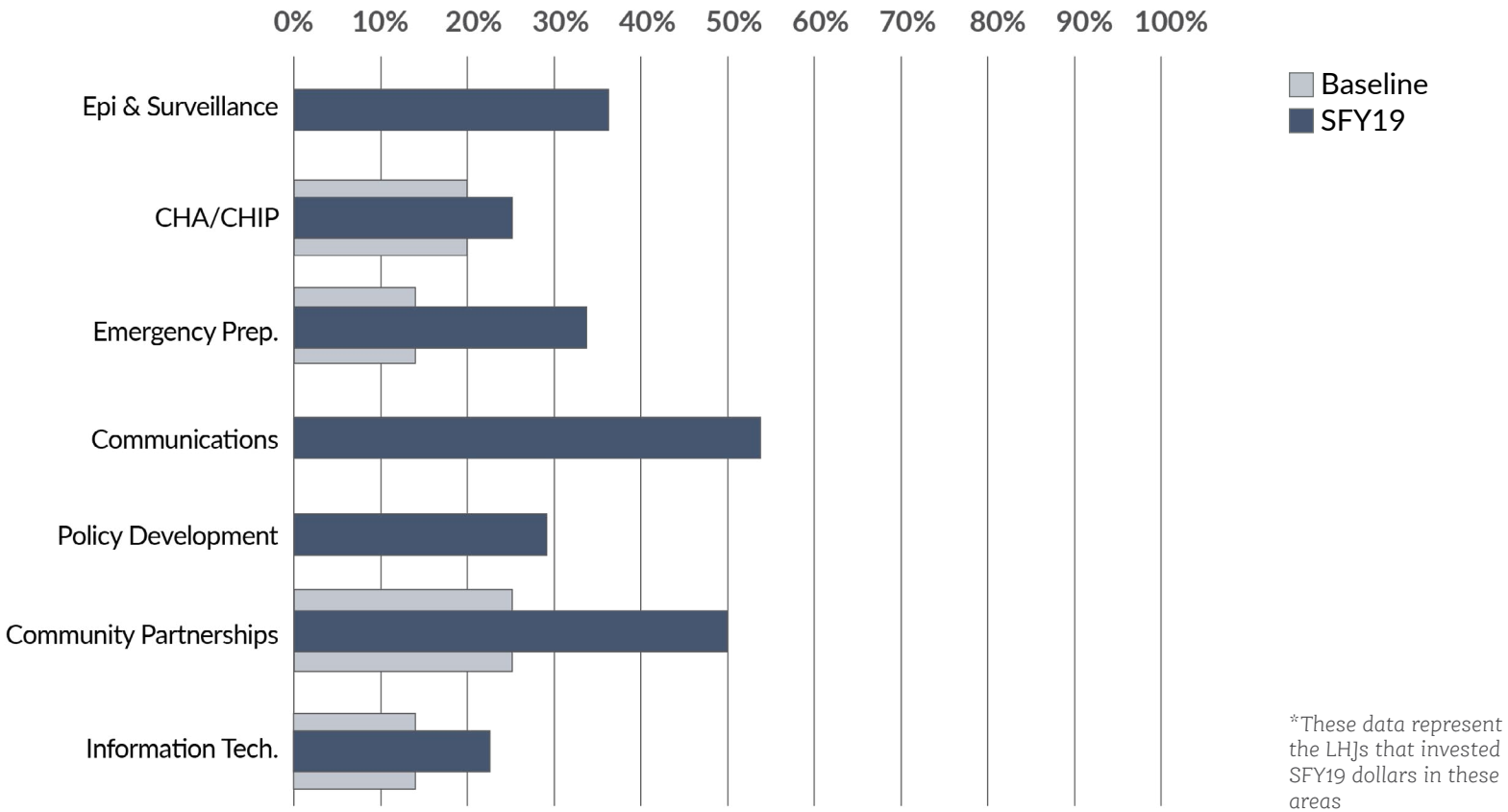


*'Baseline' represents baseline data for jurisdictions that invested FPHS specific dollars in SFY19. 'SFY19' represents the jurisdictions that invested FPHS dollars in that element/capability in SFY19. Because jurisdictions only assessed themselves in areas they invested SFY19 FPHS specific dollars, the number of jurisdictions is different for each element/capability and is indicated in parenthesis.

Fully Implemented | Significant Implementation | Partial Implementation | Limited Implementation | Not Implemented

To better visualize changes between baseline and SFY19, the percent of LHJs who reported that they are significantly or fully implementing the FPHS areas were grouped for comparison. For all cross-cutting capabilities, there was an increase in implementation among reporting LHJs. For cross-cutting capabilities with no light colored baseline bar, there were no LHJs who assessed themselves as significantly or fully implementing this capability at baseline.

Figure 15: Changes in Significantly & Fully Implemented Cross-Cutting Capabilities for reporting LHJs, baseline to SFY19



*These data represent the LHJs that invested SFY19 dollars in these areas

SECTION 2: ACCOUNTABILITY METRICS

The FPHS Steering Committee agreed to the following accountability measures to monitor the impact of FPHS funding on the governmental public health system's ability to do the work of disease investigation.

1. Children 19-35 months who have completed the standard series of recommended vaccinations.
2. Children 4-6 year-olds who have completed the standard series of recommended vaccinations.
3. New positive Hepatitis C lab reports that are received electronically which have a completed case report.
4. New positive Hepatitis C case reports with completed investigations.
5. Gonorrhea cases investigated.
6. Gonorrhea cases investigated that are receiving dual treatment (treatment for both gonorrhea and chlamydia at the same time)
7. Newly diagnosed syphilis cases that receive partner services interview.

Data for three specific conditions (hepatitis C, gonorrhea, syphilis) were selected because these conditions occur frequently and thus changes in the amount of resources available for disease investigations should be observable in the data. In much of the state, the same staff that investigate these three conditions also investigate most or all other communicable diseases that occur less frequently or sporadically. For this reason, these conditions are considered indicators of the overall statewide capacity for disease investigation. The sooner disease investigation is conducted and completed, the sooner the spread of disease is interrupted which stops the spread of disease so fewer people get sick. This reduces the long-term and costly consequences of disease for individuals, families, businesses, communities and the state.

Promoting Immunization

Year 1 of the initial investment (SFY18) – data shows a slight improvement in immunization rates over baseline.

Year 2 of the initial investment (SFY19) – changes were made in how population level data are compiled in the Immunization Information System (IIS) so this data is not comparable to previous years and will serve as the new baseline for this measure.

Table 1: Promoting Immunization Accountability Metrics

Promoting Immunization					
	SFY17 Baseline	SFY18	Change from baseline	SFY19 New Baseline	Change from baseline
Immunization coverage among 19-35-month-olds	60%	65%*	+4%*	59%**	Data not comparable
Immunization coverage among 4-6-year-olds	45%	47%*	+2%*	43%**	Data not comparable

** Data points included in the 2018 Report to the Legislature*
*** Changes were made in how population level data are compiled in the Immunization Information System (IIS).*[2]

Hepatitis C Disease Investigation

Year 1 of the initial investment (SFY18) – data on disease investigation of Hepatitis C was not available due outdated legacy data systems.

Year 2 of the initial investment (SFY19) – data that will serve as baseline for this measure is now available. This is because a portion of the initial FPHS investment was directed toward efforts to modernize critical data systems that the governmental public health system depends on for stopping the spread of disease. The FPHS funds combined with a 90% federal match enabled the launch of the Hepatitis C module of the

2. Washington State Department of Health Immunization Data –Technical Notes. 2019. Retrieved from: https://www.doh.wa.gov/Portals/1/Documents/Pubs/348-565-ImmunizationDataTechnicalNotes.pdf

Washington Electronic Disease Reporting System (WDRS). The result is data that is being used to assess the situation, prioritize and focus efforts in the most effective and efficient way, and track progress in linking infected people to curative treatment and stopping the spread of disease.

Table 2: Hepatitis C Disease Investigation Accountability Metrics

Hepatitis C Disease Investigation					
	SFY17 Baseline	SFY18	Change from baseline	SFY19 Baseline	Change from baseline
Acute Hepatitis C					
Cases were reviewed by public health staff*	N/A	N/A	N/A	98%	N/A
Cases with completed investigations				65%	
Chronic Hepatitis C					
Cases were reviewed by public health staff*	N/A	N/A	N/A	47%	N/A
Cases with completed investigations				2%	
Chronic Hepatitis C in people born in 1992 or after					
Cases were reviewed by public health staff*	N/A	N/A	N/A	60%	N/A
Cases with completed investigations				5%	

* Admin field complete

Gonorrhea and Syphilis Disease Investigation

Year 1 of the initial investment (SFY18) – data shows that for people diagnosed with gonorrhea or syphilis, more of them received disease investigation and appropriate treatment over baseline.

Year 2 of the initial investment (SFY19) – data shows that for people diagnosed with gonorrhea or syphilis, more of them received disease investigation and appropriate treatment over baseline.

Table 3: Gonorrhea and Syphilis Disease Investigation Accountability Metrics

Gonorrhea and Syphilis Disease Investigation					
	SFY17 Baseline	SFY18	Change from baseline	SFY19	Change from baseline
Gonorrhea cases interviewed					
Number of cases	3987	5418	1413	4822	835
Percent of cases	46%	49%	3%	43%	-2%
Gonorrhea cases interviewed that are getting appropriate treatment					
Number of cases	3362	4663	1301	4186	824
Percent of cases	84%	86%	2%	87%	2%
Syphilis cases interviewed					
Number of cases	1131	1359	228	1392	261
Percent of cases	71%	73%	1%	67%	-5%

APPENDIX

Appendix A

A Chronology of Funding for the Governmental Public Health System in Washington State

February 2020

Purpose of this Document

The governmental public health system in Washington State is:

- Underfunded
- Lacks dedicated core funding to deliver core public health services
- Inequitably funded
- Funded by a confusing array of sources

These are the reoccurring themes documented in reports and legislative committee findings for nearly 30 years in Washington State. The governmental public health system aims to secure stable funding that is sensitive to changes in inflation, population and demand for services in order to provide core public health services that the people of Washington State expect and rely on. A responsive and viable governmental public health system is essential for healthy and economically vital communities across Washington.

The purpose of this document is to:

- Pull together brief information from a number of reports largely focused on the need for public health funding and policy actions that are largely focused on state government funding of public health in Washington State. Analysis of other funding sources (local, fee, federal) are beyond the scope of this document.
- Present this information in chronological sequence to provide a high-level history
- Provide links to further information.

Background

In Washington State, as of 2019, (RCW 43.70.512), the governmental public health system is defined as being comprised of the state department of health (DOH), state board of health (SBOH), local health jurisdictions (LHJs), sovereign tribal nations, and Indian health programs.

Previously in Washington State and in the bulk of the reports catalogued in this document, the focus was primarily on the state / local governmental public health system comprised of DOH and LHJs. This system of governmental public health is characterized as "decentralized," meaning that local health units are primarily lead by employees of local governments and the local government's retain authority over most fiscal decisions." The 39 counties of Washington State, which vary widely in population size and land mass, are served by 35 Local Health

Jurisdictions (LHJS). County government has the primary responsibility for health and safety at the local level (RCW 70.05 & 70.46). County leadership is responsible for forming a Local Board of Health (LBOH) and determining how to provide public health services – via a department of county government (public health specific or combined with human services or other services) or via a public health district (single or multi-county).

Additional background about the state/local governmental public health system that may be helpful in reviewing this material includes:

Fiscal Years

- LHJS – Calendar year; generally annual budget
- DOH – State Fiscal Year (SFY) July 1 – June 30 (numbered based on when it ends – i.e. SFY20 is July 1, 2019 – June 30, 2020); biennial budget

Revenue Sources

- LHJs (2018, rounded) – 33% local government, 31% fee (restricted for specific use), 18% state, 17% federal (categorical / restricted to specific programs)
- DOH (2017-2019 Biennium) – 46% federal (categorical) / restricted to specific programs), 27% fee (restricted for specific use), 15% dedicated (restricted for specific programs), 12% state General Funds

Types of Funding

- Restricted – Funds that are designated for specific programs or activities. By law, fees must be used only for the specific program or activity for which they were collected. Federal funds are generally "categorical" and must be used only for the specific program or activity for which they were granted. Some state fund are "dedicated" and must be used only for the specific program or activity for which they were appropriated.
- Flexible – Funds that can be used as needed and as determined by public health leaders. This type of funding is essential and often is the only source of funding for core day-to-day services of governmental public health from communicable disease investigation to information technology and the other basic business functions of an agency. Local government funds are included in this category. It is recognized, as indicated above, that local government retain authority over most local fiscal decisions and may choose to designate funding only for specific programs or activities. However, this is largely exercised via the Local Board of Health (LBOH) which is the public health leadership in each jurisdiction.

Introduction

When tuberculosis (TB) was more common, in the mid-1900s, a portion of local property taxes (called a "millage") was set aside for tuberculosis control and general public health at the local level. As TB declined, more of the funds were available for general public health. In 1976, the Washington Legislature repealed the requirement that those funds be spent on public health, leaving the cities and counties to determine

spending levels for their local public health agencies. Local government continued to collect the tax but could use it for another purpose.

While counties held the major responsibility for local public health, the law made reference to cities as well, without stipulating the amount of cities' financial participation. In practice, not all cities provided funding for public health. Over time, local governments made very different choices, and per capita public health spending came to vary widely from one jurisdiction to another. Most local public health funding is derived from county contributions which come from taxes, fees, or other local sources. With no criteria set for local government contribution, the variation is pronounced.

Chronology

1993 – In 1993 the legislature passed the Health Services Act (HSA) – E2SSB 5304, to guarantee universal access to health care for all Washington residents, with caps on premiums as one of the primary cost-control mechanisms. Unlike other State-level comprehensive health care reform initiatives of the time, the HSA included an explicit commitment to combine traditional population-based public health programs and providers, such as health promotion and prevention services, improved access to immunization and screening services, and environmental health and safety protections with the new system. The Department of Health (DOH) was required to develop a public health improvement plan in cooperation with local public health departments. Five percent of HSA-related tax revenues were to be allocated to public health matters, such as teen pregnancy abatement programs.

While most of the law was repealed in 1995, two key public health provisions remained:

A. The law aimed to provide a dedicated, stable funding stream for local public health that would be responsive to changes in population and the need for services. At the time, the motor vehicle excise tax (MVET) was seen as a revenue sources that would follow trends in population and inflation. The law shifted 2.95% of motor vehicle excise tax (MVET) revenues from cities to counties for use by local public health departments and districts.

MVET
A good idea, not implemented, that resulted in reduced funding

   1) Initially, the amount of MVET revenue to be raised by the 2.95% fell roughly $7 million per year short of what cities had collectively contributed to local public health in the past. The idea was that MVET revenues would grow with population and inflation, so the gap would be filled in time and local public health would have a dedicated source of revenue that kept pace with population growth and inflation. But that's not what happened.

LCDF
A down payment without follow-through

The legislature provided a special appropriation to make up most of the difference in the years that followed. They establish the Local Capacity Development Fund (LCDF). The 1993-1995 biennial budget appropriated $10 in what was characterized as a "down payment" toward an estimated need for $115 million a year for local public health. In 1995, the LCDF was increased to $16 million for the next biennium (1995-1997). In 1999-2001, the fund was reduced by $700,000. These funds continue to this day but with no further increases – which due to inflation, actually results in continual reductions.

NEED
$115M/year
for local public health

2) Distribution of the MVET funds was also somewhat problematic. Since MVET funding was tied to previous city contributions for local public health and the MVET funds for each county were linked to that and it perpetuated the historical variation among jurisdictions. For the Local Capacity Development Funds (LCDF), the legislature directed them to the DOH budget, directed that the allocation to LHJs be on "base plus per capita" formula and that the fund support locally determined needs and priorities. Base plus per capita formula also add to the per capita variation among jurisdictions.

3) This change effectively removed the statutory responsibility for cities to fund local public health. It also clarified that counties were responsible and made clear that no city could establish its own health department. Some cities continue to contribute to public health, but funding is generally tied to specific services and residence requirements.

B. The Public Health Improvement Partnership (Partnership) and the Public Health Improvement Plan (PHIP) which was published every two years from 1994 – 2014 were established and codified in RCW 43.70.520 and 43.70.580 (repealed in 2019).

The Legislature established the Partnership to guide and strengthen the governmental public health system in Washington State. A close alliance of public health experts, it included members from:

- Washington State Board of Health (SBOH)
- Washington State Department of Health (DOH)
- Washington State Association of Local Public Health Officials (WSALPHO)
- local health jurisdictions (LHJs)
- local boards of health (LBOH)
- tribal nations
- Washington State American Indian Health Commission (AIHC)
- the University of Washington School of Public Health
- the federal Department of Health and Humans Services Region X

The Partnership supported policies that encouraged healthy environments and lifestyles, protected people and their communities from health threats, and worked toward eliminating health disparities. Over the span of its existence, the PHIP served as a national model for public health collaboration. Beginning around 2011, the Partnership was instrumental in launching the next iteration of collaborative partnership which would modernize the public health system in Washington State call Foundational Public Health Services (FPHS).

By agreement between the Washington State Association of Local Public Health Officials (WSALPHO) and DOH, a small portion of the Local Capacity Development Funds (LCDF) (~$600,000 per biennium) were held at DOH and used for system-wide work within the Partnership.

2000 – In 2000, following voter approval of the tax-limiting Initiative I- 695, the legislature voted to repeal the motor vehicle excise tax (MVET). The stability of a dedicated funding source for local public health was gone.

MVET
Another 10% reduction

During the same session, the legislature appropriated approximately $24 million for the year from the state general fund, directly from the state treasurer, to LHJs to replace 90% of the lost funding. Known as MVET Replacement Funds, the legislature appropriated $48 million in the 2001-2003 state budget. These funds continue to this day but with no further increases – which due to inflation, actually results in continual reductions.

2000 – Published: 2000 PHIP Report which included a chapter on financing of public health. It noted that a committee set out to analyze the distribution of funding for Washington's public health system and to develop policy recommendations to increase funding flexibility, maintain accountability and to link funding to system performance. The committee identified three problems.

- Financing had evolved without established principles and there was wide variation in the level of public health investment. For example, while the average annual local fund investment is $22.08 per person, the range is $7.65 - $41.45 per person.
- Funding allocations were according to complex and inconsistent methods.
- A stronger link between services and funding was needed to support good decision making and demonstrate return on investment.

2002 – Published: 2002 PHIP Report which included a chapter on finance that reiterated the key issues of historical and persistent underfunding, erosion of core funding, inconsistent levels of investment across the state (annual county tax support for local public health ranged from $0.94 per person to $26.05 per person), and the constraints of categorical funding. It also presented an initial framework a cost model to calculate the cost of providing public health services. Recommendations included:

- Establish a public health financing system that provides stable and sufficient funding allocated consistently throughout the state.
- Adopt a cost model for use throughout the state so that the cost of providing public health services in well documented and can be compared with local and state funding levels.

- Implement and expand the concept of consolidated advisory committee to address funding allocation with the goal of simplifying the allocation process and increasing the understanding and acceptance for the allocation methodology.

2004 – Published: 2004 PHIP Report finance chapter again reiterated the same key problems:

- Public health is historically, persistently under-funded.
- Funding for core services is eroding, making the system very fragile.
- Investments vary widely from one county to the next, so protection is inconsistent.
- Categorical restrictions hamper efforts to respond to community needs.

Appendix 8 included results from the new cost model. It estimated that to provide public health protection by meeting the public health standards 95% of the time, Washington's governmental public health system would need a sustained annual investment of about $400 million in addition to current resources. This total includes an additional investment of $14.5 million toward Department of Health (DOH) and $385 million above current public health capacity for 35 LHJs to meet the standards at 95% capacity. Appendix 9 included principles for

NEED
$400M/year for the system to achieve standards

2006 – Published: Creating a Stronger Public Health System: Setting Priorities for Action. Local and state public health leaders developed this report in response to a request for information from the Joint Select Committee on Public Health Funding. The report established specific funding priorities "for the next investment in public health" at different annual funding levels of $200 million, $100 million and $50 million within the following categories:

- Stopping communicable diseases before they spread
- Reducing the impact of chronic disease
- Investing in healthy families
- Protecting the safety of drinking water and air
- Using health information to guide decisions
- Helping people get the health care services they need

2006 – The 2006 Washington State Legislature passed Engrossed House Concurrent Resolution (EHCR) 4410 and created the Joint Select Committee (JSC) on Public Health Funding, a bipartisan study committee of the House and Senate, to address the persistent public health funding shortfall. The Committee's final report concluded that "the lack of a stable source of funding provided specifically for public health services has eroded the ability of local health jurisdictions to maintain a reliable statewide system that protects the public's health."Among other things, they recommended that the state should provide additional funding in the amount of approximately $50 million annually during the '07-'09 biennium, as an initial investment.

2006 – Published: 2006 PHIP Report which included references to the report Creating a Stronger Public Health System.

2007 – The 2006 Washington State legislature established the Blue Ribbon Commission on Health Care Costs and Access and charged it with delivering a five-year plan for substantially improving access to affordable health care for all Washingtonians. In 2007 the recommendations were largely incorporated into Engrossed Second Substitute House Bill (E2SHB) 5930 which was passed by the legislature. The bill also addressed the findings of the 2006 Joint Select Committee on Public Health Funding. Sections 60-65 of the bill addressed the public health system and were codified in RCW 43.70.512, 43.70.514, 43.70.516, 43.70.522 (repealed in 2019).

Through the 2007-2009 biennial budget process (SHB 1128, Section 222 (29)) the legislature appropriated $20 million per biennium of State General Fund (GFS) dollars for local public health to implement the new law. The so-called "Blue Ribbon Commission (BRC) / 5930 funds" were allocated to local agencies on a "base plus per capita" method per direction of the legislature to address the priority areas of stopping communicable diseases before they spread and reducing the impact of chronic disease. Performance measures were implemented and the funds were tracked.

BRC / 5930
Another down payment, later reduced by 50%, without further follow through

Per legislative direction, DOH was allowed to use up to 5% of the 5930 funds. DOH used these funds for system-wide improvements to support LHJs achieving the performance measures established for these funds.

2008 – The Great Recession Began

2008 – Published: 2008 PHIP Report – included a section on Transforming and Securing Our Public Health Investment and Appendix 2 – History of Local Public Health Funding in Washington State.

2009 – The legislature reduced the 5930 funds to local public health from $20 million per biennium to $16 million per biennium.

2010 – Published: An Agenda for Change The Agenda for Change highlighted:

- Forces of change: Changing disease trends; Healthcare reform; Economic realities.
- Key themes: Sustain our past successes; Confront our emerging challenges; Use our available resources most efficiently and effectively.
- An action agenda focused on the "what": Communicable Disease; Healthy Communities; Partner with the Healthcare System
- An action agenda for "how": Retrain the public health workforce; Re-prioritize work and modify business practices; Develop appropriate levels of financing

And defined a common set of guiding principles and criteria for making policy, program, and funding choices.

A New Era
A new approach begins

2010 – Published: 2010 PHIP Report

2011 - The legislature reduced the 5930 funds to local public health from $16 million per biennium to $10 million per biennium. This amount has continued —without adjustments for inflation or population growth—in each biennium since.

BRC / 5930
Reduced by 50% since it was implemented in 2007

2011 – Developed: The Foundational Public Health Services (FPHS) Framework

- The Concept – 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 – the Foundational Public Health Services (FPHS) – is a subset of all public health services and must be available in all communities in Washington.
- The Problem – Lack of core funding; broken, irrational and inequitable funding; need to modernize the system. "Public health is becoming simply a collection of categorically funded program. With major reductions in local and state funding, what was previously a weak foundation on which to add these categorical programs is now almost non-existent."
- The Result – The public health system isn't meeting its responsibilities to provide core services that the public depends on; growing risk to the public.
- The Solution – A system approach (focus on the entire governmental public health system together); define a limited set of core services that are unique to and provided primarily or solely by the governmental public health system everywhere in Washington; define clear funding roles; modernize how services are delivered; pursue a long-term, phased, multi-biennia, building block approach to full funding and implementation of FPHS.
- Assumptions – Federal funds will continue to be categorical and are essential in providing funding for specific programs; the FPHS framework is focused on what local and state need to pay for and deliver to provide the core day-to-day services of public health; the FPHS framework is "agnostic" about who within government (local, regional, state) should provide each service – those specific will be developed together by the system over time as a part of public health modernization efforts; cost calculations are based on the system as currently structures (DOH & 35 LHJS).
- Criteria Used to Define FPHS – Primarily population-based services where you can't easily identify the specific individual who benefited (you don't know which of your neighbors didn't get sick because you have a fully functional septic system); government is the primary or only provider; whether or not the service was mandate was taken into consideration, but was not a deciding factor because laws and mandates can be changed, if needed.

2012 – Published: 2021 PHIP Report – included Agenda for Change Action Plan and the FPHS Framework

2013 – In 2013, the Legislature combined the three (LCDF, MVET Replacement, BRC/5930) State General Fund revenue streams to local public health into one called County Public Health Assistance (CPHA). In the process, they eliminated the funds that were used for system-wide efforts and directed the state treasurer to send the remaining funds directly to each LHJ in the amount specified in the state budget.

Summary of State flexible funds to LHJs (in millions per biennial numbers)							
	Allocation Formula	1993-1995	2001-2003	2007-2009	2009-2011	2011-2013	2013-2015
LCDF	Base + per capita per legislative proviso	$16M	$16M	$16M	$16M	$16M	Blended into one funds called County Public Health Assistance $73M Allocation per legislative proviso Ongoing
MVET Replacement	90% of what each county was receiving from MVET		$48M	$48M	$48M	$48M	
BRC/5930	Base + per capita per legislative proviso			$20M	$16M	$10M	
Biennial Total		$16M	$64M	$84M	$80M	$74M	

2013 – Published: FPHS Preliminary Cost Estimation Model & Definitions The primary means of developing the statewide foundational cost estimate was to develop a flexible financial model that used sample cost data provided by participating agencies as input and scaled the sample cost data up to a statewide estimate. This model used data from DOH and nine LHJs represent a cross section of agencies, including those serving large and small populations, those located in the east, central, and west portions of the State, and both department and district governances. The provided sample data was then used to extrapolate to statewide costs.

2014 – Published: 2014 PHIP Report – included section on A Long-Term Strategy for Predictable & Appropriate Funding for Public Health (pg 8).

2014 – Published: FPHS Revised Cost Estimates. Based on data from DOH and nine LHJs and the model and extrapolations developed in 2013, the estimated additional funds needed for the governmental public health system to delivery FPHS statewide was $312-$344 million per biennium.

NEED
$312-$344M/bi for the system to delivery FPHS

2015 – Wide variation in per capita spending at the local level continues.

- Total Public Health Expenditures, per capita: $17 - $234
- Local Government Public Health Expenditures, per capita: Less than $1 - $73
- State County Public Health Assistance Expenditures, per capita: $3 - $41

From Public Health Budgeting, Accountability and Reporting (BARS) data

2015 – Published: FPHS A New Vision for Washington State – The FPHS Policy Workgroup, comprised of elected officials from city, county, state and tribal government, representatives from statewide health and public health associations and public health leaders met throughout 2014. Their recommendations included defining clear funding roles and responsibilities for state and local government, specifically including:

> 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.
>
> State responsibility for funding FPHS would increase from $175 million to $305 million annually. Some of this increase (about $100 million annually) represents new investments in FPHS. The rest involves a shift of funding responsibility from local to state government, allowing local governments to increase investments in public health services to *Additional Important Services* for their local communities overall. This cost analysis was developed through the expertise of a "technical" workgroup that performed an in-depth analysis of the cost of providing FPHS statewide.

Defined Funding Roles
FPHS – State Government

Additional Important Services – Local government and all other fund sources

2016 – Published: 2016 FPHS Report to the Legislature – A Plan to Rebuild and Modernize Washington's Public Health system. The report succinctly presented the funding problem, the results, the solution as the recommendations in the 2015 report A New Vision for Public Health in Washington State and based on modeling, the estimated additional funds needed for the governmental public health system to delivery FPHS statewide as $312-$344 million per biennium. Included an appendix on Past Efforts & Legislative Action on Public Health Funding.

2016 – Decision Package (DP) – Together, the governmental public health system initiated a long-term, multi-biennia, building block approach to fully funding and delivering FPHS statewide, in the most effective, efficient and equitable manner possible with the funds available**.**

Based on the 2014 FPHS Revised Cost Estimates and prioritization with the FPHS Steering Committee, DOH submitted budget requests for initial FPHS funding, called Decision Packages (DP's), to the Governor / Office of Financial Management (OFM) as a part of the 2017-2019 state biennial budget development process. While for many years DOH had played a key role in generating data and reports and advocating that the legislature fund local public health, submitting a DP on behalf of LHJs, to the state budget development process, was a first.

The DP's totaled $60 million for the biennium with separate DP's for DOH/SBOH $4 million per biennium and LHJs for $56 million per biennium.

https://www.doh.wa.gov/Portals/1/Documents/9220/B1_FPHSModernizationLHJFunding.pdf
https://www.doh.wa.gov/Portals/1/Documents/9220/B2_ImplementingFPHS-DOHFunding.pdf

2017 – The Legislature appropriated $12 million, one-time, State General Funds (GFS) for FPHS in the 2017-2019 biennial budget. (July 1, 2017 – June 30, 2019)

Based on direction from the legislature, $10 million for LHJs and $2 million for DOH/SBOH, the 2014 Revised Cost Estimates and prioritization, the FPHS Steering Committee focused the initial investment on foundational communicable disease services and the foundational crosscutting capabilities of assessment, emergency preparedness and response, communications, policy, partnering, business functions and information technology that support this. The FPHS Steering Committee allocated funds as indicated in the table below.

2017-2019 Summary of FPHS DPs	Request Biennial In millions	Appropriation Biennial In millions	Allocation Biennial In millions
B1 - LHJs – Address most critical gaps in FPHS communicable and chronic disease programs and capabilities.	$50	$10	$9
B1 - LHJ Modernization – Implement and evaluate new service delivery models.	$6		$1
B2 – DOH – Address the most critical gaps in FPHS communicable disease programs and managing exposure to health hazards. Implementation Plan – Funding to continue implementation of plan to rebuild and modernize public health.	$4	$2	$2
TOTAL	$60	$12	$12

2017 – FPHS 1st Annual Data Collation (August) – work plans for SFY18

2017 – Published: 2017 FPHS Report to Legislature (December) – Rebuilding and Transforming Washington's Public Health System: Preliminary Report. Included how the funds were disbursed and how the impact will be measured.

2018 – FPHS 2nd Annual Data Collection (July)

- State Fiscal Year 2018 (SFY18) – July 2017 – June 2018 – How the funds were used and impact
- State Fiscal Year 2019 (SFY19) – July 2018 – June 2019 – Work Plans

2018 – Published: 2018 FPHS Baseline Assessment (September) – Washington State Public Health Transformation Assessment Report. Tribal nations were not included in this assessment process because they were engaged in their own tribally-driven process to define FPHS delivery framework, including their costs and gaps. Estimated additional funds needed for the governmental public health system (state/local) to deliver FPHS statewide: $450 million per biennium.

2018 – **Decision Package (DP)** – Using concepts like those in participatory budgeting, the FPHS Steering Committee considered the entire governmental public health system (DOH, SBOH, LHJS and tribes), as a whole in developing funding requests and allocation of funds. Based on the FPHS Baseline Assessment finding of a need for $450 million per biennium and prioritization by the FPSH Steering committee, DOH submitted a DP for investment in FPHS to the Governor / Office of Financial Management (OFM) as a part of the 2019-2021 state biennial budget development process. Submitting a DP on behalf of the entire governmental public health system, to the state budget development process, was a first.

The DP totaled $296 million and requested funds for DOH, SBOH, LHJS and tribal health organizations.
Based on the FPHS Baseline Assessment, this amount represented the estimated additional funded needed for delivering foundational communicable disease, environmental public health and a portion of the funds needed for cross-cutting capabilities of assessment, emergency preparedness and response, communication, policy, partnering, business functions and information technology that support this.

https://www.doh.wa.gov/Portals/1/Documents/9220/1A_Fund%20Foundation%20Public%20Health.pdf

2019-2021 Summary of FPHS DP	Request Biennial In millions	Appropriation Biennial In millions	Allocation Biennial In millions
1A – Fund Foundational Public Health Services	$296	$22	$22

2018 – Published: 2018 FPHS Report to Legislature (December)**:** Rebuilding and Transforming Washington's Public Health System: Final Report. This included how funds were spent in SFY18 and impact metrics.

2019 – The Washington state legislature appropriated $22 million for FPHS in the 2019-2021 biennium directing the source of the funds as: $10 million of State General Funds (GFS) and $12 million from the newly created FPHS Account (FPHSA). The legislature directed that a portion of the new tax on vapor products that began implementation in October 2019, be directed to the FPHSA, but estimates indicated that the tax revenue would fall short of the $12 million allocated to FPHS by the legislature.

Based on the FPHS Baseline Assessment findings of a need for $450 million per biennium and prioritization, the FPSH Steering committee focused the investment on foundational communicable disease services, environmental public health, assessment and the other foundational

crosscutting capabilities of emergency preparedness and response, communications, policy, partnering, business functions and information technology that support this. The FPHS Steering Committee allocated the funds as indicated in the table below.

2019-2021 Summary of Allocations			
By FPHS		By Type	
15.0	All FPHS Focus Areas (CD, EH, Assessment, Cross-Cutting Capabilities)	15.0	Reinforcing Capacity
2.7	Assessment	4.5	Infrastructure
2.2	Communicable Disease	1.3	New Service Delivery Models
1.1	Cross-Cutting Capabilities other than assessment	1.2	Tribal Organization
1.0	Environmental Public Health		
22.0		22.0	

2019 – Legislature passed 2SHB 1497 that defined the governmental public health system, FPHS and the state's role in and expectations for funding. It is codified into law in RCW 43.70.512 & 43.70.515.

2019 – FPHS 3nd Annual Data Collection (July) – Using a new method that aims to build on and align data with the Baseline Assessment and build a process going forward for routine accountability.

- State Fiscal Year 2019 (SFY19) – July 2018 – June 2019 - How the funds were used and impact

2020 – Supplemental Budget Decision Packages – While the Legislature appropriated $22 million for FPHS in the 2019-2021 biennium, estimates projected a significant shortfall in vapor tax revenues earmarked to fund the new FPHS Account (FPHSA) that was to supply $12 of the $22 million. As a result, to request that the gap be filled, on behalf of the governmental public health system, DOH submitted a DP to the Governor / Office of Financial Management (OFM) as a part of the 2020 state supplemental budget development process.

Drawn from the original 2019-2021 biennial budget request of $296 million, the FPHS Steering Committee prioritized additional critical work and DOH also submitted additional DP's, on behalf of the governmental public health system, for additional investments in FPHS beyond the $22 million already appropriated by the legislature.

Submitting a unified DP, on behalf of the entire governmental public health system, to the state budget development process is now standard practice in Washington State.

https://www.doh.wa.gov/Portals/1/Documents/9220/ML-A3-RestoreFoundationalPHFunds.pdf

https://www.doh.wa.gov/Portals/1/Documents/9220/PL-B1-FundFoundationalPHSvcs.pdf
https://www.doh.wa.gov/Portals/1/Documents/9220/PL-B7-Eliminate%20HepC.pdf

2020 Summary of FPHS Supplemental DPs	Request, Biennial, In millions
A3 – Restore Foundational Public Health Services Funds	$3.2
B1 – Fund Foundational Public Health services	$16.4
B7 – Eliminate Hepatitis C (FPHS comprised $6.4M of the request)	$9.7

Related National Efforts & Other States

2012 –Publication: For the Public's Health: Investing in a Healthier Future by the former Institutes of Medicine, now called the National Academies of Science, Engineering and Medicine (NAS). Recommendations included:

- Congress should: Double the current federal appropriation for public health; authorize a dedicated stable, and long-term financing structure
- Federal Department of Health and Human Services (HHS) should: Set life expectance targets, establish data systems for a permanent health-adjusted life expectancy target; establish a specific per capita health expenditure target to be achieved by 2030; enable greater state and local flexibility in the use of grant funds
- An expert panel should: Determine the components and cost of the minimum package; develop a model chart of accounts for use by public health at all levels
- Public health should: Endorse a minimum package of public health services; work with partners to develop adequate clinical care capacity in communities
- State and local public health funding that is currently used to pay for clinical care should be reallocated by state and local governments to population-based prevention and health promotion activities conducted by public health departments

2013 – The Public Health Leadership Forum, funded by RWJF and facilitated by RESOLVE, convened to explore a recommendation from the Institute of Medicine report, *For the Public's Health: Investing in a Healthier Future,* to create a "minimum package of services;" in other words, the suite of skills, programs, and activities that must be available in state and local health departments everywhere for the health system to work anywhere, and for which costs could be estimated. The result was a conceptual framework describing both the foundation and programs that no health department should be without.

2015 – The Public Health National Center for Innovation (PHNCI) is the brainchild of the *Public Health Accreditation Board*, with support and funding from the *Robert Wood Johnson Foundation (RWJF)*. The framework developed by the Public Health Leadership Forum is now housed at

PHNCI. It is expected that the conceptual framework will be revised over time based on the work of the Center, its learning community, and the field.

2016 – At the core of PHNCI's initial body of work was a learning community comprised of three pilot states (Ohio, Oregon, and Washington) implementing the transformations required to provide the foundational public health services and ensure health equity. These innovations served as pathways for the nation's health departments as they work to be conveners, providers and strategists that communities need to improve health and well-being.

Oregon and Washington are similar in having decentralized public health systems; taking a systems approach to FPHS that includes state and local agencies and is engaging with tribes as they pursue tribally lead processes to define tribal FPHS; conducting baseline assessment that includes estimates of cost (total cost, current spending and gap) for delivering FPHS; and pursue long-term approaches to funding and modernizing their systems to meet current and future needs.

While the FPHS definitions adopted in each state are slightly different in their details, they are substantially the same. This provides the best opportunity to date to compare costs. FPHS baseline assessment were conducted by Berk & Associates and the results published in Oregon in 2016 and in Washington in 2018.

2018 – Because the two states are using substantially the same definitions for FPHS, have both conducted FPHS baseline assessment, it is possible to compare the estimated costs (total cost, current spending, gap) for delivering FPHS statewide.

FPHS Baseline Assessment – Cost Estimate Findings Per Capita Dollars, Rounded		
	Oregon (2016)	Washington (2018)
Cost to deliver all FPHS	$81	$80
Gap to deliver all FPHS	$26	$31

2019 – Building on FPHS cost estimation by individual states and national researchers, the Public Health Leadership Forum published a white paper titled Developing a Financing System to Support Public Health Infrastructure. It focused on the cross-cutting capabilities portion of FPHS, which can be characterized as infrastructure. The paper reached the following conclusions.

Current best research indicates an annual cost of $32 per person to put in place the basic public health capabilities needed to promote health across the nation. Yet national investment in public health capabilities is currently about $19 per person, leaving **a $13 per person gap** in annual spending. To "create the conditions in which people can be as healthy as possible," and to protect national security, this gap must be filled.

To do so, The Public Health Leadership Forum convened national experts in the public health community, policy arena and key partner sectors to begin developing policy options for long-term, sustainable financing. This group aligned around core principles and a set of criteria necessary to establish a sustainable financing structure. The proposed Public Health Infrastructure Fund for state, territorial, local and tribal governmental public health would provide the $4.5 billion needed to fully support core public health foundational capabilities, allocated in accordance with the determined principles

Appendix B: Dollars Spent on Communicable Disease Areas by LHJ

	CD Data and Planning	Promote Immunization	Disease Investigation: General CD	Disease Investigation: STI	Disease Investigation: Hepatitis C	Disease Investigation: TB	Public Health Lab	Total
Adams	$1,500		$15,000	$5,000	$500	$14,000		$36,000
Asotin	$917	$457	$917	$30		$9		$2,330
Benton-Franklin			$62,177					$62,177
Chelan-Douglas			$65,679					$65,679
Clallam		$9,743	$32,257					$42,000
Clark	$28,783		$57,566	$66,243	$14,391	$49,413		$216,396
Columbia	$2,017	$4,919	$15,137	$2,240	$2,017	$1,196	$1,000	$28,526
Cowlitz			$8,612	$18,692				$27,304
Garfield	$346	$3,000	$4,497	$692	$346	$692	$346	$9,919
Grant			$26,147	$26,147				$52,293
Grays Harbor				$21,000				$21,000
Island			$36,238	$8,000	$2,000			$46,238
Jefferson		$23,882	$18,118					$42,000
Kitsap		$14,299		$96,029	$37,017			$147,345
Kittitas		$193	$40,980	$30				$41,203
Klickitat								$0
Lewis	$1,387		$4,321	$4,576				$10,284
Lincoln		$7,650	$7,450	$1,200	$4,250			$20,550
Mason			$42,000					$42,000
NE Tri-county		$11,250	$10,625	$2,500	$7,625			$32,000
Okanogan	$1,600		$8,885	$1,000				$11,485
Pacific					$8,000			$8,000
San Juan	$1,200	$12,500	$800		$750			$15,250
Seattle-King	$76,768		$2,684,336	$228,645	$169,746	$884,113		$4,043,608
Skagit		$15,862	$6,908	$34,509	$6,908	$4,831		$69,018
Skamania		$1,521						$1,521
Snohomish		$146,087	$200,585	$90,832				$437,504
Spokane		$165,366		$111,994				$277,360
Tacoma-Pierce	$141,009	$64,004	$41,670	$126,729	$41,289	$63,703		$478,403
Thurston	$5,500	$13,700	$28,242	$41,431	$10,000	$36,276		$135,149
Wahkiakum	$1,000	$100	$150	$75	$75			$1,400
Walla Walla	$6,000							$6,000
Whatcom				$120,699				$120,699
Whitman	$12,000	$1,500	$3,500	$200	$200	$200	$400	$18,000
Yakima						$12,531		$12,531

Appendix C: Dollars Spent on Cross-Cutting Capabilities by LHJ

	Epidemiology & Surveillance	CHA/CHIP	Emergency Preparedness	Communications	Policy Development	Community Partnership Development	Business Competencies	Information Technology	Total
Adams		$4,000	$500			$1,500			$6,000
Asotin	$254	$46		$1,211	$7,555	$1,853	$25,868	$3,065	$39,852
Benton-Franklin	$86,443			$9,290					$95,733
Chelan-Douglas									$0
Clallam									$0
Clark	$43,174								$43,174
Columbia	$477	$4,297	$2,000	$1,022	$2,000	$1,622	$1,056	$1,000	$13,474
Cowlitz									$0
Garfield	$136	$4,846	$1,318	$118	$2,990	$20,316	$2,025	$332	$32,081
Grant									$0
Grays Harbor							$21,000		$21,000
Island									$0
Jefferson									$0
Kitsap									$0
Kittitas		$797							$797
Klickitat	$14,000	$14,000	$14,000						$42,000
Lewis	$2,082	$7,005		$7,116	$1,313		$619		$18,135
Lincoln		$17,576						$3,874	$21,450
Mason									$0
NE Tri-county	$2,000	$8,000							$10,000
Okanogan	$2,000			$4,185		$5,430		$18,900	$30,515
Pacific								$34,000	$34,000
San Juan	$6,200	$3,400	$9,300	$1,600		$500			$21,000
Seattle-King			$75,000	$75,000					$150,000
Skagit									$0
Skamania				$13,267	$8,962	$9,300	$2,781	$817	$35,127
Snohomish									$0
Spokane									$0
Tacoma-Pierce									$0
Thurston			$14,270	$3,708					$17,978
Wahkiakum	$1,500		$1,000	$500	$3,100	$500	$22,000	$12,000	$40,600
Walla Walla	$5,000	$15,000		$16,000					$36,000
Whatcom									$0
Whitman	$500	$3,500	$10,000	$1,000	$3,000	$3,000	$2,000	$1,000	$24,000
Yakima	$2,935					$94,778	$28,679		$126,392

Appendix D: FPHS Dollars Spent by Type of Agency, SFY19

FPHS Dollars Spent by Type of Agency, SFY19				
FPHS Program area	Total	LHJs	SSPs	DOH/SBOH
Communicable Disease				
CD Data and Planning	$280,027.00	$280,027	$0	$0
Promote Immunization	$496,032.50	$496,033	$0	$0
Disease Investigation - General CD	$3,422,796.28	$3,422,796	$0	$0
Disease Investigation - Syphilis, Gonorrhea and HIV	$1,008,492.69	$1,008,493	$0	$0
Disease Investigation - Hepatitis C	$305,113.66	$305,114	$0	$0
Disease Investigation - TB	$1,309,605.02	$1,066,964	$242,641	$0
Public Health Lab	$452,075.00	$1,746	$0	$450,329
Communicable Disease Total	$7,274,142.15	$6,581,172	$242,641	$450,329
Cross Cutting Capabilities				
Epidemiology & Surveillance	$605,840.00	$166,701	$126,549	$312,590
Community Health Assessment and Improvement Plan	$179,448.00	$82,467	$96,981	$0
Emergency Preparedness	$127,388.00	$127,388	$0	$0
Communications	$150,932.00	$134,017	$16,915	$0
Policy Development	$255,876.00	$28,920		$226,956
Community Partnership Development	$155,714.00	$138,799	$16,915	$0
Business Competencies	$106,028.00	$106,028	$0	$0
Information Technology	$74,988.00	$74,988	$0	$0
Cross Cutting Capabilities Total	$1,656,214.00	$859,308	$257,360	$539,546
Total (CD and Cross-Cutting)	$8,930,356.15	$7,440,480	$500,001	$989,875

Appendix E: FPHS Dollars Spent, 2017-2019 Biennium

FPHS Dollars Spent, 2017-2019 Biennium						
	SFY18 $ Spent	SFY18 % Spent	SFY19 $ Spent	SFY19 % Spent	Biennium $ Spent	Biennium % Spent
CD Data and Planning	$557,906.47	9%	$280,027.00	3%	$837,933.47	6%
Promote Immunization	$604,630.00	10%	$496,032.50	6%	$1,100,662.50	7%
CD Investigation	$3,551,311.00	58%	$6,046,007.65	68%	$9,597,318.65	64%
Public Health Lab	$443,920.74	7%	$ 452,075.00	5%	$895,995.74	6%
Epi, Assess & Emerg Prepare	$243,968.00	4%	$912,676.00	10%	$1,156,644.00	8%
Comm, Pol and Partnership	$229,571.90	4%	$562,522.00	6%	$792,093.90	5%
Bus Competencies/IT	$452,595.20	7%	$181,016	2%	$558,623.20	4%

Appendix F: Select Excerpts from SFY19 Annual Reports, grouped by theme

Agencies reported on two open-ended questions: "In the LAST year, what has changed in the capacity, expertise or structure of how FPHS are delivered in your jurisdiction?" and "In the LAST year, what has changed for the people of your jurisdiction about the FPHS available to them?" Using Dedoose software, Rede staff identified codes and looked for common themes in the responses.

The tables below include the responses to these two questions. Table 1 lists out responses for agencies when the time crossed both questions, e.g., the theme of Disease Investigation was reflected in an agency's response to both what has improved in the capacity of the LHJ as well as for the community. Table 2 & 3 have responses listed based on themes for the two questions separately where there was no correlation between the two answers.

Table 1: Correlation between increased capacity and availability of services, grouped by theme
(Blank cells mean there was no excerpt for that question for that LHJ)

Theme	Agency	In the LAST year, what has changed in the capacity, expertise or structure of how FPHS are delivered in your jurisdiction?	In the LAST year, what has changed for the people of your jurisdiction about the FPHS available to them?
Disease Investigation	Adams	We were able to manage an active TB case with a large contact investigation with fairly minimal assistance and even that was just some phone advice from regional and State partners.	Access to timely, thorough, and responsive communicable disease investigation and follow up has significantly improved. We followed up on reports of possible cases of mumps, measles, varicella, pertussis, and TB.
	Asotin	Three staff took on new responsibilities to their job descriptions in handling and responding specifically to communicable diseases.	Because of the increased capacity, expertise and structure increases in our District, the residents of our jurisdiction are better served by local public health expertise, specifically regarding communicable diseases.
	Benton-Franklin	Improve timeline for illness report response; Increase the number cases entered into WDRS; Increase the number of cases receiving a full investigation; Expand the number of staff trained to respond to illness reports	The use of data has allowed BFHD to more conclusively report on illness investigation related to outbreaks resulting in greater community awareness of risks
	Clallam	Clallam saw a slight increase in gastrointestinal reportable disease and was able to complete investigations for all cases as well as train new staff with limited CD experience.	Clallam has seen an increase in Chronic Hepatitis C cases and been able to review and update all cases in WDRS. We have been able to assist providers in contacting untreated individuals with STI infections and increased the number of partners contacted and increase provision of treated.
	Clark	This funding has allowed us to increase our Infectious Disease epidemiology capacity, as well as support under funding operations for disease	By bolstering our Infectious Disease team capacity, we have enhanced our ability to provide timely notifiable condition investigation & outbreak detection and response

		investigation, TB case management and outbreak response.	
	Cowlitz	Our LHJ has been able to retain knowledgeable CD/STD staff which increased competency/ expertise, which in turn allowed for more expeditious investigations, which ultimately yields a slightly higher capacity for CD/STD investigations.	We have also been able to increase capacity for investigations and follow up to patients with STDs and partners.
	Grant		We continue to strive to provide timely investigations and decrease the risk of exposure to the people in our jurisdiction. We had a mumps outbreak in a small Grant County community. The outbreak was contained to one facility, which provided additional protection to the people of Grant County. That small outbreak cost the Health District over $40,000. Which is nearly a full year's FPHS allocation.

	Kitsap		During the last year FPHS made possible the following improvements for Kitsap County residents:
			• public health nurse visits to health care providers to improve:
			  ○ knowledge of STI and Hepatitis C case reporting expectations which supports more timely case investigation and expands the power of data analytics to identify trends in subpopulations for development of targeted outreach/interventions
			  ○ knowledge of pediatric immunization recommendations which protects children and the community from vaccine preventable diseases
			• increased rates for dual treatment of Gonorrhea and Chlamydia by following up on any case report where both treatment modalities are not checked
			• increased access to HIV and Hep C screening for high risk injection drug users as a part of syringe exchange increased public health capacity to perform timely Hep C case investigations

	Kittitas	A small increase in capacity in CD investigation, which was an existing activity, but previous fund	

		sources were diverted to other areas allowing PH nurses to consistently prioritize CD.	
	Lewis	These funds increased our capacity to respond more proactively to nearby Communicable Disease risks. During the measles outbreak to our south and north, we utilized FPHS funds to support daily situational awareness meetings and support associated disease investigations.	
	Lincoln		Lincoln County Health Department communicable disease staff have received training for 8 communicable diseases to enhance our capability to receive reports, investigate cases and contain outbreaks. We have also enhanced relationships with neighboring jurisdictions for enhanced capability and provide surge support when needed. This has allowed LCHD to respond to 100% of notifiable conditions reports received.
	NE Tri-County	NETCHD staff increased both capacity and expertise to conduct STD case investigations...NETCHD expanded our capacity to conduct comprehensive case investigations of new Hep C cases	We complete more case investigations for Hep C cases, and we help coordinate referrals for treatment programs. NETCHD staff provided increased education and outreach on STD cases involving gonorrhea and chlamydia cases
	Seattle-King	Supported 1 FTE to strengthen our infection control capacity and enhance coordination with acute care facilities for preventing the spread and responding to healthcare-associated/acquired infections (HAIs)...We continued to work toward our goals of increasing the percentage of syphilis patients who receive a partner services interview and increasing the number of sexual partners treated... Used funding to maintain our current capacity for our TB control program. Activities included disease investigation; overseeing the treatment for all active pulmonary TB cases; recruiting, training and developing protocols for community providers (or across multiple jurisdictions and health officers); assuring/providing DOT; and measuring/monitoring the percentage of active cases that complete treatment….Hired a 1.0 FTE Public Health Nurse and 1 FTE Administrative Specialist to continue the work established through	We were able to provide a timelier response to reports of healthcare associated infections in acute care facilities and long-term care facilities as well as reports of infection control breaches. This allowed us to ensure patients were made aware of their exposures in a timelier fashion and that appropriate infection control measures were implemented to prevent spread of infections, keeping patients at these facilities safe. We are able to investigate reports of communicable diseases more promptly to ensure that contacts of people with certain infectious diseases get post-exposure preventive treatment when indicated to prevent infections and that healthcare providers are aware of current recommendations for diagnosis and management of emerging infectious diseases and other communicable diseases.

		the CDC's Hepatitis C Test and Cure grant. These staff provided case management to patients with HCV to ensure appropriate testing and treatment and maintained a highly functional HCV surveillance system. Also hired a 1.0 FTE DRIS to support Public Health's Perinatal Hepatitis B Prevention Program (PHBPP) and general CD investigations. The PHBPP program follows pregnant women with hepatitis B until they give birth to make sure that their infants get timely appropriate treatment and testing....Hired 1 FTE Public Health Veterinarian and 1 FTE DRIS to identify and respond to the uptick in emerging disease investigations (e.g. Zika and Ebola viruses) and zoonotic diseases that spread from animals to people (e.g., rabies, tularemia, and hantavirus)	
	Skagit	The PHN was able to investigate a total of 510 cases of notifiable conditions, provided case treatment or EPT for 34 STD cases, and provided DOT for 1 active TB case and 2 LTBI contacts.	The people in our jurisdiction have improved follow up for notifiable conditions, improved access to treatment for STDs and TB
	Snohomish		Funds supported staff to achieve 100% of communicable disease cases being fully reviewed and investigations attempted or completed, including a backlog of hepatitis C reports. Funds supported expanded STD and HIV testing capability.
	Spokane	Disease Investigator Services (DIS) capacity increased by 1.0 FTE. This increase allowed for lower DIS caseloads, which resulted in a 30% reduction in the number of days to close a case [80 days to 55 days in representative sample].	The number of people with syphilis who received Partner Notification Services increased 22% [from 80 to 103 in representative sample] and the number of those treated increased 23% [from 76 to 99 in representative sample].
	Tacoma-Pierce	Strengthened outreach to medical providers- this improved our ability to communicate with medical providers and strengthened our response to two regional measles outbreaks.	Increased capacity to investigate cases of STDs has increased the percentage of gonorrhea cases interviewed and provided partner services to prevent transmission. Rates of gonorrhea have stabilized following several years of increase. Pierce County residents benefit from improved capacity and planning to respond to outbreaks of communicable disease. During two recent region wide outbreaks of measles, although Pierce County residents contracted measles outside Pierce County, there

			were no instances of disease transmission within the county.
	Thurston	It has been a busy time with continued response to suspect measles and increasing reports of general communicable and sexually transmitted diseases. We worked with our emergency preparedness staff to build an outbreak response plan and increase response capacity for disease outbreak response.	The department Disease Control and Prevention Division, Public Health Emergency Preparedness and Response and Communication programs collaborated to bolster and improve internal capacity to respond to a disease outbreak. These efforts included a new Disease Outbreak Plan and staff training. The outcome of this work supports mitigation of possible exposure and/or limited exposure to the residents of Thurston County during a disease outbreak.
	Walla Walla		We are also more responsive on CD investigations and reporting; as with follow up with providers and clients.
	Whatcom		We are ensuring that cases have completed treatment and that contacts are treated.
	Whitman	We are better positioned to complete basic communicable disease reports and to respond to potential outbreaks.	
	Assessment/Epi Shared Service Project: Spokane	Notable accomplishments included: the co-creation with DOH staff on General Procedures and Guidelines for Notifiable Conditions, creation of general CD Case Investigation Checklist, enduring training materials in the form of webinars/tools/guides on a shared electronic platform accessible by all partners, county specific disease investigation assistance as well as occasional case investigation from start to finish when capacity at the county level was especially low, after hours support and consultation with LHJ partner staff and healthcare providers from the various jurisdictions.	CD Epi/Surveillance services were provided to the populations within Adams, Asotin, Ferry, Lincoln, Pend Oreille, and Stevens counties through their local public health department. The data supports improved initiation of case investigations of many of their communicable disease categories with improved case completion data, including case follow-up to assure treatment was received and post-exposure prophylaxis given to impacted case contacts.
	TB Shared Service Project: Seattle-King	As a recipient of FPHS funds, we were able to provide various TB services to LHJs within Washington State seeking guidance or assistance. Our expert physicians and nurses provided medical consultations, shoulder-to-shoulder training on case management and contact investigations. We assisted with the lab and discounted QFT processing. We	

		distributed TB materials, resources and other in-person and/or remote support as requested by LHJs.	
	DOH		Lab tests and disease investigations were conducted to stop the transmission of disease that wouldn't not have been done without these funds.
Immunizations	Lincoln	In an effort to increase immunization rates for kids in school, we have worked with our 4 clinics to identify strategies to make childhood vaccinations more accessible to children. This includes additional walk in clinic hours and community-based vaccination clinics in schools.	
	NE Tri-County	NETCHD expanded our capacity to work with local school districts to provide vaccination clinics at school events.	
	San Juan	Fund staff time and contractor time for planning and supporting a back-to-school immunizations clinic on Orcas Island, at the request of the school district and in response to Dose 2 varicella needs for students during a varicella outbreak, and in response to low student immunization rates in the district. Our school MMR rates rose more than 20% from 2017, to 89%, 90%, 91% and 93% for the four districts in our county by February 2019.	
	Seattle-King	The part-time program manager conducted two vaccination clinics that served at-risk communities during the measles outbreak.	
	Spokane	Pharmacy, Nurse and Medical students are utilizing our Pack N' Go vaccine clinics throughout Spokane County. This enhances our ability for impact on a larger scale. Continued strengthening of alternate vaccine delivery systems through the Vaccine Liaison (VL) model: Two community providers signed up as a Vaccine Liaison and are now able to provide childhood vaccines in their practices. They do not have a large client/patient population and so becoming a Childhood Vaccine Program (CVP) provider is not feasible. Since becoming a VL through SRHD, they can now provide vaccines at no cost to children. During this reporting period, there	Over the past reporting period, there has been a variety of interventions targeted at increasing vaccination rates amongst the 19-35-month-old population in Spokane County resulting in a 5% increase for 19-35 mo old children with a completed primary vaccination series, from 62% to 67%. This represents an 8.1% increase in the number of children aged 19-35 months with a completed primary series. Since the beginning of the project in 2017, the coverage rate for this age has changed from 59% to 67%, an 8% increase. This represents a 13.6% increase in the number of children aged 19-35 months with a completed primary vaccination series.

		were 31 VL clinics that served 650 clients and provided 894 vaccines.	
	Tacoma-Pierce		Strengthened immunization promotion to the public and outreach to medical providers has helped improve immunization coverage rates in schools.
	Thurston	Staff continue work to build collaborative partnerships to work to promote immunizations and increase immunization rates in Thurston County.	
Community health assessment/ planning	Adams	Our LHJ was also part of the FPHS Cross Jurisdictional Pilot Project in Region 9 with Spokane RHD as our lead agency. The additional training and epi support that we received through that partnership also impacted our capacity in a very positive manner. That project also makes it possible for us to conduct a thorough countywide Community Health Needs Assessment and has been invaluable in helping us to utilize that data in our strategic planning.	
	Lincoln	LCHD has partnered with the Spokane Regional Health District Data Center and have completed a 2019 Lincoln County Community Health Assessment and have identified priority health issues facing Lincoln County. This effort was supported by data interpretation and community input through 5 community forums. We then completed a Community Health Improvement Plan leading to the development of "Turn the Curve reports" identifying community strategies to impact the 5 top priority health issues facing the residents of Lincoln County. We have also worked with regional health jurisdictions in the development of the www.countyhealthinsights.org website to house community health assessment data for regional and local indicators.	As a result of this FPHS work, Lincoln County now has an updated 2019 Community Health Assessment that identifies our top health priorities as well as a Community Health Improvement Plan with identified community-based strategies to improve the health status of county residents. Our next step is to facilitate implementation with community partners.
	San Juan	Fund staff time to lead county-wide Community Health Improvement Plan efforts around immunization rate improvement	
	Walla Walla		We facilitated a thoughtful, inclusive CHIP process which is driving funding allocation from public and private grantors throughout the County

	Assessment/Epi Shared Service Project: Spokane		Data Center services provided to the communities of Adams, Lincoln, Pend Oreille, Stevens, and Ferry the opportunity to participate and give input into a process to develop health-related priorities for their community. Collaboration between service providers and other stakeholders around these priority health issues increased, creating new partnerships for better service provision.
Communications	Benton-Franklin	Communication efforts have included regular postings to the BFHD website and social media to: • Communicate during outbreaks • Report investigation results and reports • Provide regular communication to the medical community before and during incidents	
	Clallam		Communications with provider organizations and response directives regarding suspected measles case management and increase provision of vaccine to appropriate community members was completed.
	Cowlitz		In the last year (2018-2019), the FPHS created improved communications between public health and providers. Public health has been able to get better and faster messaging to providers regarding vaccine-preventable outbreaks, immunizations, and health alerts, as well as other important data and planning tools.
	Kitsap	Targeted provider outreach in September 2018 to: improve communication and collaboration; improve case report completion for Hepatitis C, STIs and other CDs; and educate providers about compliance with minimal vaccine intervals for pediatric immunization through the Immunize Kitsap campaign and biannual provider update events	
	Lewis		Last year residents in our community benefited from increased communication regarding FPHS. These improvements included twice-monthly "Health Beat" columns in our local paper, "Health News You Can Use" broadcasts and PSAs on local radio, a social media presence including Twitter and Facebook, as well ongoing press releases, and resource lists with timely health information.

	Okanogan	We also utilized DOH Communications to help us with social media on the Emergency Management social media page as well as our own.	The new FPHS investment in a cloud-based software will allow us to give the public access to public information from our webpage, therefore increasing our capacity to do our public health duties. We were also able to increase our presence on social media and utilized DOH and Emergency Management communications to "get the word out" regarding our large Pertussis outbreak this past winter.
	San Juan	Enhance communication efforts in response to the statewide measles outbreak, to better reach providers, schools, community members	Staff were able to work on systems strengthening and response efforts, and to quickly disseminate information to providers, schools and the general public. We utilized FPHS funds to develop provider toolkits and engage with stakeholder groups around outbreak prevention and immunization rate improvement.
	Seattle-King		We have had more capacity to communicate with the public about prevention measures for multiple communicable diseases so that they can takes steps to stay healthy. Related to syphilis, gonorrhea and HIV, we completed the first publicly available STD Epi report since 2015. We ensure messaging and approach is consistent with CDC's recommendations and best practices as they are created. For media training, we have provided increased support for additional staff to be more ready to provide media support, including synthesizing key messages and on-camera/on microphone delivery. In general, we have increased material development (factsheets, blogs, one-pagers) and translation of materials in several different languages across multiple diseases and conditions. We were able to regularly provide communications support to food borne investigation public reporting. Diseases for which we've been able to increase our communication support include hepatitis A, hepatitis C, carbapenem-resistant Enterobacteriaceae, measles, mosquito borne illness, and other zoonotics.
	Tacoma-Pierce	Strengthened outreach to medical providers- this improved our ability to communicate with medical	

		providers and strengthened our response to two regional measles outbreaks.	
	Walla Walla		WWCDCH is much more responsive as a community partner and we are able to be timely in data requests
	Provider Education Shared Service Project: Tacoma-Pierce		Our LHJ's own outbreaks and ongoing communication demands significantly bolstered our infrastructure, content, and procedures for provider resources.

Table 2: Responses to "In the LAST year, what has changed in the capacity, expertise or structure of how FPHS are delivered in your jurisdiction?" grouped by theme

Theme	Agency	Response to question:
Staffing	Adams	The FPHS funds we received paid for much of the salary of a full time CD nurse
	Benton-Franklin	staffing of an Epidemiologist, additional staffing in our Communicable Disease Department
	Columbia	The retirement of an RN and replacement with an LPN, in addition to hiring a program coordinator instead of a second nursing position
	Garfield	In the last year we have increased the capacity of two positions and provided more local support of EH services and increased our business competencies in Community assessment, Communicable Diseases, and environmental health.
	Island	With FPHS dollars, we were able to hire an Registered Nurse at 0.4 FTE during the summer of 2018. Until that time, Island County had an RN at 0.1 FTE. This small addition of human resources significantly enhanced the support for the general CD program work.
	Jefferson	Promoting Immunizations: able to maintain staff in IMM program.
	Kitsap	KPHD has maintained a staffed Communicable Disease program. Recruitment and retention of qualified staff has been a challenge as local public health salaries are not competitive with health care. We are excited to have had staffed program since March 2019 with well-trained individuals: one MSN MPH RN, two RNs, one medical professional trained outside the US and one CHES. Our current capacity is 4.0 FTE staff and a 1.0 FTE working supervisor with the following allocations: 0.5 FTE Hepatitis C, 1.5 FTE STI/HIV partner notification and 0.25 Expedited Partner Therapy; 1.0 FTE other communicable diseases; 0.75 FTE immunizations; 0.5 FTE Tuberculosis; and 0.5 FTE supervision.
	Lewis	Most notably, the unallocated funds from FY2019 are now being used in FY2020 to support an Epidemiology II position (June 2019) that would have otherwise remained "frozen".
	Pacific	also increased our FTE for CD work in the county
	San Juan	Fund staff time and contractor time for planning and supporting a back-to-school immunizations clinic on Orcas Island, at the request of the school district and in response to Dose 2 varicella needs for students during a varicella outbreak, and in response to low student immunization rates in the district.

	Seattle-King	Supported 1 FTE to respond to King County's ongoing increase in syphilis cases and address the need for surveillance and partner services, to ensure screening and treatment of sexual partners of confirmed syphilis patients. Hired a .5 FTE Epidemiologist to improve the ongoing monitoring of syphilis particularly among women and heterosexual men. 1 FTE to strengthen our infection control capacity and enhance coordination with acute care facilities for preventing the spread and responding to healthcare-associated/acquired infections (HAIs). PHSKC Communicable Disease Section now has dedicated FTE to conduct our own HAI investigations and to collaborate with and bolster efforts to respond to HAIs by infection control, risk management, employee health, and communications staff at acute care hospitals around King County.
	Skagit	We were able to hire a public health nurse partially funded with the FPHS funding
	Snohomish	Funds supported increased FTE in the HIV/STD program to address a backlog of cases for gonorrhea, syphilis and chlamydia.
	Spokane	Disease Investigator Services (DIS) capacity increased by 1.0 FTE. This increase allowed for lower DIS caseloads, which resulted in a 30% reduction in the number of days to close a case [80 days to 55 days in representative sample].
	Walla Walla	We were able to hire a full time Assessment and Communication Coordinator and fully flesh out our CD program.
	Assessment/Epi Shared Service Project: Spokane	The Data Center was able to maintain dedicated staffing support for assessment and provide expertise in multiple skill areas, including quality improvement, data collection (focus groups, surveys), advanced facilitation/group process, epidemiology, data analysis and visualization
	DOH	Public Health Lab – 3 FTE and test supplies. 2 FTE – Microbiology lab for foodborne disease surveillance – Salmonella, E.coli and Listeria case identification and testing oyster for V. parahaemolyticus.
	SBOH	additional staff capacity (0.6 FTE) provided by Foundational Public Health Services funding allowed staff to complete 18 Health Impact Reviews; the most reviews ever completed during a Legislative Session. • Additional capacity has also allowed staff to provide additional research support during the interim to the State Board of Health and the Governor's Interagency Council on Health Disparities. For example, staff completed the Literature Review on Inequities in Reproductive Health Access, required by the Reproductive Parity Act which was passed during the 2018 Legislative Session.
Community outreach	Columbia	A change in structure to provide more prevention education in the schools and actively be involved and build trust with the community.
	Kitsap	targeted provider outreach in September 2018 to improve communication and collaboration; improve case report completion for Hepatitis C, STIs and other CDs; and educate providers about compliance with minimal vaccine intervals for pediatric immunization through the Immunize Kitsap campaign and biannual provider update events. O
	Spokane	Community Engagement is another area in which we grew our capacity to reach broader community and educate about the importance of immunizations. This was accomplished through: a community screening and discussion of the movie "Maurice Hilleman: Saving the World's Children"; regular attendance and

		education to the Health Services Advisory Committee and parent-community quarterly meetings; preparation for a measles outbreak response with School Nurse Leadership and childcare centers;
	Whatcom	We were able to retain the public health nurse hired to do primarily STD case investigation work. This freed up time for other staff to increase their outreach and education with partners.
New IT	Grays Harbor	We have implemented new fund accounting software and implemented new fiscal tracking, monitoring, and reporting practices.
	Okanogan	We were able to research a cloud-based software and make an initial "down payment" to streamline our antiquated system. It is still in the design phase but should be completed this fall. We could not have made the investment had it not been for FPHS funding!
	Pacific	We implemented an electronic record system that directly uploads to WAIIS system, used for tracking immunizations, clinic work, some non-reportable CD work
	Yakima	We are also implementing and installing a new ERP (Enterprise Resource Planning) system that will give accurate financial data in real time.
Emergency preparedness	Klickitat	Also, for the first time in many years staff participated in emergency preparedness training and an active shooter drill in the county to be better prepared to support the citizens in times of emergency.
	Thurston	We worked with our emergency preparedness staff to build an outbreak response plan and increase response capacity for disease outbreak response.
Enhanced data/surveillance	Tacoma-Pierce	Enhanced data and evaluation support when responding to recent CD outbreaks or other emergent incidents of public health importance. For example, for the first time, we were able to successfully adapt and use an Access database while responding to a measles outbreak that occurred in May. Also, our epidemiologist helped shape effective strategies for responding to a TB outbreak that occurred in a local homeless shelter, which included better use of data technology. Improved understanding of childhood immunization coverage rates. Our FPHS funded epidemiologist took a closer look at the Washington State Immunization registry and identified a significant factor that is causing inaccuracies in coverage data. This analysis was used to develop a strategy to improve the accuracy of coverage data.
	Assessment/Epi Shared Service Project: Spokane	Staff developed a sustainable structure and process to host and maintain public-facing health data-County Health Insights- that is responsive and tailorable to community need. This resource can be maintained with minimal burden on any one LHJ through cost sharing of the infrastructure and efficiencies gained by sharing analysis staff and statistical code used to run the data. We also gained access/increased capacity for use of the RHINO data system (syndromic surveillance).
Provide TA	Provider Education Shared Service Project: Tacoma-Pierce	We became skilled at providing technical expertise and support to our partners.

	Assessment/Epi Shared Service Project: Spokane	The Data Center was able to maintain dedicated staffing support for assessment and provide expertise in multiple skill areas, including quality improvement, data collection (focus groups, surveys), advanced facilitation/group process, epidemiology, data analysis and visualization
No change	Wahkiakum	Services have remained consistent as costs continue to rise
	Chelan-Douglas	No change
Other	Asotin	Our jurisdiction also increased capacity and expertise in regard to communicable and infectious and chronic disease prevention as part of this effort.
	Garfield	FPHS funds covering communicable disease and partnerships freed up local dollars to be spent on Environmental health.
	Klickitat	Development of policies and formalizing practices for succession planning was a big change for this health department. Family planning services (with Title X $$) returned and the nursing staff turned over from contract, non-committed staff to full-time very committed staff; created stability for clients.
	NE Tri-County	NETCHD developed the capacity and expertise to establish a comprehensive syringe exchange program with disease testing, consultation, and referral program

Table 3: Responses to "In the LAST year, what has changed for the people of your jurisdiction about the FPHS available to them?" grouped by theme

Theme	Agency	In the LAST year, what has changed for the people of your jurisdiction about the FPHS available to them?
Partnerships	Columbia	Being involved in numerous Coalitions and providing feedback has helped the community be more aware of services available both in the community and Public Health services. Our community partnerships have allowed us to be involved in National Night Out and Lewis-Clark Community Walk. FPHS has allowed us to spend more time in community outreach and linking the different areas of healthcare into a coalition to assist in finding healthcare gaps and finding resolutions.
	Garfield	Community Health outreach includes being involved in a community health fair, National Night out, and organizing a community walk with our healthcare community. Outreach to our dental providers about gaps in service and education to our children. Working with public transportation, local hospital and clinic, and other healthcare providers about transportation costs for our community to access healthcare needs. Working with the high school to teach food handling requirements for food worker card eligibility.
	Jefferson	Promoting Immunizations: Regionalization of the VFC Immunization Program QA activities allowed increased Immunization Promotion activities including working with the schools, this is visible to the public.
	Lewis	FPHS services were also increased to key healthcare partners (PCP's, school nurses, local clinics) when FPHS funds facilitated ongoing discussion and support during the measles outbreak to our south and north.
	NE Tri-County	There have been more options for immunization opportunities through work done with local school districts.

	Pacific	With increased capacity for reporting, we are able to reach out to an increased number of providers and their clients to assure treatment options are made available to them. With the potential for a "cure" of chronic Hepatitis C this is invaluable to those who may not have been referred for potential treatment.
	San Juan	We have increased our work with the local school districts, with two of the four districts committing to strengthen their procedures around student exclusion for out-of-compliance students. Community partnerships were strengthened as a result of increased dedicated staff time to respond to a county-wide varicella outbreak, and the state-wide measles outbreak
	Seattle-King	We have coordinated closely with several healthcare providers on breaches and HAI situations, including a dental provider and regional hospital.
	Yakima	We are currently involved in a investigation/exploratory exercise to gain partnerships to elevate the health of the general population in Yakima County.
	TB Shared Service Project: Seattle-King	The FPHS funds allowed for a slight increase in FTE to assist in managing day to day TB Control activities and provide services to other LHJs.
	Provider Education Shared Service Project: Tacoma-Pierce	Our LHJ's own outbreaks and ongoing communication demands significantly bolstered our infrastructure, content, and procedures for provider resources.
Data products	Clark	increased availability of surveillance data products to community partners.
	Lincoln	Lincoln County residents also have access to community health data and demographic information through a shared website: countyhealthinsights.org
	Seattle-King	Related to syphilis, gonorrhea and HIV, we completed the first publicly available STD Epi report since 2015.
	Tacoma-Pierce	Pierce County residents have benefitted from improved more timely and accurate information about the health of the county, For example, we were able to keep the public better informed about our measles response as we worked to contact those who had been exposed and contain the spread of disease.
	Provider Education Shared Service Project: Tacoma-Pierce	The residents and providers, including stakeholders in healthcare, government, and nonprofits, now have access to health data for their communities and can use this information to develop programs/strategies and write grants to bring in additional resources for health improvements. CD Epi/Surveillance services were provided to the populations within Adams, Asotin, Ferry, Lincoln, Pend Oreille, and Stevens counties through their local public health department. The data supports improved initiation of case investigations of many of their communicable disease categories with improved case completion data, including case follow-up to assure treatment was received and post-exposure prophylaxis given to impacted case contacts.
	DOH	Progress was made in modernizing data systems to people will have better access to data that is more relevant and timelier for use in making decisions.
Health promotion	Asotin	residents are better served by improved expertise and capacity regarding preventive health education health promotion.

	Garfield	Working with the food bank on grant applications for recipients to have access to more fresh fruits and vegetables.
	Island	Staff were able to spend more time with community members discussing CD with additional time spent in general education.
	Skagit	Improved access to education on immunizations
	Seattle-King	We have been able to provide an increase of health promotion materials for our residents. In the last year, we have improved our web presence for Spanish speaking populations and now have more materials in additional languages where before we may have only been able to distribute materials in English. For example, we were able to have a robust communications response in multiple languages to hepatitis A and measles outbreaks. We were also able to support patient and provider educational materials for new hepatitis C screening at Harborview Medical Center.
Identify service gaps	Columbia	Being involved in the Accountable Communities of Health has helped us define the service gaps in our community. Completing our Community Health Assessment has helped us find some gaps of service and needs in our community and we are working on getting our community partners together to address those concerns.
	Garfield	identifying gaps in service within our healthcare systems and working on resolutions together
LHJ Seen as expert	Benton-Franklin	The community is currently looking to BFHD to supply real-time data regarding illness, conditions and data that can affect health policy.
	Skamania	Community member are more aware of the services we provide and are more likely to seek services from our agency
No Change	Chelan-Douglas	No change
	Kittitas	We maintained the level of FPHS services available in the people of our jurisdiction
	Wahkiakum	Services have remained consistent
Other	Grays Harbor	Resources freed up have been allocated to other processes, including professional development programs
	Jefferson	We have been able to increase Promoting Immunizations activities somewhat, due to the regionalization of the VFC program clinic QA activities that were previously in our LHJ Immunization ConCon.
	Mason	Funding from all sources dedicated to CD and water quality are being reduced
	NE Tri-County	Implementation of a syringe services program throughout the three-county service area of NETCHD. In less than one year, the program has collected over 10,000 syringes, distributed 55 overdose kits of which 8 have been reported to save a life from an overdose, and established a referral system for MAT treatment
	Whatcom	We prefer to continue to do our own local work