

**PUBLIC HEALTH IMPROVEMENT PARTNERSHIP
FOUNDATIONAL PUBLIC HEALTH SERVICES**

**Phase II Technical Workgroup Working Papers
September 9, 2014**

PUBLIC HEALTH IMPROVEMENT PARTNERSHIP FOUNDATIONAL PUBLIC HEALTH SERVICES | PHASE II

Foundational Public Health Services Revised Cost Estimate

September 9, 2014

INTRODUCTION

The purpose of this document is to provide a description of the Revised Cost Estimate for providing a uniform level of Foundational Public Health Services (FPHS) across the state. This document provides a brief overview of the Phase I analysis as well as a description of the specific revisions made to the FPHS Cost Estimate during Phase II.

The FPHS Cost Estimate is an estimate of how much money it would take to adequately support provision of foundational public health services statewide. A draft estimate from Phase I was developed using a financial model built to support the Technical Workgroup's work. The initial cost estimate is based on detailed estimates from DOH and nine sample LHJs of how much it would cost their organization to provide the foundational services, whether or not the services are currently being provided and regardless of how or if the services are currently funded. For additional details on methodology and limitations, please refer to **Appendix A** on page 8.

For additional information on the background information for the Phase I FPHS Cost Estimate, please refer to the Public Health Improvement Partnership's *Foundational Public Health Services Preliminary Cost Estimation Model Final Report*, released September 2013.

Identifying Areas for Revision

Phase I work resulted in the report referenced above, summarizing the FPHS Technical Workgroup's Draft FPHS Cost Estimate. Based on conversations with the FPHS project team and the Technical Workgroup to begin Phase II work, the following three FPHS were identified for additional research and potential revision.

The Technical Workgroup felt that the definition for these services specifically highlights these as program areas, and upon further consideration, felt that the definition should be interpreted as calling for more extensive programs not fully reflected in the earlier estimate. Because minimal work is currently being done in these three areas, the Technical Workgroup wanted to revisit the analysis to ensure the estimate was adequate.

Tobacco. The Phase I estimate for tobacco prevention and cessation focused narrowly on providing capacity to support implementation of a minimal tobacco program. Upon further discussion and review of the FPHS definitions, the Technical Workgroup felt that the foundational program should be a fully-functional program that would result in less tobacco use and fewer deaths from tobacco. Tobacco use is still the biggest single cause of preventable deaths in Washington, and so a commensurate response should be considered foundational. The Technical Workgroup felt that the foundational service should be a program that would result in less tobacco use and fewer deaths from tobacco. Therefore, they

wanted to revisit the original estimate and make revisions to ensure the estimated cost could support a program that resulted in the desired outcomes.

Healthy Eating Active Living (HEAL). HEAL is an emerging set of activities that work to increase healthy eating and active living and to decrease obesity and chronic disease. Similar to the tobacco estimate, the Technical Workgroup felt that the Phase I HEAL estimate was not adequate to support an effective program considering the significance of the population-wide problems involved, and that it allowed for only foundational capacity. The Technical Workgroup wanted to revisit the cost estimate to ensure it could support a program that would result in decreased rates of obesity and related health problems.

Environmental Public Health. The Technical Workgroup felt that the Phase I estimate for environmental public health may not have adequately captured some of the non-fee supported elements of environmental public health programs, as well as some of the emerging work in land use planning and built environments. The Technical Workgroup wanted to revisit its survey work to think about this element in depth and ensure all appropriate cost areas were captured.

SUMMARY OF REVISED FPHS COST ESTIMATE

The Revised FPHS Cost Estimate of providing the foundational services statewide is about \$380 million per year. The Phase II efforts to revisit and refine the three FPHS elements discussed above resulted in increases to the Draft Foundational Public Health Services cost estimate from the Phase I Report, which was approximately \$328 million per year.

Exhibit 1 summarizes these changes. The revisions are in the Chronic Disease and Injury Prevention program (which contains the tobacco and HEAL estimates) and Environmental Public Health.

Exhibit 1 Revised FPHS Cost Estimate Adjustments for DOH and LHJs

Services Ranked By Cost	State DOH			Local Health Jurisdictions			Total Statewide Estimate		
	Phase I	Phase II	Change	Phase I	Phase II	Change	Phase I	Phase II	Change
Foundational Capabilities	27,750,000	27,750,000	0%	47,945,000	47,945,000	0%	75,695,000	75,695,000	0%
A. Assessment	5,410,000	5,410,000	0%	5,935,000	5,935,000	0%	11,345,000	11,345,000	0%
B. Emergency Preparedness and Response	3,620,000	3,620,000	0%	7,205,000	7,205,000	0%	10,825,000	10,825,000	0%
C. Communication	750,000	750,000	0%	3,210,000	3,210,000	0%	3,960,000	3,960,000	0%
D. Policy Development and Support	1,115,000	1,115,000	0%	3,300,000	3,300,000	0%	4,415,000	4,415,000	0%
E. Community Partnership Development	860,000	860,000	0%	4,025,000	4,025,000	0%	4,885,000	4,885,000	0%
F. Business Competencies	15,995,000	15,995,000	0%	24,270,000	24,270,000	0%	40,265,000	40,265,000	0%
Foundational Programs	134,890,000	151,640,000	12%	117,405,000	152,870,000	30%	252,295,000	304,510,000	21%
A. Communicable Disease Control	9,010,000	9,010,000	0%	24,750,000	24,750,000	0%	33,760,000	33,760,000	0%
B. Chronic Disease and Injury Prevention	12,590,000	27,895,000	122%	12,265,000	40,285,000	228%	24,855,000	68,180,000	174%
C. Environmental Public Health	33,760,000	35,205,000	4%	62,045,000	69,490,000	12%	95,805,000	104,695,000	9%
D. Maternal/Child/Family Health	13,765,000	13,765,000	0%	11,410,000	11,410,000	0%	25,175,000	25,175,000	0%
E. Access/Linkage with Clinical Health Care*	62,145,000	62,145,000	0%	3,440,000	3,440,000	0%	65,585,000	65,585,000	0%
F. Vital Records	3,620,000	3,620,000	0%	3,495,000	3,495,000	0%	7,115,000	7,115,000	0%
Total Cost	162,640,000	179,390,000	10%	165,350,000	200,815,000	21%	327,990,000	380,205,000	16%

Source: DOH, 2014; Participating LHJs, 2014, and BERK, 2014.

*Note: The estimates for the Access/Linkage with Clinical Health Care program are still being refined due to emerging issues primarily related to implementation of the Affordable Care Act (ACA). These estimates may change as a result of continuing work.

Chronic Disease and Injury Prevention. Revisions increased the foundational cost estimate on Chronic Disease and Injury Prevention from \$24.9 million in Phase I to approximately \$68.2 million per year, an

increase of 174% or approximately \$43.3 million. Changes to this estimate are from adjustments to two programs:

- **Tobacco.** Despite the decrease of the overall smoking rate, smoking rates for some populations and preventable deaths from tobacco use are still high. Tobacco use is the most preventable cause of death in Washington State. Therefore, the estimate for a foundational level of spending on tobacco prevention programs has been re-estimated at \$28.8 million per year to reflect the need for a foundational program for tobacco prevention and cessation.
- **Healthy Eating and Active Living.** HEAL is an emerging set of programs and ideas that works to make healthy choices easier choices. Obesity and other health conditions impacted by inactivity and poor nutrition are rising. Based on discussion with the State Department of Health (DOH), Local Health Jurisdictions (LHJs), the Technical Workgroup, and a HEAL subgroup developed to focus on this area, the estimate for spending on HEAL has been re-estimated at \$28.8 million per year.

Environmental Public Health. Revisions increased the estimate for foundational spending on Environmental Public Health from \$95.8 million in Phase I to \$104.7 million per year, an increase of 9% or about \$8.9 million per year.

CHRONIC DISEASE AND INJURY PREVENTION

Tobacco

In order to determine an effective spending level to promote state and local tobacco prevention programs in Washington, we researched national, other state, and prior Washington program efforts. The research showed that prior Washington spending levels for tobacco prevention programs had shown effective results in lowering the smoking rates among adults, youth, and vulnerable populations. In recent years, Washington's tobacco prevention spending has decreased. Following the research, a subset of the Technical Workgroup was convened comprised of employees from the Department of Health and representatives from two local health jurisdictions.

The focus of this work was to analyze what would be an effective level of financial resources to allocate to tobacco prevention programs in the State of Washington to align with the foundational public health services definition in this area. The tobacco subgroup took the Technical Workgroup's high-level direction on overall magnitude, and discussed how to refine that estimate and how best to split the program's responsibilities between DOH and the LHJs.

Reviews of spending and tobacco usage showed that Washington's tobacco program spending levels from the mid- to late-2000s (about \$26 million per year, or \$3.81 per capita) correlated with a decrease in the smoking rate. This success was achieved even though Washington's spending was significantly lower than the Center for Disease Control's (CDC) recommended tobacco program spending of \$9.94 per capita, or \$67 million per year.

However, the 2014 Surgeon General report "*The Health Consequences of Smoking – 50 years of Progress*" shows that, while the overall smoking rate for adults and youth has decreased, smoking rates for some populations as well as deaths from tobacco use are still high. There is a significant disparity in tobacco usage rates across race, ethnicity, education level, and socioeconomic status. Tobacco use is the

leading cause of preventable deaths in King County and Washington State.¹ Therefore, the need for tobacco prevention programs is far from over and still important to the State’s public health.

Revised Estimate and Responsibilities

In the mid- and late-2000s, tobacco prevention spending in Washington State was more heavily weighted toward spending by DOH than at the local level because the programs were more focused on statewide prevention efforts. In order to better address the diversity of populations and locations going forward, the Technical Workgroup recommended allocating the majority of tobacco spending to LHJs. Future efforts will be more focused on location-oriented interventions and special groups with elevated rates, which are best served through community efforts that are place-based and culturally appropriate. Additionally, the Food and Drug Administration is currently funding youth advertising campaigns; therefore, DOH would have less need for media campaigns and statewide outreach.

Based on the 2007-2009 biennium’s statewide tobacco prevention spending levels, adjusted for inflation and population growth, an effective tobacco prevention program in Washington would cost about \$28.8 million per year statewide. For the purposes of creating a foundational cost estimate that includes allocations between DOH and LHJs, the Technical Workgroup recommends an allocation of 40% to the State DOH and 60% to LHJs. This ratio implies that approximately \$17.3 million would be allocated among 35 LHJs throughout Washington State.

The focus of the Technical Workgroup was not to plan detailed programming; however, they developed broad descriptions of the types of activities that DOH and LHJs could potentially be responsible for. Some suggestions for State DOH programs and LHJ programs are as follows.

State DOH	Local Health Jurisdictions
<ul style="list-style-type: none"> • Evaluation and surveillance of tobacco use • Monitor Essential Health Benefits (EHB) and Affordable Care Act (ACA) implementation and provide guidance to LHJs and Community Based Organizations (CBOs) • Support capacity building for LHJs and other partners and CBOs • Work with Educational Service Districts (ESDs) to coordinate in-school efforts • Operate Quitline • Provide policy support to achieve smoke-free housing and colleges • Develop targeted statewide media campaigns and communications 	<ul style="list-style-type: none"> • Partner with schools and school districts for youth prevention and cessation efforts • Partner with CBOs to target prevention and cessation within subpopulations • Develop and communicate best practices for outreach to communities of color, communities with high obesity rates, and low-income communities • Partner with efforts around holistic health improvement to improve community health and reduce likelihood of tobacco use • Promote policy development, such as smoke-free housing, parks, and/or colleges • Support local media and social media efforts

¹ Tan, Thanh. [The Seattle Times](#). “Still smoking? More illnesses linked to tobacco use” January 22, 2014.

Healthy Eating and Active Living (HEAL)

Healthy Eating and Active Living (HEAL) is an emerging set of activities, policies, and ideas that works to make healthy eating and active living more available, convenient, and easier for people. In short, the healthy choice should be the easy choice. Due to the increased access to unhealthy foods and the decrease of physical activity in our society, many adults and youth show high levels of inactivity and obesity which can lead to severe health problems.

HEAL programs can work to increase activity and healthy eating for youth and adults. Youth programs can focus on healthy school lunch programs, and increasing physical activity at school and home. Adult programs can focus on creating more opportunities for activity and healthier food options within workspaces and cities in order to promote healthier lifestyles for all. Additionally, cities can promote healthy lifestyles through zoning regulations, healthy food options for employees, and employee wellness promotions.

Similar to the tobacco research, we researched national, other state, and prior Washington Department of Health program efforts. Given that this is an emerging area, the available research and the historical spending in Washington State did not provide a confident insight into the type and level of spending that would be effective in creating positive outcomes in the population. A subset of the Technical Workgroup, comprised of the consultant, DOH, and LHJ representatives, was convened to discuss an appropriate level of funding.

The purpose of this work was to determine what areas to focus spending on and how much money to allocate. The HEAL subgroup reviewed the implications of the Technical Workgroup's high level directions and discussed how best to split the program's responsibilities between DOH and the LHJs. In order for an overall state program to function effectively and efficiently, this division of tasks and responsibilities is important to determining which level, State or Local, is more effective at overseeing varied tasks.

Obesity and health conditions related to inactivity and poor nutrition are rising. Compared with tobacco, there is less history and available research about effective levels of spending by public health agencies to address these issues. Based on the experience among the FPHS Technical Workgroup practitioners, spending levels similar to the suggested amount for Tobacco Prevention would likely be necessary to create significant progress towards encouraging healthy eating and active living in Washington.

Revised Estimates and Responsibilities

An annual level of spending similar to the tobacco program would be approximately \$28.8 million per year. The Technical Workgroup believes that a divide weighted towards local jurisdictions could best address the complex underlying factors that contribute to obesity and related illnesses. At a 60% distribution to local jurisdictions, \$17.3 million would be allocated to LHJs.

The focus of the Technical Workgroup was not to plan detailed programming; however, they have developed broad descriptions of the types of activities that the state and LHJs could potentially implement.

Some suggestions for State DOH programs and LHJ programs are as follows.

State DOH	Local Health Jurisdictions
<ul style="list-style-type: none"> • Evaluation and assessment • Best practices research and development; act as a resource for LHJs and partners • Coordinate regional activity of local organizations by supporting “hubs” • Coordinate with Office of Superintendent of Public Instruction and partner with educational service districts • Partner with statewide early learning and childcare providers • Partner with state and regional transportation entities to coordinate HEAL work such as Complete Streets and Safe Routes to School • Work with workers organizations to improve worksite HEAL work • Work with State Parks & Recreation to incorporate HEAL elements into planning, program, and design • Select statewide media campaigns 	<ul style="list-style-type: none"> • Work with local transportation jurisdictions to promote Complete Streets and Safe Routes to School • Work with local jurisdictions to incorporate HEAL elements into parks and recreation plans, programs, and design • Encourage local jurisdictions to institute healthy zoning regulations that result in clean, walkable communities • Partner with schools to prioritize and coordinate HEAL work, such as physical education and nutrition education • Partner with tribes to prioritize and coordinate HEAL efforts • Partner with community based organizations to coordinate HEAL work and develop culturally appropriate materials for subpopulations with high rates of obesity • Multi-faceted efforts to create a local message environment promoting healthier choices

Environmental Public Health

The Technical Workgroup wanted to revisit the Phase I estimate for the environmental public health program to focus on two areas: environmental public health services that aren’t supported by fees and emerging efforts in land use planning and sustainable development. The Technical Workgroup felt that the Phase I estimates may have understated the needed level of effort in these programs.

Staff from DOH and representatives from Public Health-Seattle King County, Kitsap County, and Klickitat County LHJs worked together to thoroughly review the model’s Phase I estimate and provide reasonable adjustments. They recommended specific adjustments within each sub-element of environmental public health.

To incorporate these adjustments into the cost model, the additional FTEs were added to the existing set of cost data originally provided by the nine sample LHJs. FTE adjustments were averaged across the LHJs and scaled by population. Where FTE additions were specific to certain functions (such as marine water quality work), FTEs were only added to counties with similar characteristics.

Costs were assigned to each FTE based on average labor and non-labor costs per-FTE at each LHJ according to the relationships in the previous cost estimate.

Revised Estimate and Responsibilities

This environmental public health subgroup recommended the following adjustments to the environmental public health cost estimate:

- LHJ staffing increases (between 0 FTEs at small LHJs and 4.5 FTEs at the largest LHJs) in toxicologists to support work around toxic exposures.
- LHJ staffing increases (between 0 FTEs at small LHJs and 2.5 FTEs at the largest LHJs) in environmental health specialists to support mandated inspections and oversight, including land use planning related to drinking water, and inspection and monitoring of pools and bathing beaches.
- LHJ staffing increases for LHJs with marine water borders (between .05 and 12.25 FTEs) to support water quality work, shellfish monitoring, and on site sewer monitoring and testing.
- DOH staffing increase of 6 FTEs (3 health physicists and 3 environmental health specialists) to do work around radon at the state and local support level.
- LHJ and DOH staffing increases (between 0 and 7 FTEs at LHJs and 7 FTEs at DOH) to conduct adequate land use planning and built environment work.

Adding these FTEs to each of the samples and scaling them to other jurisdictions using the base scaling and elasticity factors resulted in an increase of \$8.9 million statewide. Approximately \$1.5 million of this increase is from increased DOH activities and approximately \$7.4 million is spread across the 35 LHJs.

APPENDIX A: SUMMARY OF METHODOLOGY AND DATA LIMITATIONS

Methodology

All the estimates shown were developed with careful consideration by the Technical Workgroup, with consultant support. The FPHS Cost Estimate was developed as follows:

Estimating DOH Costs

Source: Washington State Department of Health

1. **DOH provided direct estimates of the cost** of fully providing each of the foundational public health services.

Estimating LHJ Costs

Source: Nine sample jurisdictions [Chelan-Douglas (112,880 people, 30 FTEs), Clark (435,500 people, 79 FTEs), Grant (91,800 people, 20 FTEs), Lincoln (10,675 people, 7 FTEs), NE Tri (64,600 people, 28 FTEs), PHSKC (1.98 million people, 1,138 FTEs), Spokane (480,000 people, 217 FTEs), Walla Walla (59,500 people, 25 FTEs), and Whatcom (205,800 people, 74 FTEs)]

1. **Gather Estimates from Sample Jurisdictions.** BERK gathered cost estimates of what it would take to fully provide foundational services from a sample of nine jurisdictions through a combination of data requests and phone interviews. The nine jurisdictions represented a cross section of LHJ sizes, geographies, and governance structures.
2. **Scale Sample Estimates Statewide.** The primary tool for creating the LHJ statewide cost estimate was a flexible, assumption-driven financial model. The basic steps of the model are described below.
 - a. **Translate sample data into per-unit cost factors for direct service costs.** The costs provided were scaled to the magnitude of identified cost drivers in each LHJ's service area (e.g.

population, rates of tuberculosis infection, number of restaurants) to create a cost factor for each service that was based on the number of driver units within the jurisdiction. The resulting cost factors describe the relationship between direct service costs and specific cost drivers. The model also provided the ability to develop cost factors based on specified groupings of LHJs, or for all LHJs in aggregate.

- b. **Apply overhead and indirect rates.** Factors, structured as a percentage cost increase applied to direct service costs, were developed for overhead and indirect costs that allow for appropriate scaling of the direct service costs up to a total cost of service. These factors were designed to capture the relevant costs associated with doing business, such as rent, facility maintenance, and administration.
 - c. **Apply elasticity factors to account for economies of scale.** The model provided the ability to apply an elasticity percentage to each service's cost factor to control how costs scaled across the LHJs. Elasticity assumptions allow the model to define what portion of costs are "variable" (i.e., changing with the underlying cost driver) and what portion of costs are "fixed" (i.e. remain stable for all types of organizations).
 - d. **Scale per-unit costs to all jurisdictions statewide.** The model used the three inputs developed above (direct service cost factors, overhead and indirect percentages, and elasticity assumptions) to create an estimate for every LHM in the State. These individualized estimates include the number of FTEs and the costs for direct service and indirect and overhead needs for each element of the foundational services. Costs were scaled based on the magnitude of the chosen cost drivers at each jurisdiction. Cost factors could be applied to all LHJs or subsets of LHJs based on specified groupings. These groupings helped address variances in LHJs, such as size, or geography.
3. **Finalize statewide foundational cost estimate.** The final step in developing the statewide foundational cost estimate was to work with the Technical Workgroup to analyze the model's outputs using alternative scenarios for cost drivers and elasticity factors, and develop a consensus Technical Workgroup estimate.

In order to bring qualitative input and subject matter expertise into the estimate, the process included multiple work sessions with the Technical Workgroup and the sample jurisdictions that provided data to refine the assumptions in the model. These work sessions were integral to creating a reasonable and justifiable estimate of foundational costs.

Key Data Limitations

- The estimate for DOH was based on the judgment of key program staff.
- The estimate for LHJs includes the following limitations:
 - Nine sample LHJs were used to estimate costs for all 35 LHJs. These 9 LHJs were assumed to be a representative sample of all LHJs statewide.
 - The model takes into account some variations across LHJs, such as population served, but does not account for all variances (such as governance structure or delivery models).
 - Given these limitations: the statewide estimate for LHJs is reasonable and likely in the correct range. However, estimates may not reflect potential cost implications for individual LHJs.
 - It is based on the judgment of LHM leaders.

APPENDIX B: REVISED KEY EXHIBITS FROM PHASE I REPORT

Revised Cost Estimate

The revised cost estimate of providing the foundational services statewide is about \$380 million per year, Exhibit 2 presents the full results of the Technical Workgroup’s efforts to develop a cost estimate, showing the statewide foundational cost estimate broken down into individual programs and capabilities and split between costs at the state level and costs at the local level.

Exhibit 2
Revised Estimate of Providing Foundational Public Health Services Statewide for DOH and LHJs

Services Ranked By Cost	Total Estimated Cost of FPHS	State Dept. of Health	Local Health Jurisdictions	State DOH ■ LHJs	
				State DOH	LHJs
Foundational Capabilities	75,695,000	27,750,000	47,945,000	37%	63%
A. Assessment	11,345,000	5,410,000	5,935,000	48%	52%
B. Emergency Preparedness and Response	10,825,000	3,620,000	7,205,000	33%	67%
C. Communication	3,960,000	750,000	3,210,000	19%	81%
D. Policy Development and Support	4,415,000	1,115,000	3,300,000	25%	75%
E. Community Partnership Development	4,885,000	860,000	4,025,000	18%	82%
F. Business Competencies	40,265,000	15,995,000	24,270,000	40%	60%
Foundational Programs	304,510,000	151,640,000	152,870,000	50%	50%
A. Communicable Disease Control	33,760,000	9,010,000	24,750,000	27%	73%
B. Chronic Disease and Injury Prevention	68,180,000	27,895,000	40,285,000	41%	59%
C. Environmental Public Health	104,695,000	35,205,000	69,490,000	34%	66%
D. Maternal/Child/Family Health	25,175,000	13,765,000	11,410,000	55%	45%
E. Access/Linkage with Clinical Health Care	65,585,000	62,145,000	3,440,000	95%	5%
F. Vital Records	7,115,000	3,620,000	3,495,000	51%	49%
Total Cost	380,205,000	179,390,000	200,815,000	47%	53%

Source: DOH, 2014; Participating LHJs, 2014, and BERK, 2014.

About 63% of the cost of providing the foundational capabilities is at the local level, and about 37% is at the state level. For the foundational programs, about 50% of the cost of is at the state level, and about 50% is at the local level. Within the programs, the distribution between state and local responsibility varies significantly.

It’s important to remember that the responsibilities of DOH and the LHJs are different within each of the services, so it was expected that the share of costs would vary by element. However, the shared split of the total estimate between state and local costs strongly reflects the cooperative relationship between DOH and the LHJs in providing public health services in Washington.

Exhibit 3 shows how much of the revised estimate comes from each of the capabilities and programs for the total statewide cost, for only DOH, and for the LHJs in total.

Exhibit 3
Revised Estimate Foundational Costs by Service as a Percent of Total Cost for DOH and LHJs

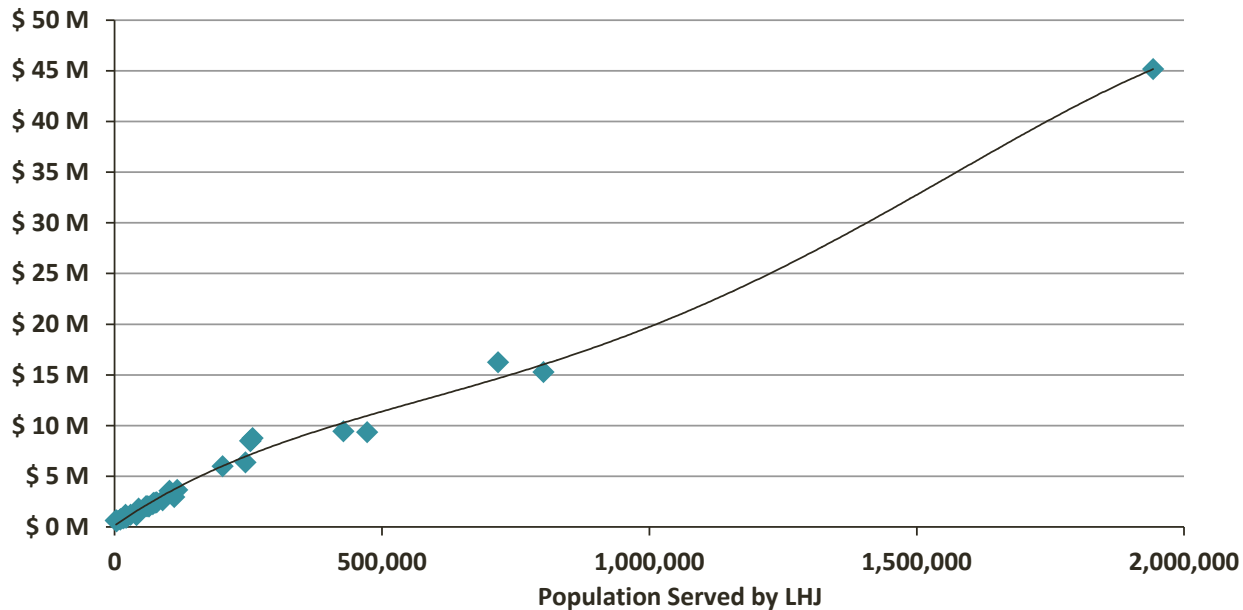
Services Ranked By Cost	Total Estimated Cost of FPHS	State Dept. of Health	Local Health Jurisdictions
Foundational Capabilities	75,695,000 20%	27,750,000 15%	47,945,000 24%
F. Business Competencies	40,265,000 11%	15,995,000 9%	24,270,000 12%
A. Assessment	11,345,000 3%	5,410,000 3%	5,935,000 3%
B. Emergency Preparedness and Response	10,825,000 3%	3,620,000 2%	7,205,000 4%
E. Community Partnership Development	4,885,000 1%	860,000 0%	4,025,000 2%
D. Policy Development and Support	4,415,000 1%	1,115,000 1%	3,300,000 2%
C. Communication	3,960,000 1%	750,000 0%	3,210,000 2%
Foundational Programs	304,510,000 80%	151,640,000 85%	152,870,000 76%
C. Environmental Public Health	104,695,000 28%	35,205,000 20%	69,490,000 35%
B. Chronic Disease and Injury Prevention	68,180,000 18%	27,895,000 16%	40,285,000 20%
E. Access/Linkage with Clinical Health Care	65,585,000 17%	62,145,000 35%	3,440,000 2%
A. Communicable Disease Control	33,760,000 9%	9,010,000 5%	24,750,000 12%
D. Maternal/Child/Family Health	25,175,000 7%	13,765,000 8%	11,410,000 6%
F. Vital Records	7,115,000 2%	3,620,000 2%	3,495,000 2%
Total Cost	380,205,000	179,390,000	200,815,000

Source: DOH, 2014; Participating LHJs, 2014, and BERK, 2014.

Exhibit 3 shows that about 80% of the revised cost estimate is generated from the cost of providing the foundational programs, and about 20% is from the cost of providing the foundational capabilities. This percentage varies for DOH (85% for programs and 15% for capabilities) and for the LHJs (76% for programs and 24% for capabilities), but in general the cost of providing the programs is significantly higher than the cost of providing the foundational capabilities.

The LHJ cost estimate was built from the ground up by modeling the cost of providing the foundational services for each of the State's 35 LHJs individually. Exhibit 4 shows the foundational cost estimate for each LHJ compared to the size of the population they serve.

Exhibit 4
Revised Estimated Annual Cost of Providing Foundational Public Health Services by Local Health Jurisdiction Compared to Population Served



Source: DOH, 2014; Participating LHJs, 2014, and BERK, 2014.

PUBLIC HEALTH IMPROVEMENT PARTNERSHIP FOUNDATIONAL PUBLIC HEALTH SERVICES | PHASE II

Foundational Public Health Services Current Spending Estimate September 9, 2014

INTRODUCTION

The purpose of this document is to provide an overview of current public health spending in Washington State and the funding sources that support it. The document begins with a summary of all public health spending at the State Department of Health (DOH) and local health jurisdictions (LHJs). The second section focuses in on the estimated amount that each of these entities is currently spending on foundational public health services (FPHS).

DATA SOURCES

DOH spending and revenue information comes from two different sources:

- **DOH 2011-13 operating budget.** The overarching spending and revenue information is from the 2011-13 operating budget for DOH. The amounts have been adjusted to reflect one year of spending from the biennial information.
- **DOH-provided estimates of foundational public health spending.** During Phase I data collection, DOH provided an element-level estimate of current spending on foundational public health services as well as an estimate of how and if each of these services is currently being funded.

LHJ spending and revenue information comes from two different sources:

- **DOH Budget Accounting and Reporting System (BARS) Data.** BARS is a uniform system prescribed by the Washington State Auditor's Office that the State and local governments are required to follow by Washington State law. Jurisdictions report their expenditures and revenues against a defined set of categories that can be used for consistent reporting across local jurisdictions. Annually, DOH collects detailed BARS data from LHJs.
- **LHJ-provided estimates of foundational public health spending.** During Phase I data collection, nine LHJs provided cost estimates of what it would take for their organization to provide the foundational public health services. They provided estimates at the element level.

OVERVIEW OF PUBLIC HEALTH EXPENDITURES

Public health is provided by a mix of local and state agencies, and shared-services and regional arrangements. This section provides an overview of the total governmental public health spending in Washington State by DOH and the 35 LHJs. While there are other public health related functions that are provided by entities other than the DOH and local LHJs, DOH and LHJs are the backbone of the broader system and comprise the governmental public health system in Washington State.

The Technical Workgroup wanted to understand what funding is available to DOH and the LHJs, where that money comes from, and where that money goes. The following analysis describes how much money is in the governmental public health system in Washington.

Washington State Department of Health

Exhibit 5 summarizes the State DOH's state fiscal year (SFY) 2013 operating budget.

Exhibit 5
DOH Operating Budget for All Public Health Services (SFY 2013)

	SFY 2013 Operating Budget
Total DOH Operating Budget	\$ 561,500,000
Investments at LHJ level	\$ (56,900,000)
Subtotal	\$ 504,600,000
Large Grant Programs (pass-throughs to other agencies)	
WIC	\$ (126,900,000)
Prevention Health Block Grant	\$ (900,000)
Community Transformation Grant	\$ (4,400,000)
DOH Budget	\$ 372,400,000

Source: Washington State Department of Health, 2013.

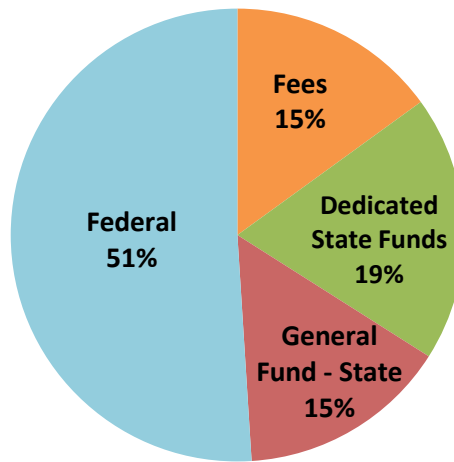
The DOH budget includes a mix of expenditures that stay within the state's operations as well as pass-through funds. In SFY 2013, DOH had an operating budget of \$561.5 million. However, more than one-third of this budget went to other programs and agencies:

- About 23% of the total operating budget (\$126.9 million) was for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which provides federal grants to states for supplemental foods, health care referrals, and nutrition education for woman and children.
- Approximately 10% of the operating budget (about \$56.9 million) is funds that are invested at the LHJ level. This amount is netted out of the spending amount because these dollars are accounted for in the LHJ analysis described below.
- Another nearly 1% is funding from the Prevention Health Block Grant and Community Transformation Grant.

Removing the above identified pass-through dollars and grant-funded programs results in approximately \$372.4 million in spending that supports DOH and other community partner public health activities and services.

Exhibit 6 summarizes the high-level funding sources for the \$561 million operating budget shown above.

Exhibit 6
DOH 2011-13 Biennial Operating Budget for All Public Health Services by Funding Source



Source: Washington State Department of Health, 2014.

- Approximately 51% is from federal sources. This amount encompasses some of the large grant programs noted in Exhibit 1, such as WIC.
- Approximately 15% is from dedicated fee accounts. The State charges fees for many environmental public health services, as well as health professionals and facility licensing work.
- Approximately 19% is from other state dedicated accounts.
- The remaining 15% is from the State General Fund.

Local Health Jurisdictions

Local Health Jurisdiction Characteristics

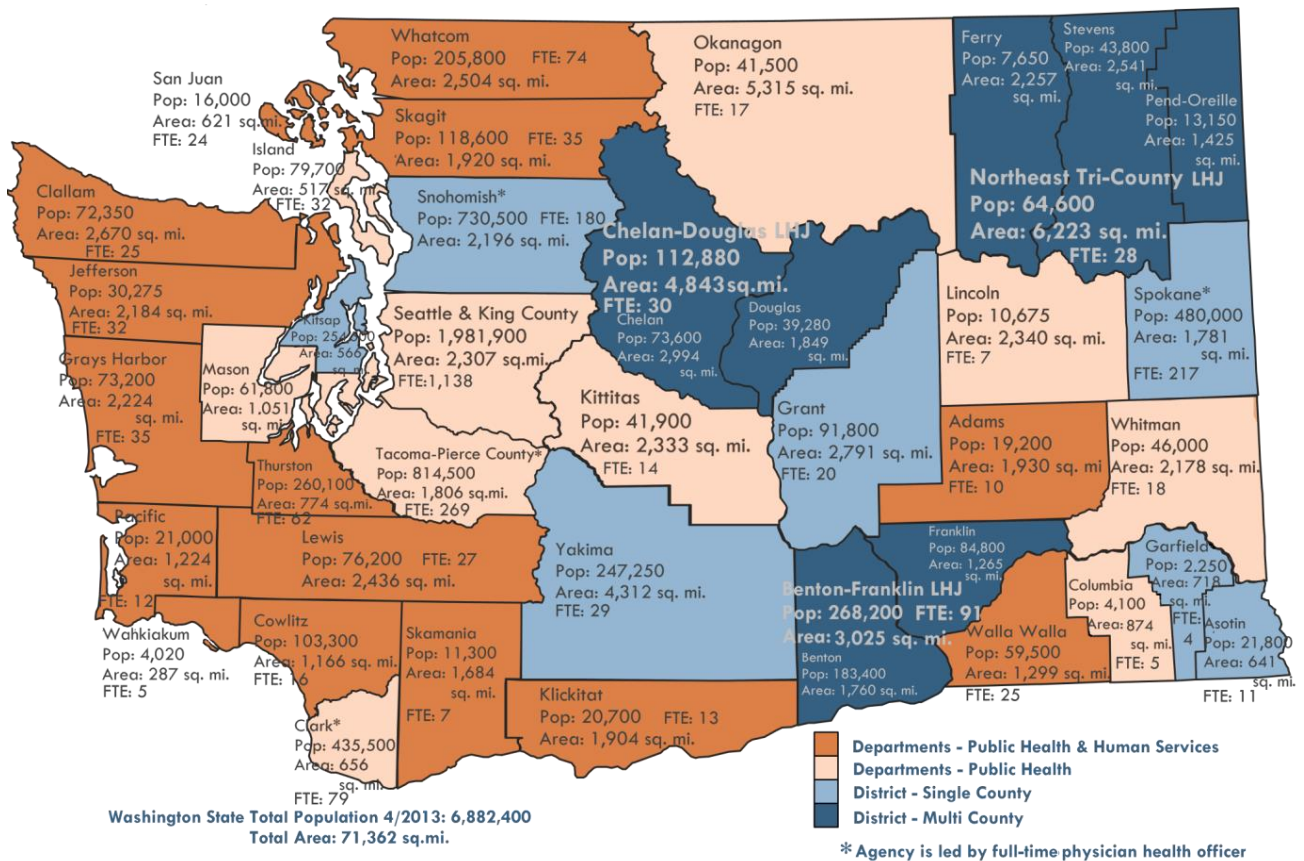
Understanding current spending by local health jurisdictions is complicated because of Washington’s decentralized network of local public health providers. Washington’s 35 LHJs vary significantly in ways that impact their current funding and expenditures, and how they might address funding and service challenges going forward. Many factors contribute to difference among LHJs, such as:

Organizational model	Geography	Population served	Local characteristics
<ul style="list-style-type: none"> • Governance • Structure • Revenue mix • Service delivery methods 	<ul style="list-style-type: none"> • Physical features • Area • Urban/suburban/rural • Density 	<ul style="list-style-type: none"> • Wealth • Race/Ethnicity • Special needs 	<ul style="list-style-type: none"> • Health issues • Preferences and priorities • Culture

The implication of these differences is that state-wide shifts in funding and in policy are likely to impact individual LHJs and their service population differently.

Exhibit 7 displays Washington State’s diversity of LHJs in terms of the size of their service population, their full-time equivalents, and the square mileage of the service area. The colors refer to the organizational structure of the LHJ. Existing multi-county districts tend to cover large geographic areas, up to 6,223 square miles in the Northeast Tri Counties, with relatively low population density.

Exhibit 7
Map of LHJs with Selected Characteristics Shown



Source: BERK, 2014.

LHJs serve the needs of their respective jurisdictions through a variety of organizational and funding combinations. The size of LHJs ranges from a low of 4 Full Time Equivalent employees (FTE) in Garfield County, up to 1,138 FTE at Public Health-Seattle King County (PHSKC).

The following analysis focuses on funding for local health jurisdictions in 2011, which is the latest year for which all data is available. All amounts shown have been adjusted to 2013 dollars to provide comparability to the state picture described above.

Total LHJ Funding by Funding Source

Funding sources for LHJs can be divided into three broad categories: local, state, and federal funds.

- Local sources consist of city and county government contributions; licenses, permits, and fees; and a few miscellaneous funding sources.
- State sources consist of funds, both dedicated and flexible (the Local Capacity Development Fund, SSB 5930 Fund, and MVET/I-695 Replacement Fund) from the state general fund, and funding from other state agencies.
- Federal sources consist of Medicaid, the U.S. Department of Health and Human Services, and other federal agencies. Most federal sources of funding are grants dedicated to specific purposes.

Budget Accounting and Reporting System (BARS) data from DOH was used as the basis for this LHJ analysis. BARS data categorizes, for local jurisdictions, how dollars were spent and which funding

sources are associated with each expenditure category. Exhibit 8 shows the total funding for all 35 LHJs in 2011, broken out by source and area of service. Amounts shown are adjusted for inflation to 2013 dollars.

Exhibit 8
LHJ Funding by Expenditure Category and Funding Source for All Public Health Services
(FY 2011, in 2013 dollars)

	LHJ FUNDING SOURCES				
	Local	State	Federal	Total	Percent
Administration/Policy Development	14.8 M	6.4 M	3.6 M	24.9 M	7%
Chronic Disease and Injury Prevention	5.1 M	5.7 M	5.2 M	16.1 M	5%
Communicable Diseases	15.1 M	16.0 M	17.1 M	48.2 M	14%
Environmental Health	57.1 M	9.0 M	1.3 M	67.4 M	19%
Family and Individual Health	35.4 M	12.3 M	87.3 M	135.0 M	38%
Other Public Health	24.9 M	10.0 M	24.9 M	59.8 M	17%
Vital Records	4.5 M	.1 M	.0 M	4.6 M	1%
Total	157.0 M	59.6 M	139.4 M	356.0 M	100%
Percent	44%	17%	39%	100%	

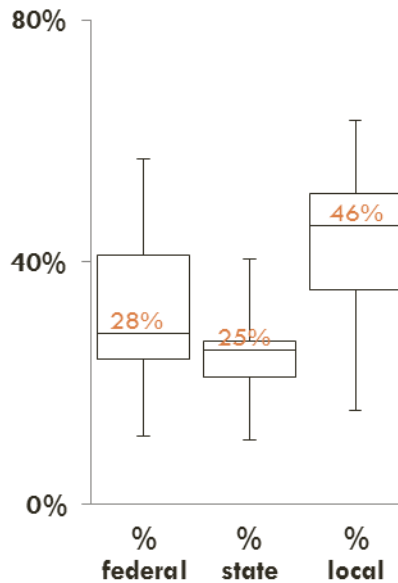
Source: BARS, 2011.

In aggregate, funding for LHJs was comprised of the following broad funding categories:

- Local funding sources made up approximately 44% of all LHJ funding in 2011, or approximately \$157 million. This is the largest source of funding for LHJs in aggregate.
- State funding sources made up approximately 17% of LHJ funding, or approximately \$59.6 million.
- Federal funding sources made up about 39% of LHJ funding in FY 2011, or about \$139.4 million.
- Most LHJ public health money is spent on Family and Individual Health activities. This category is largely funded through federal sources, and includes such items as Maternal/Infant/Child/Adolescent Health and WIC. The next largest spending category is Environmental Health, which is almost entirely supported through local funding in the form of fees.

While the above table shows LHJ funding distributions for all 35 LHJs in aggregate, Exhibit 9 displays the distribution of LHJs according to the share of their funding coming from federal, state and local sources. The label in orange marks the median, the box represents the 25th percentile to the 75th percentile range (where half the LHJs lie), and the ends of the ‘whiskers’ represent the maximum and minimum found among the LHJs.

Exhibit 9
Distribution of Share of Funding by Funding Source for LHJs for All Public Health Services



Source: BARS, 2011.

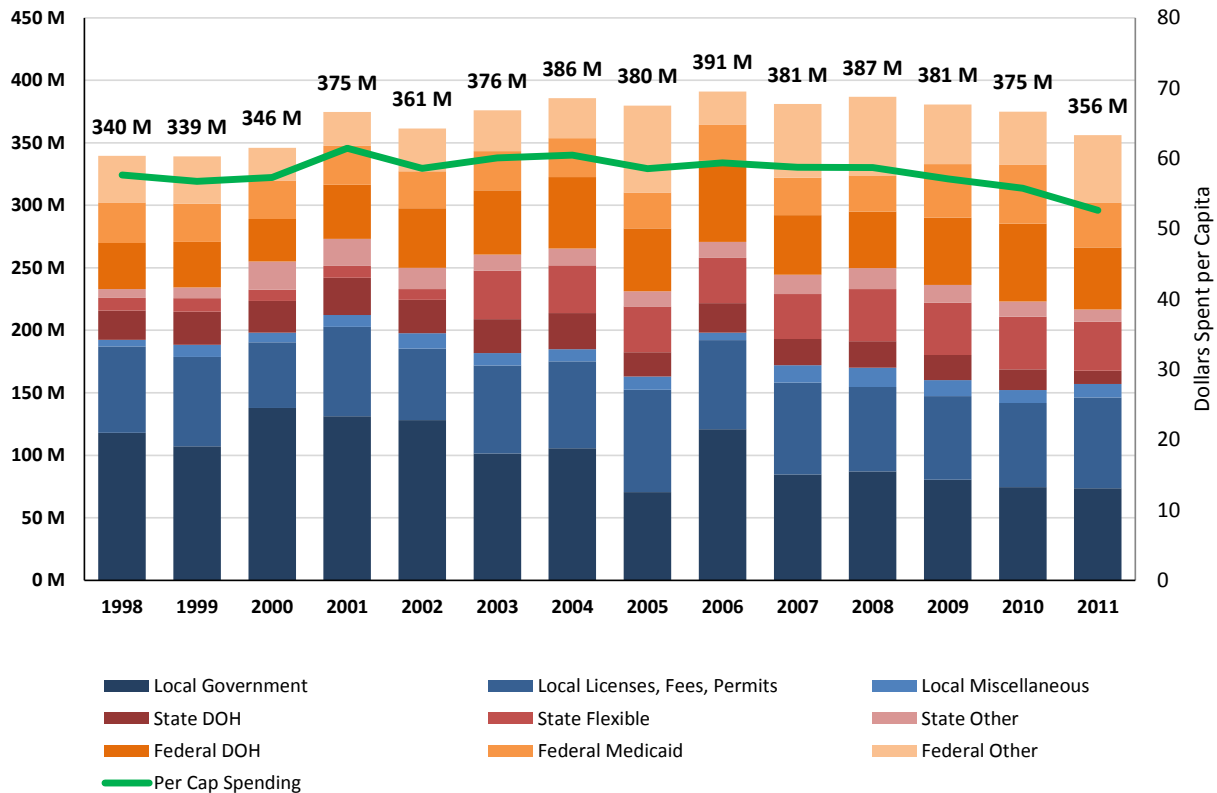
Local funding tends to make up the largest share of each LHJ's funding, federal funding is typically the second largest portion, and state funding the smallest portion. The plots illustrate, however, that this general trend does not always hold. Federal funding makes up a minimum of 11% to a maximum 57% of a LHJ's funding, and local funding makes up 15% to 63%. The share of LHJ funding comprised of state dollars is within a more compact range of 11% to 41%, with half the LHJs quite close to the median of 25%.

Of course, as the map in Exhibit 7 illustrated, LHJs serve vastly different size populations and geographic areas, so it is not altogether surprising that their resources might vary to match the need or available funding in their area.

LHJ Funding Trends

Exhibit 10 shows total spending, and how that spending was funded, from 1998-2011, for all 35 LHJs in aggregate.

Exhibit 10
LHJ Spending by Funding Source for All Public Health Services (1998-2011, in 2013 dollars)



Source: BARS, 1998 – 2011.

The chart highlights how the distribution of funding sources has changed over time.

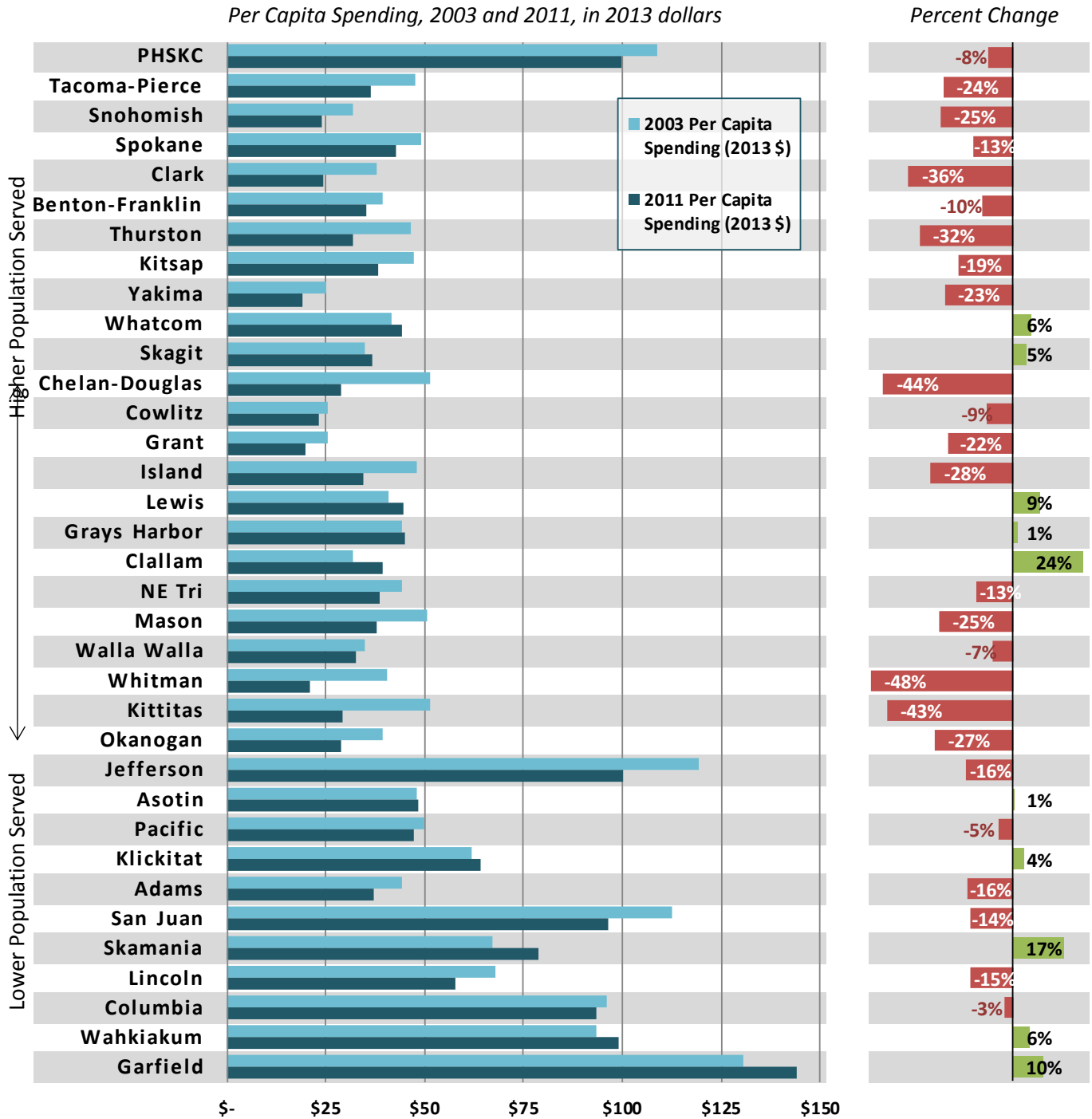
- In 1998, local funding sources supported approximately 57% of public health spending by LHJs, federal spending comprised about 31%, and state funding made up the remaining 12%
- By 2011, local funding had decreased to about 44% of public health spending by LHJs. State funding had grown from 12% to 17%, and federal funding had grown from 31% to 39%.

Exhibit 6 also highlights a decline in overall LHJ funding since 2006 in inflation-adjusted dollars. This decrease in spending is more severe when compared to population growth in Washington State. In 1998, per capita spending was approximately \$58 per resident of Washington State. This increased to approximately \$61 in 2001, but has declined to approximately \$53 in 2011.

Additionally, the per capita spending for LHJs varies significantly. Per-capita amounts ranged from \$19 to \$144 in 2011, depending on the LHJ.

As shown in Exhibit 11, for many specific LHJs, the decrease in funding has been more significant. Some LHJs have experienced a decrease in per-capita funding of as much as 48% since 2003.

Exhibit 11
Comparison of 2003 and 2011 Per Capita Spending by LHJs for All Public Health Services
(in 2013\$)



Source: BARS, 2003-2011; and BERK, 2014.

Local Funding Sources for LHJs

Local funding sources made up approximately 44% of all LHJ funding in 2011, or approximately \$157 million per year. This is the largest source of funding for LHJs in aggregate. Within the broad category of local funding:

- Local government general fund allocations comprised \$73.7 million. The median per capita funding from local government general funds for LHJs was about \$7.00 in 2011, but LHJs ranged from nearly zero dollars per capita to as much as \$27.00 per capita.
- Local licenses, fees and permits comprised \$72.4 million. The programs primarily funded by licenses, fees, and permits are environmental public health and vital records. LHJs have varying abilities to leverage local license and fee revenues from the populations and businesses in their service area. While the median per capita revenue from licenses and fees is \$9.00, funding ranges from \$1.00 per capita to \$36 per capita.
- Local miscellaneous funding comprised \$10.9 million. The median rate of miscellaneous per capita funding was slightly less than \$1.00 per capita, with a range from \$0 up to \$6.00.

State Funding Sources for LHJs

State funding sources made up approximately 17% of LHJ funding, or approximately \$59.6 million. State funding consists of multiple revenue streams from the Department of Health, general fund allocations, and funding from other state agencies:

- State DOH funding comprised \$10.7 million. According to BARS data, 2011 LHJ per capita funding from State DOH ranged from \$0 to \$4 per capita, with a median amount of \$1.30 per capita.
- State flexible funding comprised \$39.2 million. State flexible funding exhibits a significant range of per capita funding by LHJ, ranging from \$2.50 per capita up to \$50 per capita. The median funding amount is about \$5.50 per capita.
- Other state funding comprised \$9.6 million. This funding represents funding from other state agencies that supports LHJ public health activities. The median LHJ funding amount from other state agencies was about \$1.15, with a range of between \$0 and \$9 per capita.

Federal Funding Sources for LHJs

Federal funding sources made up about 39% of LHJ funding in FY 2011, or about \$139.4 million. The majority of federal funding that supports LHJs goes toward maternal, child, and family health programs, such as WIC. Federal funding is tracked in three categories:

- Federal funds passed through DOH to LHJs comprised \$49.6 million. The median per capita funding for LHJs is about \$7.50, with a range of \$2.00 to \$60.00 per capita.
- Federal Medicaid funding comprised \$36.2 million. The median per capita funding for LHJs is about \$0.25, with a range of \$0 to \$17.40 per capita.
- Other federal funding comprised \$53.6 million. The median per capita funding for LHJs is about \$2.25, with a range of \$0 to \$19.40 per capita. This includes major federal grants for MCH, chronic disease prevention, and other public health programs.

System Total

Between the LHJs and State DOH, annual spending on public health is approximately \$861 million per year (in 2013 dollars). Exhibit 12 summarizes this statewide total

Exhibit 12

Summary of Annual Spending for DOH and LHJs on All Public Health Services (in 2013 \$)

	Funding Sources			
	Local	State	Federal	Total
DOH Budget	-	265.1 M	296.4 M	561.5 M
<i>LHJ Pass-throughs</i>				<i>(56.9 M)</i>
LHJ Spending	157.0 M	59.6 M	139.4 M	356.0 M
Total Statewide				860.5 M

Source: Washington State Department of Health, FY 2013 Operating Budget; BARS for LHJ Spending, 2011 data adjusted to 2013 dollars; and BERK, 2014.

FOUNDATIONAL PUBLIC HEALTH SPENDING

This section describes what portion of the systemwide spending above is currently spent on foundational public health services. The estimates below were developed with input from DOH and the LHJs, as there are not consistent data systems in place that track spending according to the specific definitions newly developed for the FPHS framework.

Washington State Department of Health

During the Phase I data collection process, DOH provided estimates of its current spending on each of the foundational public health services, based on its FY 2013 operating budget. Exhibit 13 summarizes the data provided.

Exhibit 13

DOH Estimated Spending on FPHS (FY 2013)

	Federal	Dedicated state	State			Total FPHS Spending
			General Fund	Fee/License	Other	
Foundational Capabilities	9.38 M	0.24 M	6.00 M	10.48 M	0.06 M	26.17 M
Assessment	2.18 M	0.00 M	1.92 M	0.70 M	0.00 M	4.80 M
Emergency Preparedness	2.79 M	0.00 M	0.00 M	0.00 M	0.00 M	2.79 M
Communication	0.10 M	0.00 M	0.50 M	0.14 M	0.00 M	0.75 M
Policy Development and Support	0.15 M	0.00 M	0.77 M	0.20 M	0.00 M	1.12 M
Community Partnership Development	0.28 M	0.00 M	0.22 M	0.36 M	0.00 M	0.86 M
Business Competencies	3.87 M	0.24 M	2.58 M	9.09 M	0.06 M	15.85 M
Foundational Programs	32.89 M	1.90 M	23.13 M	72.93 M	0.54 M	131.39 M
Communicable Disease Control	3.67 M	0.00 M	1.24 M	0.05 M	0.00 M	4.96 M
Chronic Disease and Injury Prevention	4.54 M	0.00 M	3.24 M	0.80 M	0.09 M	8.67 M
Environmental Public Health	11.55 M	1.90 M	6.44 M	10.45 M	0.00 M	30.34 M
Maternal/Child/Family Health	9.04 M	0.00 M	0.00 M	0.00 M	0.00 M	9.04 M
Access/Linkages with Clinical Health Care	1.24 M	0.00 M	4.25 M	56.56 M	0.10 M	62.15 M
Vital Records	0.36 M	0.00 M	3.26 M	0.00 M	0.00 M	3.62 M
Lab	2.49 M	0.00 M	4.71 M	5.06 M	0.35 M	12.61 M
Total Expenditures by Fund Source	42.26 M	2.15 M	29.13 M	83.41 M	0.60 M	157.55 M

Source: Washington State Department of Health, 2013.

Of the \$561.5 spent by DOH annually, about \$157.6 million is spent on FPHS. This amount is currently funded by the following sources:

- Fee, license and permit funding provides \$83.4 million, about half of the entire amount.

- The majority of fee, license, and permit revenue (about 80%) is directed toward access and linkage with clinical health care activities (68% - mainly health professionals and facilities licensing) and environmental public health (12%)
- Federal funds provide \$42.3 million and are the second largest source of funds.
 - About 70% of this federal funding goes to support four foundational programs: about 27% goes toward environmental public health, 21% to maternal/child/family health, 11% to chronic disease and injury prevention, and 9% to communicable disease control.
- State general funds comprise approximately \$29.1 million annually. State general funds are spread fairly evenly across the foundational programs.
- Other dedicated state sources and miscellaneous funds make up the remaining \$2.8 million per year.

Local Health Jurisdictions

An estimate of current foundational public health spending for LHJs was more complicated to develop. The first challenge is that, using our survey process from Phase I, we only collected cost and funding information for nine LHJs in the system. While these data points provided a solid basis for estimating the cost of foundational public health services and the current spending on those services, the diversity of approaches to funding public health activities noted above made these data points less useful for understanding the current funding by source for foundational services.

The primary data source available to understand LHJ spending and funding sources is BARS. The BARS system categorizes costs and expenditures using different BARS codes that LHJs report their spending against. While this system provides a consistent data source for all 35 LHJs, the challenge is in understanding how to best align BARS codes with the foundational public health services definitions.

This analysis estimates that of the \$356 million in public health spending by LHJs each year, approximately \$141 million is spent on foundational public health services. Further detail on this analysis is provided below.

BARS Codes that Contain Foundational Public Health Services

The first step in refining the total LHJ spending number of \$356 million per year into an estimate of spending on foundational services was to understand which BARS codes contain activities and services that we have defined as foundational. This process was accomplished by DOH and members of the Technical Workgroup reviewing the definitions for public health BARS codes.

Excluding all BARS codes that did not contain any foundational activities or services resulted in a spending subtotal of \$209.8 million per year.

This subset of \$209.8 million still contains many expenditure areas that are not included in the foundational public health services definitions, because BARS codes descriptions do not align consistently with the FPHS definitions. In most cases, a BARS code that contains one of the foundational services also contains expenditures on additional important services. Therefore, the FPHS Current Spending Estimate will be a subset of this \$209.8 million.

Estimating Current Spending on Foundational Public Health Services

Our approach to refining the subset of relevant BARS codes into an estimate of foundational spending was based on comparing two known data sets: (1) BARS expenditures and (2) provided cost sample data for the nine LHJs that participated in our Phase I data collection.

At a high level, this analysis compared these two data sets, and extrapolated the findings to the BARS data for the remaining LHJs using similar scaling factors and groupings as the Draft Cost Estimation Model. These steps are outlined in more detail below.

4. **Identify which BARS codes contain foundational services.** The first step in this analysis was to exclude all public health spending that is definitely not foundational by excluding BARS codes that contain no foundational activities.
5. **Estimate what percent of these BARS codes are comprised of foundational spending.** Since BARS codes don't align perfectly with the foundational definitions, the second step was to further refine the analysis by estimating how much of each BARS code was foundational expenditures. This analysis relied on comparing BARS data with the cost sample data from our nine sample LHJs.
 - a. Aggregate BARS data for the nine sample LHJs into the seven major FPHS buckets (six programs + capabilities) for which we estimated current spending.
 - b. Categorize the sample cost data from the nine LHJs into the same seven FPHS buckets.
 - c. Aggregate BARS and sample cost data by LHJ size categories to mitigate variances and average out service delivery differences.
 - d. BARS spending in each size category and for each element was compared to the LHJ-provided cost estimate in the same category.
 - i. Where the LHJ-provided cost estimate was higher than the BARS spending amount in that category, 100% of the BARS data was assumed to be spent on foundational services and was included in the estimate of current foundational spending.
 - ii. Where the LHJ-provided cost estimate was lower than the BARS spending amount in that category, the percent difference between the categories was applied, and so only a subset of the BARS data was assumed to be spent on foundational services and therefore included in the estimate of current foundational spending.
 - iii. Using this information, a discount percentage was created for BARS data for each FPHS expenditure category for every size category of LHJ.
 - e. Apply the percentages developed in Step D to the BARS spending data for all LHJs, using the appropriate factors for each LHJ size category.
6. **Finalize the current spending estimate.** In order to bring qualitative input and subject matter expertise into the estimate, the process included multiple work sessions with the Technical Workgroup. These work sessions were integral to creating a reasonable and justifiable estimate of current spending.

Exhibit 14 summarizes the results of this analysis, which estimates that approximately \$141 million is currently spent on foundational public health services per year. The table shows how each of the BARS spending categories was adjusted in order to arrive at this estimate.

Exhibit 14
Foundational Public Health Spending Estimate for LHJs, from BARS Analysis
(FY 2011, in 2013 dollars)

Foundational Public Health Services	Expenditures in BARS Categories Containing FPHS Activities	Percent of Category Estimated as Foundational	FPHS Current Spending Estimate for LHJs
Foundational Capabilities	40.6 M	89%	36.3 M
Communicable Disease Control	46.5 M	42%	19.4 M
Chronic Disease and Injury Prevention	7.1 M	96%	6.8 M
Environmental Public Health	64.6 M	100%	64.6 M
Maternal/Child/Family Health	46.3 M	20%	9.4 M
Access/Linkage Clinical Health Care	.0 M	0%	.0 M
Vital Records	4.4 M	100%	4.4 M
Laboratory	.0 M	0%	.0 M
TOTAL	209.8 M	67%	141.0 M

Source: BARS, 2011; and BERK, 2014.

Note: All of the elements in foundational capabilities were aggregated into one line item to account for inconsistent data recording across LHJs in the specific categories of business competencies, assessment, communication, community partnership development, policy development, and emergency preparedness

This methodology does not purport to estimate the exact spending on foundational services. However, it is designed to provide a reasonable insight into the amount of money that was spent on these services in FY 2011. The methodology is also designed to be conservative about how it discounts each BARS category, to mitigate the chance of underestimating current foundational spending:

- Where the LHJ-provided estimate was higher than the BARS spending amount in that category, we assumed 100% of the BARS data in that category was currently spent on foundational services. It's likely that, even on areas that are funded below what the sample said is required, there are still dollars being spent toward non-foundational services. If we were able to quantify that spending, it would further reduce the estimate of \$141 million.
- The analysis takes the nine LHJ sample sets, which were an estimate of what *should* be spent on foundational services, and sets them as the metric for what *is being spent currently* at each of those LHJs. Again, this results in a conservative estimate, because if we were able to quantify exactly how much is being spent at each organization today on foundational services, it would result in a lower estimate of overall current spending on FPHS.

Some additional key data limitations of the above methodology include:

- Given that DOH's budget structure is not aligned with FPHS definitions, some judgment calls were made to categorize spending into the FPHS definition.
- For LHJs, the estimate uses BARS as a consistent data source across LHJs.
- LHJs have some discretion over how to categorize expenditures in BARS, and some types of spending are categorized inconsistently between LHJs.
- BARS codes don't align perfectly with FPHS definitions, so judgment calls were made to categorize spending into FPHS categories and to assign costs between FPHS and AIS.

PUBLIC HEALTH IMPROVEMENT PARTNERSHIP FOUNDATIONAL PUBLIC HEALTH SERVICES | PHASE II

Estimated Foundational Public Health Services Funding Gap September 9, 2014

INTRODUCTION

The purpose of this white paper is to summarize the methodology and key policy questions related to estimating the gap between the cost of providing a uniform level of foundational public health services statewide and the current spending on those services.

This document uses the work to-date on estimating the cost of providing foundational services statewide (FPHS Cost Estimate) and the current spending on foundational services (FPHS Current Spending Estimate). It uses these two estimates as a stepping-off point to understanding the Estimated FPHS Funding Gap – the amount of funding that would be needed, in addition to current spending, to deliver a uniform level of foundational services statewide.

The Estimated FPHS Funding Gap is not simply the difference between the estimate of current spending and estimate of FPHS costs. This document outlines the relationship between these estimates, and the important assumptions included in developing the Estimated FPHS Funding Gap.

ESTIMATED FPHS FUNDING GAP FINDINGS AND METHODOLOGY

Summary of Findings

The Technical Workgroup developed a process and methodology to estimate how much it would cost to provide FPHS, how much is currently spent on FPHS, and the gap between the cost to provide FPHS (FPHS Cost Estimate) and the current spending on FPHS (FPHS Current Spending Estimate). Exhibit 15 summarizes the results of the Technical Workgroup's efforts.

Exhibit 15
FPHS Cost Estimate, Current Spending Estimate, and Estimated Gap by Program for DOH and LHJs (2013 \$)

Program	Service Delivery	(1)	-	(2)	=	(3)	+	(4)	=	(5)	
		FPHS Cost Estimate		FPHS Current Spending Estimate		Preliminary FPHS Gap		FPHS Gap Adjustments (a) Exclude LHJ Spending Above Estimates (b) Exclude Uncertain Revenue		Estimated FPHS Gap	
Foundational Capabilities	DOH LHJs	\$ 27.8 M \$ 47.9 M		\$ 26.2 M \$ 36.3 M		\$ 1.6 M \$ 11.6 M		- \$ 1.6 M		\$ 0.0 M \$ 1.9 M	\$ 1.6 M \$ 15.1 M
Environmental Public Health	DOH LHJs	\$ 35.2 M \$ 69.5 M		\$ 30.3 M \$ 64.6 M		\$ 4.9 M \$ 4.8 M		- \$ 7.8 M		\$ 0.0 M \$ 0.0 M	\$ 4.9 M \$ 12.6 M
Communicable Disease	DOH LHJs	\$ 9.0 M \$ 24.8 M		\$ 5.0 M \$ 19.4 M		\$ 4.0 M \$ 5.4 M		- \$ 0.9 M		\$ 0.0 M \$ 0.8 M	\$ 4.0 M \$ 7.1 M
Chronic Disease & Injury Prev.	DOH LHJs	\$ 27.9 M \$ 40.3 M		\$ 8.7 M \$ 6.8 M		\$ 19.2 M \$ 33.4 M		- \$ 0.0 M		\$ 0.0 M \$ 0.0 M	\$ 19.2 M \$ 33.4 M
Access/Linkage to Clinical Health Care ⁶	DOH LHJs	\$ 62.1 M \$ 3.4 M		\$ 62.1 M \$ 0.0 M		\$ 0.0 M \$ 3.4 M		- \$ 0.0 M		\$ 0.0 M \$ 0.0 M	\$ 0.0 M \$ 3.4 M
Maternal/ Child/ Family Health	DOH LHJs	\$ 13.8 M \$ 11.4 M		\$ 9.0 M \$ 9.4 M		\$ 4.7 M \$ 2.0 M		- \$ 2.0 M		\$ 0.0 M \$ 2.1 M	\$ 4.7 M \$ 6.0 M
Vital Records	DOH LHJs	\$ 3.6 M \$ 3.5 M		\$ 3.6 M \$ 4.4 M		\$ 0.0 M (\$ 0.9 M)		- \$ 1.2 M		\$ 0.0 M \$ 0.0 M	\$ 0.0 M \$ 0.3 M
Laboratory ⁷	DOH LHJs	- -		\$ 12.6 M -		(\$ 12.6 M) -		- -		\$ 0.0 M -	(\$ 12.6 M) -
DOH Total		\$ 179.4 M		\$ 157.6 M		\$ 21.8 M		\$ 0.0 M		\$ 0.0 M	\$ 21.8 M
LHJ Total		\$ 200.8 M		\$ 141.0 M		\$ 59.8 M		\$ 13.4 M		\$ 4.8 M	\$ 78.0 M
Total Statewide		\$ 380.2 M		\$ 298.5 M		\$ 81.6 M		\$ 13.4 M		\$ 4.8 M	\$ 99.9 M

Source: Washington State Department of Health, 2013; Data from 9 sample LHJs, 2013; State Auditor's Office Budget Accounting Reporting System (BARS), 2013; and BERK, 2014.

Notes: ⁶ The estimates for this program are still being refined due to emerging issues primarily related to the implementation of the Affordable Care Act (ACA). These estimates may change as a result of continuing work.

⁷ Funding data for DOH's laboratory was provided independently from cost information. On the cost side, laboratory is included within the programs that the lab supports. However, current spending and revenues for the DOH laboratory are all included in the laboratory line item. The total gap for DOH is the sum of the gap within each program and the \$12.6 M listed as laboratory revenue. LHJ lab data are included in relevant program areas.

Methodology

(1) FPHS Cost Estimate. The draft estimate of the cost to provide FPHS is \$380.2 M per year. About 47% (or \$179.4 M) is for services provided by DOH, and about 53% (or \$200.8 M) is for services provided by LHJs. Development of this estimate is explained in the working paper titled *Foundational Public Health Services Revised Cost Estimate*.

(2) FPHS Current Spending Estimate. Annual current spending on FPHS is about \$298.5 M. About 53% (or \$157.6 M) is spent by DOH, and about 47% (or \$141 M) is spent by the LHJs. This spending represents only a portion of total statewide spending on public health. Combined, spending on all public health services totals about \$860.5 M per year for DOH and the LHJs. Development of this estimate is explained in the working paper titled *Foundational Public Health Services Current Spending Estimate*.

(3) Preliminary FPHS Funding Gap. The preliminary estimate of the gap in funding for FPHS was generated by simply subtracting the current estimate of FPHS spending from the estimated cost of providing a uniform level of FPHS. As discussed below, this estimate was further adjusted to produce the Estimated FPHS Funding Gap.

(4) FPHS Funding Gap Adjustments. For DOH, the Estimated FPHS Funding Gap is simply the difference between the agency's FPHS Cost Estimate and its FPHS Current Spending Estimate. Both numbers were estimated directly by DOH during the data collection process.

The process for LHJs was more complex, as data challenges and the number of LHJs resulted in two types of adjustments:

- a. **At the program level, exclude LHJ spending above estimates.** About \$13.4 million, or 3.5%, of current spending was excluded, because it was being spent at LHJs where the FPHS Current Spending Estimate for this program was higher than the FPHS Cost Estimate for this program.

The FPHS Current Spending Estimate for LHJs is based on BARS, and therefore is not a precise estimate, though it is the best available information. Given this imprecision, for a few LHJs, BARS-estimated spending exceeds the FPHS cost estimate for that LHJ generated by the cost model. While all differences are within an expectable range of error given the underlying data, the question arises of how to handle this amount in estimating the gap. If such additional spending was counted it would be misleading because the gap for LHJs is meant to describe the amount needed to bring all LHJs up to a uniform level of FPHS. Since spending at one LHJ cannot be assumed to cover deficits at a different LHJ and spending on one program should not be assumed to be available to cover deficits in another program at the same LHJ, spending above the cost estimate was excluded when estimating the Gap.

- b. **At the program level, exclude uncertain revenues.** About \$4.8 million, or 1.2%, of current spending was excluded because it was supported by grant revenues that were considered by the Technical Workgroup to be uncertain going forward. While there are some grants that have been stable over many years, revenues of that kind were not excluded. In some cases, funding being used for specific foundational programs is highly unstable and the Workgroup considered it unwise to depend on such sources to support foundational activities into the future. The workgroup took a conservative approach that excluded only the most uncertain dollars. The exclusions fell into the following categories:

Foundational Capabilities. About \$1.9 million of current spending was excluded for this category. The excluded amount was funded from federal sources which the Technical Workgroup considered too uncertain to support foundational capabilities. The Workgroup felt it is especially problematic to fund cross-cutting business competencies with such dollars, because these basic agency functions must be performed even if grants go away.

Communicable Disease Control. About \$0.8 million of current spending was excluded. This included fees and grant funding that support current spending that the Workgroup considered too unstable to support foundational communicable disease control activities. (Again, other grant funds were not excluded because they are more stable.)

Maternal/Child/Family Health. About \$2.1 million of current spending was excluded. The excluded amount included federal funding, which the Technical Workgroup considered too uncertain to support foundational maternal/child/family public health activities.

(5) Estimated FPHS Funding Gap. This column shows the estimated amount needed, in addition to current spending, to support provision of FPHS (as defined) statewide. The Estimated FPHS Funding Gap is \$99.9 M. For DOH, the Estimated FPHS Funding Gap is about \$21.8 M. For LHJs, it is about \$78.0 M. *It's important to note that the Estimated FPHS Funding Gap is not simply the difference between the Cost Estimate and the Current Spending Estimate, as noted above.*

The purpose of this working paper is to describe how the Estimated FPHS Funding Gap was developed, and how important policy questions around additional important services, categorical funding, and fee funding were addressed by the Technical Workgroup.

Key Data Limitations

The above methodology results in some key limitations to keep in mind when discussing how to address the Estimated FPHS Funding Gap:

- For DOH, the same challenges that limit the accuracy of the Cost Estimate and the Current Spending Estimate limit the accuracy of the Estimated FPHS Funding Gap, including:
 - The FPHS Cost Estimate was based on the judgment of key program staff.
 - Given that DOH's budget structure is not aligned with FPHS definitions, some judgment calls were also made to categorize spending into the FPHS definition.
- Similarly, for LHJs, the data challenges and limitations that underlie the components of estimating the gap (the FPHS Cost Estimate and FPHS Current Spending Estimate) include:
 - Nine sample LHJs were used to develop the FPHS Cost Estimate for all 35 LHJs. These 9 LHJs were assumed to be a representative sample of all LHJs statewide.
 - The FPHS Cost Estimation Model takes into account some variations across LHJs, such as population served, but does not account for all variances, such as governance structure or delivery models.
 - For LHJs, the Current Spending Estimate uses BARS as a consistent data source across LHJs. Since LHJs have some discretion over how to categorize expenditures in BARS, some types of spending are categorized inconsistently between LHJs.
 - BARS codes don't align perfectly with FPHS definitions, so judgment calls were made to categorize spending into FPHS categories and to assign costs between FPHS and AIS.

Given these limitations: the statewide Cost Estimate, Current Spending Estimate, and Estimated FPHS Funding Gap for DOH and for all LHJs in aggregate are reasonable and likely in the correct range. However, the estimates may not reflect potential implications for individual LHJs.

KEY ASSUMPTIONS DISCUSSED BY THE TECHNICAL WORKGROUP

Before developing a methodology for how to estimate the gap between what it would take to provide FPHS statewide and current spending, it was important for the Technical Workgroup to work through a few key technical questions. The Technical Workgroup's viewpoint on these questions formed the basis for how the gap was estimated and what components were or were not included in the calculation.

Many of these questions will also be discussed by the Policy Workgroup in more detail, and a framework for thinking further about these questions is included in the working paper titled *Service Delivery and Funding Alignment Option Development*. The purpose of the information included below is to describe the assumptions included in the FPHS Funding Gap.

These questions fall into three main categories:

- Current spending on additional important public health services
- Fee revenues
- Grant (categorical) revenues

The balance of this paper focuses on each of the above topics as they relate to developing the Estimated FPHS Funding Gap.

Additional Important Public Health Services

There are many additional important public health services not included in the foundational definition. Foundational public health services are defined as the services that no one should be without statewide, and which are necessary everywhere in order to support operation of an effective system. Additional important services include those needed to address important local health risks or community priorities. In some cases, these activities are oriented toward individual, direct service instead of population-based services included in the foundational definition.

Money currently being spent on non-FPHS services at each LHJ is a mix of local, state, and federal dollars. The amount of spending varies across LHJs, as does the distribution of funds by source. There is no standard across jurisdictions; non-FPHS revenue streams are largely contingent on grants or local funding mechanisms, and spending decisions are often driven by grant requirements or community priorities.

When considering whether or not current spending on AIS could be used as a source to address the Estimated FPHS Funding Gap, it was important to consider the following challenges:

- **AIS spending maximizes community benefit.** Generally, jurisdictions and agencies leverage available revenues to maximize overall impact to their community. For example, a budget may include using flexible funding to pay the required match on a grant that brings significant dollars into the community or the state. Even if this grant supports AIS, the flexible funding was leveraged in a way that if it were moved to support FPHS, the community would lose the important service that the grant provides. Those types of unintended consequences are important to consider when discussing whether or not funding currently spent on AIS could support FPHS instead.
- **AIS spending may not be movable.** Money currently spent on AIS can't necessarily be redirected to foundational services, even if policymakers are willing to reduce the level of AIS being provided statewide or in a specific community. A large portion of AIS spending is from grants and fees that are dedicated for those specific services.
- **Local priorities are important.** A benefit of Washington State's decentralized public health system, with service provision highly distributed to the county level, is that locally driven health priorities can be meaningfully supported. There is a need for flexible dollars to be available to LHJs to spend on these local priorities in order for the system to work.

Given these challenges, the Technical Workgroup felt that any assumptions about using these revenues to address the Estimated FPHS Funding Gap should be carefully considered through a rigorous policy analysis process. Therefore, no redistribution of revenue sources from AIS to FPHS was assumed when developing the Estimated FPHS Funding Gap.

Fee Revenues

Another assumption that the Technical Workgroup discussed before deciding on the methodology to develop the Estimated FPHS Funding Gap was if the gap calculation should include assumptions about:

- Which foundational public health services should be funded by fees.
- How much of the cost of certain programs should be covered by fees.

It is expected that fee revenues will come up as an area to potentially find "new" revenues during the policy process. Policy makers will likely be interested in understanding if fees are being charged for all

appropriate services, and if the fee levels are recovering a reasonable portion of the cost of those services, before considering the need for new public funding.

Which foundational public health services should be funded by fees?

The Technical Workgroup first discussed if there are any services that should be supported by fees that aren't currently. The following table summarizes the main services and activities for which fees are currently charged.

FPHS Element	
Foundational Programs	
Environmental Public Health	<ul style="list-style-type: none"> • Drinking water: Operating permits for public water systems, water plan review, system inspections • Wastewater management: Wastewater and reclaimed water use, sewer plan review, on-site system permits • Community food safety: Restaurant inspections, food worker cards • Radiation protection: use of radioactive materials, inspections of industry uses • Water recreation facilities • Shellfish operation license, inspections of commercial shellfish companies
Access/ Linkage with Clinical Health Care	<ul style="list-style-type: none"> • Healthcare professional licenses/certification • Healthcare facilities licenses/certification
Vital Records	<ul style="list-style-type: none"> • Birth and death certificates

The Technical Workgroup felt that DOH and the LHJs are already charging fees for the activities and services where it makes sense to do so. Therefore, no adjustments were made to the Estimated FPHS Funding Gap based on assumed new fee revenues.

Should there be a cost recovery target for fee-based services?

One suggestion that has come up in FPHS discussions is whether there should be an established level of cost recovery set for fee-supported services. The Technical Workgroup considered if a set level of cost recovery should be assumed as a baseline when estimating the FPHS Funding Gap. This theoretical level would then inform the amount of a service's costs that a jurisdiction would be required to fund through fees before using other public funding.

The Technical Workgroup identified that the current variation in cost recovery levels among LHJs is driven by a number of complex factors, including:

- **Board of Health or county political decisions.** In some jurisdictions, fee-setting policy makers such as the Board of Health, have made the choice that fees shouldn't recover 100% of costs because constituents already pay for portions of the service through tax dollars.
- **Economic Development.** Policy goals can also affect the price of fee-supported services across different LHJs. For example, to attract business or to incent use of a service, a community might choose to reduce the price of fees (e.g. restaurant inspections) and cover the cost through other funding.

- **Historical context.** In some jurisdictions, fees have remained stable or grown very slowly. Over time, as costs increased more quickly, fees have recovered a lower and lower portion of program costs. However, adjusting fees now would result in significant increases on consumers given the delay in tracking revenues to costs.
- **Fixed Costs.** To provide any type of service there are fixed costs and variable costs. For larger jurisdictions, full cost recovery can be easier because larger LHJs serve a larger population, which means fixed costs are spread over more people, resulting in lower costs per person for services. For smaller jurisdictions, full cost recovery can be challenging, as large fixed costs per person can result in high fees. To prevent a service from becoming cost prohibitive, some small LHJs charge an affordable fee and then fund the difference with other revenues. Shared services across jurisdictions can also reduce the high per capita costs associated with smaller service areas.

The Technical Workgroup felt that, given these complexities and the potential implications of changing requirements, this concept should be discussed by policy makers going forward. Therefore, the Estimated FPHS Funding Gap does not include any assumptions about increasing cost recovery rates of fees.

Categorical Revenue

Categorical funding is money targeted for specific purposes. While fees (described above) are technically a categorical revenue source, categorical funding for the purpose of this analysis is defined as financial assistance from the state or the federal government, usually in the form of grants, intended for specific programs, activities, and functions. With categorical public health funds, priorities are set by the funder, so DOH and LHJ flexibility is limited in how those funds are spent.

Categorical funding has advantages and disadvantages. Categorical funds are meant to create a more equitable public health resource allocation system by giving DOH and LHJs the opportunity to provide a service they otherwise may not be able to afford. So, though the funds are restricted, they make some types of services for struggling communities a possibility.

However, because categorical funds are restricted, DOH and LHJs can't always use the money for the areas where there is the greatest need or in ways that they know to be most efficient. In addition, they can't always rely on categorical funds as a steady source of revenue. By its very nature, the funding reflects the funder's priorities, and priorities are always changing.

The Technical Workgroup devoted considerable discussion to the concept of whether all or some categorical funding should be considered a sustainable source of funding for foundational services, and came to the decision that some categorical funding should not be assumed to continue when developing the Estimated FPHS Funding Gap. The key discussion questions and points that resulted in this decision are described below.

Which foundational services should be supported by grants, and how much of their costs should grants cover? Are there some grants that shouldn't be considered a stable source of funding?

If Foundational Public Health Services are intended to be a set of public health services that are available to all residents and communities statewide, then it is worth considering the role categorical funding should play in providing these services. The risk inherent in relying on categorical funds is important to the policy discussion on providing sustainable funding for public health.

No one grant can be assumed to carry over year to year. However, the question of whether or not grants should therefore be considered appropriate to fund FPHS is more nuanced. For example, while DOH or a LHJ may not be confident about the long-term availability of a particular grant, that grant funding is still available to them in the current year.

Some grants, especially at the federal level, have proven their longevity and stability over time, and are likely appropriate to be funding foundational services. However, some grants are less predictable and using those funds to support foundational services increases the risk that funding will need to be backfilled as federal priorities change in the future.

The Technical Workgroup discussed each of the foundational programs and capabilities individually, and made the following assumptions when developing the Estimated FPHS Funding Gap:

- **Reliance on grants should be minimized for Foundational Business Competencies.** While there are no grants that directly support business competencies, most categorical funds allow allocations for overhead and indirect costs. However, these allocation percentages often don't support the full cost of indirects and overheads related to a grant program. Additionally, when grants come and go, the ability to provide basic business competencies is impacted by changes in public health priorities. This dynamic is counter to the FPHS framework, which strives for a consistently provided set of foundational capabilities. In light of this viewpoint, the estimated gap excludes uncertain grant funds that are currently supporting business competencies.
- **Reliance on grants should be minimized for other Foundational Capabilities.** Similarly to business competencies, many foundational capabilities are services that need to be provided consistently over time, so it is important to minimize their reliance on changing categorical revenue streams. Even though some capabilities, such as emergency preparedness, are almost entirely supported by grants today, the Technical Workgroup felt that ongoing federal funding levels are uncertain and may not be relied on at the same level going forward.
- **Reliance on grants should be minimized for Foundational Maternal/Child/Family Health (MCH) services.** Some MCH services are almost entirely supported by grants. However, the Technical Workgroup felt that, while there are multiple stable and long-term grants that support MCH services generally, these grants are for specific programs that are important but not defined as foundational. Therefore, policy makers should try to minimize the amount of federal funding used to support the foundational portion of MCH spending.
- **Reliance on grants and fees should be minimized for Foundational Communicable Disease Control services.** There are some fee and federal categorical revenues that currently support communicable disease control. The Technical Workgroup felt that some of these revenue streams are too uncertain to be funding the foundational portion of Communicable Disease services going forward, and should therefore be excluded from consideration when estimating the gap.

The financial impacts of these Technical Workgroup assumptions are described on page 3, section (b), related to exclusion of uncertain funding.

The Policy Workgroup should keep these assumptions in mind when discussing the Estimated FPHS Funding Gap and decisions around categorical funding as the process moves forward.

PUBLIC HEALTH IMPROVEMENT PARTNERSHIP

FOUNDATIONAL PUBLIC HEALTH SERVICES | PHASE II

Service Delivery and Funding Alignment Option Development

September 9, 2014

INTRODUCTION

Over the past two years, the Foundational Public Health Services (FPHS) Technical Workgroup has developed a set of definitions for what constitutes FPHS, a cost estimate for what it would take to provide FPHS statewide, an estimate of how much is currently spent on FPHS, and the gap between current spending and the cost estimate.

The next step in the FPHS process is to develop options for how to address the Estimated FPHS Funding Gap. The purpose of this paper is two-fold:

- **Define the problem we are addressing.** This paper describes the challenge that public health currently faces in Washington State, including both the estimated gap between service costs and funding, as well as longer-term structural challenges that need to be addressed to ensure adequate service delivery in the future.
- **Explore potential options to reform governmental public health.** This paper identifies a framework for how to think about policy option development, and presents potential options for the Workgroups to consider around how to align the FPHS definitions, service delivery, and funding.

This document includes the following sections:

1. **Defining the Challenge: How to address the Estimated FPHS Funding Gap**
2. **Understanding the Challenge: Background and Context**
3. **Addressing the Challenge: Option Development**

1. DEFINING THE CHALLENGE: HOW TO ADDRESS THE ESTIMATED FPHS GAP

This section introduces a potential way to think about the challenge of addressing the Estimated FPHS Gap. It's important to first understand how options around definitions, funding alignment, and service delivery are interrelated.

What do we know about our current challenge?

Public health's current crisis is a problem of both *amount* of funding and *structural misalignment* of funding and costs:

- The **amount of funding challenge** is captured, preliminarily, in the Estimated FPHS Gap of \$99.9 million. This estimate reflects the difference between what is currently being spent on foundational public health services

The FPHS Framework

Foundational public health services (FPHS) include the six capabilities and six programs that should be provided at a uniform level statewide.

FPHS are only a subset of the full complement of services provided by public health in Washington State. Additional Important Services (AIS) are defined in the framework as everything outside of the foundational definition.

It's imperative to remember throughout this process that AIS also contains extremely important services. AIS often address critical local public health risks or specific service needs, but may not be needed at a uniform level statewide.

and what it would take to provide those services, as defined, statewide. This estimate is based on a one-year snapshot in time, and therefore reflects the attributes of the system in its current state.

- The **structural challenge** is defined by the mismatch between public health’s delivery and cost structure, and how those costs grow with demand, and its revenue structure, which is based on available funding mechanisms. In short, under the current system, costs have been growing faster than revenues over time, leading to reduced purchasing power and lower per capita spending, and therefore, reduced levels of service. An ideal solution would address both of these aspects in full or at least part, by moving the growth curves for costs and revenues closer together. More details on funding and service delivery structures are provided in **Section 2**. It will be important to evaluate the degree to which potential options address the structural imbalance between cost and revenue growth when considering the value of any particular option.

How can we address the challenge?

Addressing these two challenges simultaneously will require ensuring that the system has adequate resources and that service delivery and funding mechanisms are aligned for stability and predictability in the long-term.

Within the governmental public health system, and given the laws and politics in Washington State, there are only so many ways to address the challenge of adequately and sustainably funding FPHS. The graphic below outlines the areas under which we can develop options, and the key questions to consider for each.

Addressing the Governmental Public Health Challenge Will Require Balancing Four Components			
Cost of FPHS		Revenue for FPHS	
<p>Definition of FPHS</p> <ul style="list-style-type: none"> • Could changes to the FPHS definition improve cost and revenue alignment? • What would the impacts of changes be on Washington residents? 	<p>Service Delivery Methods</p> <ul style="list-style-type: none"> • Could more services benefit from a shared, regional, or state delivery model? • Are there opportunities for more economies of scale in some services? • Could changes in service delivery or technology improve the ability to meet growing demand over time? 	<p>Existing Funding</p> <ul style="list-style-type: none"> • Could current funding be used differently to improve how well FPHS are funded? • What are the implications of moving money from other public health expenditure areas to support FPHS? 	<p>New Revenue</p> <ul style="list-style-type: none"> • Are there new sources of local funding that could support FPHS? • Are there new sources of state funding that could support FPHS? • Are there new sources of funding that could support other public health services, and therefore increase FPHS’s share of current funding?

The purpose of this paper is to identify and analyze options within each of these buckets so that costs and cost growth align with revenues and revenue growth within the governmental public health system.

2. UNDERSTANDING THE CHALLENGE: BACKGROUND AND CONTEXT

This section presents a high-level overview of the existing service delivery and funding systems of Washington's governmental public health network.

What does public health service delivery look like today?

Washington's public health network includes local public health, state public health, and tribal public health. Each is described below.

Local Public Health. The Washington State governmental public health network is a decentralized model characterized by local control. State law requires that counties bear the cost of public health services within their jurisdiction (RCW 70.05.130) and grants them the authority and responsibility for organizing these services. There are 35 LHJs in Washington that serve all 39 counties. All operate under the authority of a local board of health and may be structured in a variety of ways, as allowed in RCWs 70.05, 70.08, and 70.46:

- **Department of County Government (RCW 70.05).** This type of LHJ is a department under county government. The department head is usually accountable to the county executive or board of county commissioners, and administrative services and facilities are usually shared with other county departments. Some LHJs are stand-alone Public Health Departments, while at some counties public health is combined with human and/or social services activities to create a multi-purpose department.

23 LHJs are a department of county government, report to their county commissioners, and use county infrastructure. 13 of these are part of a department that includes health and human services and 10 are stand-alone public health departments.

- **City/County Health Departments (RCW 70.08).** 2 LHJs (Public Health Seattle-King County and Tacoma-Pierce County Health Department) operate under a charter agreement between the city and county. The charter spells out their governance structure and other operational agreements.
- **Health Districts (RCW 70.46).** Public health districts are independent, special purpose districts without taxing authority that can be created under Washington State law. A health district can consist of one or more counties. Public health districts are managed by a Board of Health, usually comprised of city and county elected officials within the district's service area. In Washington, there are a mix of single- and multi-county public health districts

10 LHJs are districts and must arrange for their own infrastructure. 7 of these serve a single county and 3 districts serve multiple counties.

State Public Health. The state level of governmental public health is comprised of two entities:

- The **State Board of Health's** mission is to provide statewide leadership in developing and promoting policies that protect and improve the public's health. Activities include reviewing and monitoring the health status of people in Washington; initiating and supporting policy development, analyzing policy proposals, providing guidance, and developing rules; promoting system partnerships; and fostering public participation in shaping the health system.
- **Washington State DOH** is an independent state agency responsible for the "preservation of public health," monitoring health care costs, maintaining standards for health care delivery, and general oversight and planning of the state's public health activities.

DOH provides both state-level services, such as database management and federal grant contracting, as well as statewide services at the local level, such as healthcare facility monitoring, health care professional licensing, radiation safety, public drinking water, and collection of vital records

Tribal Public Health. Federally recognized tribes are sovereign nations equivalent to the federal government that create their own public health laws and regulations. As such, they are not explicitly integrated into the state/local

public health network in Washington State, but rather intersect with that network in important ways. There are 29 federally recognized American Indian Tribes in the State of Washington, all of which have different population sizes, land bases, self-determination statuses, and government structures.

There are different health models among Washington tribes, including:

- 27 of the tribes in Washington State either contract or compact with Indian Health Services (IHS) so that the tribe can provide their own health services. These arrangements are sometimes referred to as “638 tribes.” A contract with IHS allows tribes to administer individual programs and services that IHS would otherwise provide. A compact is more like a block grant than a contract, giving a tribe greater management and administrative authority to administer health services.
- 2 of the tribes in Washington State receive health care services directly from the IHS.

Tribal health departments are not legally mandated by federal or state law to deliver any particular public health service. The services they deliver depend on each tribe’s vision.

Cross-jurisdictional Services. While many services are delivered by a single jurisdiction to its residents, some services are delivered through various partnerships and cross-jurisdictional shared service arrangements. Cross-jurisdictional sharing includes many kinds of relationships, including:

- Collaboration between local agencies or between a local agency and state DOH
- Shared services, where a local jurisdiction or DOH provides services directly to a (usually smaller) LHJ or the residents of a LHJ.
- Regional coordination, resources, and/or technical assistance that may be “housed” at DOH or a specific LHJ.

What does public health funding look like today?

Public health funding is a shared responsibility across federal agencies, tribes, state agencies, local governments, and some private grants. DOH, LHJs, and tribes are all providers of public health services as well as entities that manage the budgets that support public health. It’s important to note that nearly all governmental public health services are supported by the same group of people – taxpayers. Different services, depending on the funding sources, are supported by different subsets of this population (i.e., taxpayers within a specific county vs. taxpayers statewide vs. taxpayers nationwide).

Washington State DOH. For State DOH, primary revenue sources are federal categorical funding; fee, license, and permit charges for specific services; and funding from the state general fund and other state agencies. Since there are only a select number of services where it is possible or appropriate to charge directly for services, DOH relies on receiving categorical funding from the federal government and meeting its remaining budget needs through fees and legislative requests from the state general fund – both dedicated and non-dedicated.

The state general fund is primarily supported by sales tax, the state’s property tax levy, and the Business and Occupation (B&O) tax.

Local Health Jurisdictions. For LHJs, primary revenue sources are the county general fund, fees charged for specific services, federal categorical funding, state general funds that the legislature designates for specific uses (categorical funds), and state general funds that the legislature designates as flexible. In addition, there are some LHJs that are supported partially through city revenues as well, although city revenues are inconsistently used throughout the state.

As noted above, LHJ revenues from the state are generally supported by statewide sales, property, and B&O tax levies. County general funds, which are another primary funder of LHJs, receive most of their funding from a small portion of sales tax and property taxes levied on the citizens of that specific county. While there are some specific funding mechanisms that can support public health activities (such as the 1/10th of 1% sales tax that counties can levy to address chemical dependency and mental health disorders), none of the non-fee-supported services defined as foundational have an associated funding mechanism separate from general tax dollars.

Tribes. At this time, there is no available analysis of average tribal public health budget, sources of funding, or populations served by tribes in Washington State. At a high level, we know that tribes fund public health services for tribal members using a mix of (1) federal funding, which is a major source through grants and contracts, and (2) tribal enterprise dollars.

Tribes also work with the Indian Health Service (IHS), which is a federal agency within the US Department of Health and Human Services and the principal federal health care provider advocate for American Indians and Alaska Natives. Regardless of whether they contract, compact, or receive services directly from IHS, tribes provide a spectrum of public health services from their tribal clinics, health departments, and other tribal agencies.

Private Foundation Grants. All of the public health providers described above may also receive grants from private foundations with missions in public health. The Robert Wood Johnson Foundation, for example, is a philanthropy that has been highly involved in developing new public health frameworks at the national level. This type of funding usually goes toward supporting specific programs or planning efforts. Private foundation funding, however, makes up a very small part of overall governmental public health funding.

For additional detail on current public health funding, please refer to the paper titled *Current Public Health Spending*.

How has public health funding changed over time?

Over the past decade, public health spending in Washington State has declined precipitously at the local level, with some LHJs experiencing reductions in their annual budget of more than 40% since 2003. While the overall budget for the State Department of Health has increased over this time period, much of that increase has come from categorical funding dedicated to narrow purposes, while general fund revenues available for basic services have declined sharply.

It's important to note that this funding crisis has not been unique to public health – a combination of difficult economic times and laws in Washington State that have limited government's ability to increase revenues have resulted in hard decisions throughout state and local jurisdictions.

When revenues are limited, budgeting becomes a prioritization exercise. Mandated services and services with dedicated revenue streams are often resilient, as reducing funding could have legal ramifications. Other services, such as those with obvious and critical impacts like public safety, are often prioritized next to avoid immediate negative impacts to residents. Services without significant dedicated funding and without easily identifiable short-term impacts, such as public health, often receive the most severe cuts.

Below, we have outlined some of the key trends and events over the last decade that policymakers should consider during this process:

- **Revenue Cuts That Have Not Been Mitigated.** When the motor vehicle excise tax (MVET) was repealed in 2000, public health lost one of its main revenue sources that was anticipated to be adequate and sustainable, and to grow with increases in population. To partially mitigate this loss, the Legislature appropriated an amount from the state general fund equal to about 90% of lost MVET revenues at the time. While this funding continues today, the appropriation has not increased with inflation or population, reducing its purchasing power over time.
- **Limited Potential for Additional Revenue.** Since 2001, due to state legislation, property tax revenues have been limited to growth of 1% per year, plus the value of new construction. Effectively, this prohibits a primary governmental revenue source from keeping pace with changes in inflation and population. Over time, purchasing power per capita has been greatly reduced. Counties, more so than the state and cities, are highly dependent on only a few revenue sources, one of which is the property tax. Counties do not have many revenue tools except for a small portion of sales and property tax for paying for general government services.
- **Impact of Large Categorical Funding Changes.** In order to maximize total community impact, public health organizations have historically leveraged available categorical funding to address community needs. As

federal and state priorities have changed over time, the focus of public health organizations has changed as well. For example, emergency preparedness funding has grown significantly since the terrorist attacks of September 11th, 2001, while dedicated funding for tobacco has decreased. These large swings create a lack of stability in funding public health activities.

- **Competition With Other Priorities.** Every budget cycle, public health has to compete with other priorities without dedicated funding for a smaller and smaller pool of general resources. Decisions in cases such as *McCleary vs. State of Washington*, which mandates that the Legislature significantly increase education funding by 2018, create a scenario where the state is mandated to spend an increasing portion of existing revenues on activities besides public health.

Criminal justice, including corrections, incarceration, and law enforcement, is another dramatically increasing budget component at both the state and local level. While not mandated by the court like the increases in education funding, increasing costs of service along with increasing demand and rates of incarceration are straining jurisdictions with criminal justice responsibilities.

3. ADDRESSING THE CHALLENGE: OPTION DEVELOPMENT

Policy options to address the public health funding challenge will include options around system structure, service delivery, and funding alignment. This section discusses these topics separately, though it's likely that any cohesive reform package will include elements of all three.

This section proposes multiple questions and criteria for how to think about developing policy options, for the purpose of developing a framework to support the Policy Workgroup's discussions about options and recommendations within these topics.

System Structure and Service Delivery

There are multiple perspectives from which one can approach policy option development around system structure and service delivery. Below, we have outlined some of the key criteria and questions around potential changes in structure, scale, or technology that could improve public health's ability to meet demand now and in the future.

Each service and activity provided by the governmental public health network may be more or less well suited to a specific service delivery model (such as state, local, or regional service provision). While many of the currently provided services and activities are aligned with their most effective model, a criteria-based review of the public health services – both those defined as FPHS and those defined as AIS - could identify opportunities to refine the system.

It's important to note the existing successes by public health in analyzing and aligning service provision with effective and efficient service delivery structures. Most jurisdictions have made significant cuts and reforms over the past decade to both adjust to declining budgets as well as incorporate new research and best practices in delivering services.

Most jurisdictions are already actively involved in cross-jurisdictional and regionalized programs. Although further emphasis on cross-jurisdictional program delivery and streamlined management is worth exploring and could produce some savings, the Workgroup believes these gains would be small in relation to the overall problem. That said, we cannot afford to ignore any opportunities for improvement, and the concept of changes in structure and service delivery will be a part of upcoming policy discussions.

Framework for Determining Effective Service Delivery Models

As noted above, public health services have a continuum of service delivery characteristics. This section outlines some of the key characteristics of a service that policy makers should consider when determining an effective service delivery model. These characteristics provide a framework for thinking about policy options, but do not represent black and white criteria for placing a service under the responsibility of any specific service provider. Most public health services have been adequately delivered in several different ways in various states.

The key considerations below can apply to both FPHS and AIS. While the focus of this effort is to ensure statewide provision of FPHS, reform that achieves cost savings within AIS would contribute to the overall system's capacity to provide public health services and potentially free up funding to support FPHS work.

To answer the questions above, we need a set of criteria for determining effective service delivery models for each program. The continuums shown below frame BERK's draft thinking about evaluating the tradeoffs in making changes to service delivery structures. We will discuss if this seems like the right framework, and make edits, deletions, and additions to these draft evaluation tools.



Specific Local Needs

Very specific, unique needs			More generalizable needs
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- A service where local needs may vary significantly from needs in other locations may benefit from smaller scale delivery. Services that don't need locally specific components may benefit from economies of scale if delivered to a larger population.
- Where local connectivity (such as knowledge of relationships among local health care providers) is an important aspect of providing a service, the service may benefit from local delivery or larger scale delivery with some localized components.

Local Physical Delivery or Expertise

Direct delivery or local expertise			Indirect delivery or general knowledge
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- Services that require on-the-ground activity may benefit from being delivered locally (e.g., restaurant inspection or disease case investigation).
- Services that require deep local expertise (e.g., around political sensitivities or geological challenges) may benefit from a local service delivery model.

Level of Local Demand

Frequent occurrence or significant caseload			Low or infrequent demand
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- Services that don't drive demand for full-time staffing at all jurisdictions, especially smaller jurisdictions, may benefit from multiple entities sharing resources across a larger service population or geography.

Economies of Scale

Costs and demand scale similarly			Costs scale slowly compared to demand
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- If an entity has under-utilized capacity in its system (e.g., an epidemiologist who is unused a certain number of hours per week), that capacity could be shared with another jurisdiction that needs more capacity.
- A service whose cost structure is relatively fixed and does not scale quickly with demand may be able to realize economies of scale if provided to a larger population.

Technical Expertise

Low expertise need, small service area			High expertise need, larger service area
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- Services that require technical expertise and/or advanced education (e.g., epidemiology, environmental public health plan review) may benefit from being delivered at a larger scale, as it can be difficult to hire for this staff type for a smaller service population.
- Services where a center of technical expertise can be leveraged by a large service area or multiple jurisdictions (e.g., developing and identifying evidence-based policy recommendations) can improve service consistency and minimize statewide costs.

Technology

Custom, locally specific tools			Significant, shareable technology needs
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- Services that require significant technological investment (e.g., electronic lab reports, public health laboratory, and drinking water database) may benefit from a single service provider, larger service areas, or centralized technology tools such as online resources.

Necessary Statewide Standardization

Can differ locally			Standardization desired or needed
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- Services where a high level of standardization is desired or needed statewide, either by customers or regulators, (e.g., vital record collection and maintenance, radiation monitoring, health professional licensing) could benefit from delivery by a single entity.

The section below outlines some of the key questions and considerations the Technical Workgroup has discussed.

Opportunities Related to Scale

- Are there programs or services that would benefit from moving to a state, shared, or local service delivery model from how they are currently delivered? The Technical Workgroup discussed the following under this topic area:
 - **Having a single entity conduct development of communication materials, messaging, and media campaigns.** The group noted that this is happening a lot already, but there may be an opportunity in the newly expanded tobacco and healthy eating, active living (HEAL) programs to be implemented in this way, as long as local input is maintained. Workgroup's cost estimates in this area assumed state-local collaboration of this type.
 - **Having a single entity or a regional partnership provide administrative functions for smaller LHJs.** The group noted that many smaller LHJs are departments of counties, so some administrative functions are already provided by the county and are shared across all county departments. However, public health-specific functions such as contracting, federal grant management, and reporting may benefit from this type of arrangement. The group acknowledges that some smaller jurisdictions may benefit from this model, but its potential for cost savings are small given the level of partnership already occurring.
 - **Having a single entity or a regional partnership support LHJs in policy research (i.e. identifying the evidence-based policy options) and expertise.** The group felt that a regional or single entity that had expertise available to research and identify best practices could be helpful in giving guidance and for bulk contracting for research work. However, actual work with local policy makers must still be conducted locally.
 - **Creating centers of expertise for Tobacco, HEAL, and injury prevention services that can serve as regional hubs.** The group noted that public health has already had many successes in this area, such as shared contracts for tobacco policy experts, the Community Transformation Grant collaboration, and some emergency preparedness regions. Finding opportunities for additional regional resources could work well, although it's important to note that not all past regionalized efforts have succeeded. Such efforts must be structured in a way that requires centers to maintain effective ties within smaller communities they serve.
- Are there certain types of services, such as those with high fixed costs or high expertise requirements, that should always be provided regionally or by one entity? The Technical Workgroup discussed the following under this topic area:
 - **Sharing epidemiology and program evaluation services.** While shared epidemiology services are common in many parts of the state already, additional cooperative arrangements as well as regional resources for program evaluation and evaluating hospital community benefits could result in more consistent levels of service being provided statewide. However, there is likely not opportunity for significant cost savings here; the smaller jurisdictions that would benefit the most are not putting many resources into these functions now, so this would be more of a service improvement than a cost reduction.
 - **Having a single entity or a regional partnership provide data analysis for assessments.** The group noted that having a regional resource to support community health assessments could be beneficial and result in more consistent assessment work, but there is not opportunity for significant cost savings.
 - **Having a single entity or a regional partnership assure capacity for infrequently used services, such as treatment of active TB (especially drug-resistant), managing larger outbreaks of notifiable conditions, or some emergency preparedness functions.** The group felt that having standing cooperative arrangements in place between smaller jurisdictions and a single entity or regional resources could ensure adequate capacity for emergent needs while minimizing costs and staffing statewide.

- Are there opportunities to increase the scalability of a service to manage cost increases going forward?

Opportunities Related to Technology

- How can technology be used to reduce current costs, or improve the ability to serve increasing demand over time with less resource needs? The Technical Workgroup discussed the following under this topic area:
 - **Having centralized data collection and analysis tools.** The group felt that having a single entity manage consistent databases (e.g., like happens currently for PHRED, PHIMS, CHAT) is beneficial, especially with the emerging importance of the ability to analyze “big data.” A state-level effort on increasing capacity to handle and analyze big data could be beneficial to all jurisdictions. This analysis would include both state-level databases, federal databases, and potentially healthcare reform data.
 - **Digitizing information.** One opportunity that some jurisdictions have implemented and seen benefits from is digitizing land use records and making them available online. This gives people direct access to records and saves staff time. Digitizing medical records is a large subject of its own that warrants additional analysis.
 - **Supporting advanced forms of analysis, such as mapping and data visualization.** This is another area where a single or regional entity could provide expertise and resources to support advanced analysis of information.

Opportunities Related to System Structure

- Are there opportunities to change how spending and funding decisions are made between state and local jurisdictions?
 - Should local and state public health work toward a codified way to share in decision making around how money is distributed and spent? Should a process like this include only state money or both local and state money? What about federal funds?
 - Should system-wide decisions about where to spend available funding be made before funding allocation decisions are made?
- Are there opportunities to change how public health systems or services are structured in Washington State?
 - Could aligning geographic areas with similar needs regionally create streamlined delivery of certain programs or services?
 - Are there boundaries for local service providers other than county boundaries that would support effective delivery? (e.g., hospital catchment areas, councils of governments, other geographic boundaries.)

Funding Alignment

As noted above, the funding challenge facing public health is an issue of both the amount of funding and structural alignment. All funding alignment policy options should be considered from both perspectives. The framework below for developing and discussing funding options is split into two categories: (1) overarching changes to how public health and public health organizations are funded and (2) potential targeted funding mechanisms for programmatic elements. Both angles are important to consider in addressing the significant gap identified by the Technical Workgroup.

When considering funding options, it is also important to consider some key questions about the appropriateness of each funding option:

- Is it a funding stream that is stable and predictable over time?
- Does the funding stream grow over time? If so, what are its drivers?

- Is there logic to how the revenue stream aligns with the program it supports?

The sections below present the questions discussed by the Technical Workgroup and their responses.

What large-scale funding policy options would align funding with the FPHS framework?

The Workgroups should consider if there are policy-level, overarching changes to how public health is funded in Washington State that could support the FPHS framework. Some potential areas to consider are:

Potential Options For State Funding Sources

- **What would the implications be if it was required that state flexible funds sent to LHJs were directed to foundational services before jurisdictions can spend it on other public health services?** Technical workgroup comments include:
 - Because of the way foundational services were defined, additional important services include many direct service programs, such as HIV treatment, home visiting and nurse family partnership programs, and coordination with primary health care providers. These services are valued by the individuals receiving them, and local policymakers consider many of them a high priority.
 - It seems appropriate that flexible funds should support these prior to funding other programs if we are saying these are the critical functions that every health jurisdiction should do. Optimum approach might be to document that these capabilities are present before allowing money to be spent on other issues.
 - The level of service being mandated would need to be clear.
 - LHJs have been lobbying for years to keep discretionary funds as truly discretionary. During reductions, local communities were requesting to maintain discretionary support to address/fund highest priorities.
 - A decision like this would imply too strongly that FPHS are more important than all other services that public health is providing, which isn't true. FPHS should be everywhere, but losing local priorities isn't appropriate. Not getting state flexible funding would mean some LHJs would have to cut non-FPHS services or service levels.
- **What would the implications be if state funding allocation formulas for LHJs were updated to rebalance current funding differently across the LHJs? Could revised formulas improve consistency in the level of service provided statewide?** Technical workgroup comments include:
 - Funding allocation adjustment is long overdue and, if done appropriately, could improve consistency of services across the state. Change could be phased in over 3 years to allow adequate adjustment time.
 - May require LHJs to improve efficiency of service delivery and would probably require smaller LHJs to work more collaboratively with larger LHJs for some services where cost savings could be achieved, although collaboration is not always a cheaper option depending on the service.
 - Risk: the state formula should not be changed in a way that would allow LHJs to contribute fewer local dollars or reward/incent less local funding. The issue of what an appropriate state/local split is should be addressed, then local match as a condition for state funding would be reasonable.
 - Concerning because of challenges of calculating the "right" amount, given available data challenges such as BARS and recent years of underfunding. Also, border counties particularly have different funding challenges associated with lost sales tax revenue.
 - Would be in favor of revising formulas if current methodology is indefensible, outdated, or skewed.
- **Given that neither of the above options could fully address the Estimated FPHS Gap or the issue of long-term structural misalignment, how could we increase the total amount of state funding spent on public health?** Technical workgroup comments include:

- Believe system will never be funded to meet the entire identified gap, so it's critical to look at efficiency of LHJs and allocation of existing dollars.
- Any savings will still be inadequate, so we must maximum Medicaid reimbursement for non-traditional health workers, non-medical services, and local initiatives.
- Must work with Accountable Care Organizations to fund population health initiatives.
- Can advocate for a percent of the Marijuana revenue to be allocated to public health.
- Short of a dedicated revenue source, which seems unlikely, this would require a prioritization of public health over other state services and other local services. In favor of comprehensive 'priorities of government' exercises at local level, including community involvement and/or community budget games. These exercises are more workable at the local level.

Potential Options For Fee Revenues

- **What would the implications be if we required that fees cover at least a certain percentage (up to 100%) of all services where fees are appropriate?** Currently, fee amounts and cost recovery percentages for fee-supported services vary across LHJs. Some LHJs achieve full cost recovery for their fee-supported programs, while other LHJs choose partial recovery to achieve specific policy goals or acknowledge financial constraints within their constituency.. Technical workgroup comments include:
 - Would results in significant push back from the public.
 - Good policy. Alternatively, local tax dollars could be used at local discretion to subsidize. State/local formula for distribution should assume full local coverage for fee-funded activities.
 - Would require locals who choose not to reach the guidance to make up the difference, which would be a local policy decision, and may cost the community a service if local policymakers refuse to implement recovery through fees and other funds are not available.
 - For some LHJs it isn't practical to pass on full cost of service to users, and for certain services, some LHJs have chosen to cover the costs through other funding in accordance with local priorities. Variation in cost recovery among LHJs is driven by a number of factors, such as Board of Health or county political decisions, economic development goals, historical context, or high fixed costs.
- **How could the system leverage fees to support full program costs, including direct service and reasonable allocations of system and overhead costs?** Technical workgroup comments include:
 - A state regulation/law stating what should be covered would help.
 - Fee calculations often include full costs – including indirects, overhead, and other costs – already.
- **Are there other services that could be supported by fees, either through fees that are currently collected (i.e., broadening the definition of a program) or through new fees?** Technical workgroup comments include:
 - With a law change we could expand, but currently we are limited. We have looked into this.
 - Septic O&M (annual operating permit fee) comes to mind, if locals do not already have it in place.
 - We have been investigating implementation of a Group B Water program funded the same way, but not sure it's politically realistic right now.

Potential Options for Local Funding Sources

- **What would the implications be if local funding sources currently spent on AIS were redirected to support FPHS before jurisdictions can use them to support other public health services?** Technical workgroup comments include:

- Important to point out that there isn't that much money that legally or functionally can be moved because it is categorical, matched, or subsidized.
- Mixed feelings on this. If we are saying public health funding is a joint responsibility between cities, counties, and the state, then this would seem appropriate. However, we would see the loss of some critical programs such as Nurse Family Partnership. If we are saying it's the state's responsibility to fund FPHS, then local funds should not be used.
- Ultimately, we would be better off.
- Additionally, see the notes under the state funding version of this question about the general importance of these other public health services. Spending on other services maximizes community benefit, funds important local priorities, and may not be movable due to categorical or other requirements.
- **What would the implications be of creating local public health taxing authority to provide a dedicated, appropriate revenue stream for foundational services?** Technical workgroup comments include:
 - Would increase the inequity of public health services across the state. Communities that passed the tax would have a higher level of service than those that do not.
 - Good idea. Would need to be in the context of a state match so state would not devolve this responsibility.
 - Similar to fire districts – great idea.
 - County decision makers might not appreciate having their authority changed in this area.
- **What would the implications be of partnering with a public hospital district?** Technical workgroup comments include:
 - Would not work in many jurisdictions.
- **What would the implications be of requiring a certain level of local matching funds in order to receive state funds?**

Potential Programmatic Funding Options

The Workgroups should also consider if there are program-level funding sources that could mitigate specific gaps and increase overall capacity of the public health system. Some potential ideas include:

- **Could all LHJs charge an appropriate fee for on-site-sewer services?** Technical workgroup comments include:
 - Must be the right time with the right Board. It's one thing to recommend locals do this, but another for them to follow through.
 - Many LHJs are already doing this, so the revenue potential may be low.
- **Could the tobacco tax be used to fund appropriate tobacco services?** Technical workgroup comments include:
 - Of course. Would seem appropriate. Tobacco remains the #1 killed and there should be funding dedicated.
- **Are there opportunities for new revenues, such as taxes on marijuana production and sales, to be directed toward public health?** Technical workgroup comments include:
 - Yes, also sugared beverages.
 - Tax on candy, etc., seemed to be the most appropriate. Tobacco tax, marijuana tax, etc.

- **Given the growing linkages between public health and health care, are there appropriate surcharges that could be applied to health insurance coverage or health care service delivery to support relevant public health services?** Technical workgroup comments include:
 - Some states are doing this and might be worth investigating.
 - In a rational world, this is the best solution.
 - Definitely a link between public health services and health insurance/health care industry – we aim to reduce the need for those services.