IDAHO DEPARTMENT OF HEALTH & WELFARE

DIVISION OF PUBLIC HEALTH

Idaho Bureau of Laboratories

Laboratory System Improvement Program Assessment Report

June 2017

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Assessment Overview

The Laboratory System Improvement Program (L-SIP) assessment is a day-long evaluation of how the Public Health Laboratory System supports the Ten Essential Public Health Services at state and local levels (Figure 1). Facilitators guide the participants through discussion using the L-SIP assessment tool which is based on the Eleven Core Functions and Capabilities of Public Health Laboratories (Figure 2). Idaho Bureau of Laboratories (IBL) conducted an initial L-SIP assessment on Tuesday, May 2, 2017 at Boise State University. Fifty-three individuals were in attendance, including 3 facilitators, 6 theme takers from IBL, 3 IBL managers, and 41 stakeholders.

Figure 1. Ten Essential Public Health Services

Figure 2. Eleven Core Functions of Public Health Laboratories

The entire group begins with discussing one Essential Service and its Key Idea(s) so that everyone is introduced to the format. After a facilitated discussion, the group gives an assessment score on the performance of the Public Health Laboratory System for that Essential Service.

Following the initial evaluation, the large group breaks into three smaller groups, and each discusses and scores the remaining assigned Essential Services. Theme takers record the major discussion points, ideas and issues needing more exploration for each Essential Service. After the breakout sessions, all the participants reconvene and the small groups report their findings.

At the end of the day-long event, documents will be produced outlining the assessment scores, parking lot issues, and prioritized next steps. This information can be used for planning continuous improvement activities.

Objectives

L-SIP seeks to improve the Public Health Laboratory System through the collaborative work of partners to:

- Assess the system's performance
- Plan for system improvements
- Implement improvement strategies

- Evaluate effects of strategies
- Re-assess system performance

Scoring

Once the questions for each Key Idea have been discussed, the facilitator moves the discussion to closure. The facilitator asks the group how they would rate performance by the state public health laboratory (SPHL) System relative to the Key Idea and the Points for Discussion. The performance options to be considered are shown below:

NONE	MINIMAL	MODERATE	SIGNIFICANT	OPTIMAL

It is the facilitator's responsibility to bring the group to general agreement on one of the ratings listed above for each Key Idea (but not each individual question). The facilitator asks for a "straw vote" of individuals in the group, who vote by holding up a card with the color that matches that of the system performance rating (refer to the rating definitions below). If the resulting vote reflects significant diversity of opinion, the facilitator may ask for a few members of the group who showed high and low rating cards to explain their vote. The discussion often helps lead to agreement. Additional "re-votes" are used to determine if the group is coalescing around a rating. The facilitator should guide the group through the scoring process, using the following definitions of the rating options:

NONE	MINIMAL	MODERATE	SIGNIFICANT	OPTIMAL

NONE	0% or absolutely none of the performance described is met within the public health laboratory system.
MINIMAL	Greater than zero, but no more than 25%, of the performance described is met within the public health laboratory system.
MODERATE	Greater than 25%, but no more than 50%, of the performance described is met within the public health laboratory system.
SIGNIFICANT	Greater than 50%, but no more than 75%, of the performance described is met within the public health laboratory system.
OPTIMAL	Greater than 75% of the performance described is met within the public health laboratory system.

When general agreement is reached, the theme taker records the rating on L-SIP Scoring Tool spreadsheet.

After the last Key Idea for each Essential Service is completed, the facilitator leads a brief discussion of the top two to three "next steps" that System partners might consider taking to strengthen system performance in the overall Essential Service. The responses will subsequently help identify priorities for system improvement projects.

Results of Idaho L-SIP

Overall Results

Essential Public Health Services

	1	2	3	4	5	6	7	8	9	10
Optimal Activity		83.5	100.0	89.0	78.0	100.0	100.0			
Significant Activity	64.0							72.3	67.0	
Moderate Activity										50.0
Minimal Activity										
No Activity										

Essential Service #1: Monitor Health Status to Identify Community Health Problems

Overview of Scores

Indicator	Activity Level
Essential Service #1	**Significant**
1.1. Monitoring of Community Health Status	**Optimal**
1.1.1. The SPH Laboratory System identifies infectious disease sentinel events, monitors trends, and participates in state and federal surveillance systems.	Significant
1.1.2. The SPH Laboratory System monitors congenital, inherited, and metabolic diseases of newborns and participates in state and federal surveillance systems.	Optimal
1.1.3. The SPH Laboratory System supports the monitoring of chronic disease trends by participating in state and federal surveillance systems.	Significant
1.2. Surveillance Information Systems	**Moderate**
1.2.1. The SPH Laboratory System has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting, and exchange.	Significant
1.2.2. The SPH Laboratory System partners collaborate to strengthen electronic surveillance systems.	Moderate

Discussion Summary

<u>1.1.1</u>

- There is a statewide sentinel surveillance system for infectious diseases. IBL encourages surveillance samples for influenza from all labs.
- IBL did a good job communicating with labs about Zika virus.
- There isn't a formal sentinel response on the environmental side; CST will respond to environmental samples as needed.

- There is no database for environmental response, and there is not a reportable disease list for chemicals.
- IBL uses the quarterly Clinical Forum newsletter and surveys to provide outreach to Idaho clinical labs.
- Discussion on if the system gathering data from all laboratories. For example, if tularemia is identified from animals, how do we make sure that information gets to the right places?
- CDC feeds data to states of what we do nationally but we need to consider if we are communicating that to our statewide partners. Discussion of how broad to go in sharing the data, how data is defined, who needs to know what and when, and how the data should be communicated.
- The SPHL System monitors for foodborne outbreaks through collaboration, but it's a low-level monitoring system, more of response; epidemiologists monitor for outbreaks.
- IBL translates data into useful information as a SPHL system.
- IBL may want to utilize the external website more as a data communication tool to not bombard clients via email.

1.1.2

- Newborn screening is tested by the Oregon lab.
- The Idaho Division of Public Health Newborn Screening Program monitors the 5 reportable newborn diseases and follows up with parents and physicians as needed.

1.1.3

- Chronic disease testing is not performed at IBL. The Idaho Bureau of Community and Environmental Health (BCEH) releases surveillance data about chronic diseases where clinical labs and clinicians mine the data. BCEH includes programs over stroke, cancer, diabetes, physical activity, etc.
- Prevalence on chronic disease data is based on the Behavioral Risk Factor Surveillance System (BRFSS), not lab data; data are disseminated to stakeholders through Idaho Disease Bulletin, website, reports, conferences, presentations.

1.2.1

- IBL has a LIMS with centralized databases for electronically sharing lab results, prompt electronic reporting, and within security and confidentiality guidelines. There is an up to 15-minute delay before results get to CDC. Systems don't always communicate.
- Electronic test ordering not currently supported by the system. The capability exists but it has not been configured considering funding, cost effectiveness, and return on investment.

1.2.2

- Financial resources for updated hardware and software are dependent on grants and federal dollars. The needs for data systems are evaluated annually with grant proposals.
- Data provided are evaluated regularly for grant funded projects but not regularly for projects that are not grant-funded.
- Environmental testing results are sent to a reporting system with RadNet, Air Audit reports go to the Department of Environmental Quality (DEQ), ArboNet and PulseNet are other data reporting mechanisms.

Next Steps/Priorities

- Increase communication of data and ensure that relevant stakeholders have access to data in a timely manner in a format and method that works for the client.
- Consider electronic test ordering for clients.

Essential Service #2: Diagnose and Investigate Health Problems and Health Hazards in the Community

Overview of Scores

Indicator	Activity Level
Essential Service #2	**Optimal**
2.1. Appropriate and Effective High Quality Testing	**Optimal**
2.1.1. The SPH Laboratory System assures the effective provision of services at the highest level of quality to assist in the detection, diagnosis, and investigation of all significant health problems and hazards.	Optimal
2.1.2. The SPH Laboratory System has the necessary system capacity, authority, and preparations in place to rapidly respond to emergencies that affect the public's health.	Significant

Discussion Summary

2.1.1

- SPHL System possesses expertise to assure testing in the academic and hospital lab settings.
- IBL offers training opportunities (e.g., packaging and shipping) and provided guidance on filling out CDC Form 50 for Zika testing (website had useful instructions).
- IBL is responsive to any issues and a resource for explaining test results. Clients have positive relationships with IBL staff.
- Air quality expertise can be a challenge with recruiting—this program requires a lot of initial and refresher training.
- IBL doesn't test radioactivity, but there is a radiological system program that the Idaho Civil Support Team (CST) can use if needed.
- IBL, Idaho National Laboratory (INL), and University of Idaho (Moscow) have Biosafety Level 3 (BSL-3) laboratories, but there is no coordination between labs.
- Two-way communication opportunities with IBL include the following: Web Portal, phone conversations, monthly lab/epi meetings, and StateComm (24/7 contact with IBL).
- The SPHL System support investigations through epis, laboratorians, system partners with regular meetings and contact with epidemiologists during outbreaks, providing flu kits and additional testing as needed, and providing Rapid Response Teams (RRTs) statewide with sampling kits.

2.1.2

- IBL does not have the capability to test all biological, radiological, and chemical threat samples, but has the resources to have the samples tested. For example, CST can do radiological testing and call radiological assistance program (a state program, broken

down by region). On the clinical lab side, it is helpful to have BT workshops and quarterly BT surveys to work up in lab.

- Stakeholders are in contact with other agencies during emergencies, such as Continuity of Operations Plan(COOP), but more planning can be done in advance.

Next Steps/Priorities

- Build capacity in Idaho for testing all types, especially environmental testing capacity (e.g., radiological testing resources for clinical and environmental samples).
- Identify opportunities for collaboration with stakeholders, including communicating available resources from IBL.
- Consider the potential for formalizing resources/availability/questions/requests on the environmental side, including an environmental newsletter or lab blast alerts.
- Improve electronic reporting, specifically with environmental testing.
- Determine COOP collaboration with stakeholders and provide guidance on COOP planning for partners.
- Include wastewater industry in future assessments as stakeholders.

Parking Lot

- Address issues associated with turnover and succession.
- Identify radiological capabilities and resources statewide.

Essential Service #3: Inform, Educate, and Empower People about Health Issues

Overview of Scores

Indicator	Activity Level
Essential Service #3	**Optimal**
3.1. Outreach to Partners	**Optimal**
3.1.1. The SPH Laboratory System creates and delivers consistent information to community partners about relevant health issues associated with laboratory services.	Optimal
3.1.2. The SPH Laboratory System creates and provides education opportunities to health and non-health community partners.	Optimal
3.2. Empower Partners	**Optimal**
3.2.1. Relationship-building opportunities are employed to empower community partners.	Optimal

Discussion Summary

3.1.1

- With consistent communication among partners, IBL handles and documents public records requests per Idaho administrative rules and departmental procedures. Lab information is integrated to investigations. Involvement in local emergency planning committees can be a good way to disseminate information. Information is communicated to partners through presentations (epi conferences, first responders, drinking water groups, residents, physician assistant school, pharmacy school, community groups, hospitals, infection control, etc.), partnerships with academia

(internship opportunities, medical lab science programs), professional societies and organizations (American Society for Clinical Laboratory Science, Association for Professionals in Infection Control and Epidemiology presentations, posters and presentations at Council for State and Territorial Epidemiologists, Morbidity and Mortality Weekly Report articles, APHL posters and presentations), IBL Clinical Forum newsletter, and career fairs (at the department but not lab level).

- Outreach to partners about lab services is provided through the following: Clinical Forum newsletter, website, emails, webinars emails, Health Alert Network (HAN) for outbreaks with doctors, and Idaho Sentinel Lab Network (ISLN) for clinical lab blast emails. An annual needs assessment is sent to clinical labs (not environmental labs).
- Public Health Departments (PHDs) include a lab component with outreach to community organizations, including information about distribution and picking up flu kits and presentations.
- Messages to doctors and labs are consistent with what is going out to the public. For example, with the plague outbreak in the past few summers, the same messaging has gone out to clinicians and vets and the public. Statewide communication comes from the Idaho Department of Health and Welfare (IDHW) Public Information Officer (PIO) and regional communication comes from PHDs.

3.1.2

- The SPHL system educates public health officials and state level advocates with clinical lab certification, monthly PHD Board of Health meetings, monthly Division of Public Health (DPH) and PHD director meetings, and participation in professional associations.
- Community education opportunities are available through internships and university outreach, public health classes and presentations, food outbreaks, STD outbreaks, lead testing in school campaign, drinking water testing campaign, HIV program community based outreach, rabies posters to schools, and recreational water campaigns.
- Information modes include the following: social media, IBL lab tours with posters, rabies brain extraction video (no requests thus far), TB collection instructions, and Eastern Idaho utilizes Spanish radio for monthly public health messages.
- The SPHL system strives to work proactively with media. Interactions with the media go through the PIO with media requests, and the SPHL systems seeks media coverage with rabies, West Nile Virus testing, etc. There is value in being proactive because the SPHL system controls the messaging.
- Public outreach includes the following: blogs, social media, weekly radio show with PIO (only Treasure Valley). PHDs generate their own media.

3.2.1

- The SPHL system promotes relationships with service organizations, advocacy groups, other key community members through HIV awareness day with free testing, reaching out to state Independent Living Council, and the Idaho Office of Refugees.
- There are opportunities to learn about the public health system through lab tours, presentations, Clinical Forum to public health partners, lab director, and other lab staff serving on committees to advocate for laboratory services. Lab staff have toured Idaho clinical labs and shadowed the DEQ air and water programs to learn more about non-lab testing components. In addition, IBL provides opportunities for students to shadow at the lab upon request.

- The SPHL system works with community partners to identify strategies to enable the public to use appropriate laboratory services. This has been done through Zika guidance and education, health alerts, disease bulletin, leveraging partners to share information, infection control. With rabies and plague testing, the SPHL system works with partners to identify and distribute testing criteria.

Next Steps/Priorities

- Encourage partners to contact IBL to collaborate on presentations from other program areas.
- Continue social media discussion and outreach. Consider opportunities for outreach with North Idaho colleges and tribal communities.
- Develop a virtual lab tour on website.
- Consider developing webinars in-house.

Essential Service #4: Mobilize Community Partnerships to Identify & Solve Health Problems

Overview of Scores

Indicator	Activity Level
Essential Service #4	**Optimal**
4.1. Partnership Development	**Significant**
4.1.1. Partners in the SPH Laboratory System develop and maintain relationships to formalize and sustain an effective system.	Significant
4.2. Communication	**Optimal**
4.2.1. SPH Laboratory System members communicate effectively in regular, timely, and effective ways to support collaboration.	Optimal
4.3. Resources	**Optimal**
4.3.1. The SPH Laboratory System works together to share existing resources and to identify new resources to assist in identifying and solving health issues.	Optimal

Discussion Summary

4.1.1

- Partnerships are formalized through Memoranda of Agreement/Understanding (e.g., Air program, Drinking Water Program). IBL has a contract with IDWR for sample collection, letters of Notation with Tribes for air quality work, Region X, and Northern Plains Consortium MOAs. Expectations, responsibilities, and timelines for all parties must be clearly articulated.
- There is a need to build relationships with partners throughout the state, not just locally.
- Informal agreements exist with partners, including clinical labs providing isolates for the biorepository and surveillance programs at IBL.

4.2.1

- The SPHL system has a good framework for internal DPH, DHW, communication plans. StateComm provides the ability to communicate with the lab 24/7.

- There is a lack of communication of plans from private partners, including wastewater partners and hospitals.
- The IBL Clinical Forum newsletter serves as a centralized communication system to clinical labs, but there is not a newsletter targeting environmental partners.
- The SPHL system communicates with the public through the following: Health Alert Network, IDHW blog, state agency PIOs, IDHW social media, state agency websites, and the Public Information Emergency Response (PIER) group.

4.3.1

- Resources are shared with commercial labs through training, workshops, and materials.
- The SPHL system must identify knowledge gaps at partner labs and fill those gaps with trainings and resources. This requires strategic application of resources.

Next Steps/Priorities

- Formalize agreements with partners when applicable.
- Begin a Lab Systems Partner Group and develop a clear mission and vision.
- Enhance communication with environmental laboratories, especially wastewater and drinking water.

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

Overview of Scores

Indicator	Activity Level
Essential Service #5	**Optimal**
5.1. Partnerships in Public Health Planning	**Significant**
5.1.1. The SPH Laboratory System obtains input from diverse partners and constituencies to develop new policies and plans and modify existing ones.	Significant
5.2. Role in Laboratory-Related Policy Making	**Optimal**
5.2.1. The SPH Laboratory System and partners contribute their expertise and resources using science and data to inform and influence policy.	Optimal
5.3. Dissemination & Evaluation	**Significant**
5.3.1. The plans and policies that affect the SPH Laboratory System are routinely evaluated, updated and disseminated.	Significant

Discussion Summary

5.1.1

- The SPHL system considers input from key partners by waiving fees for outbreaks and providing an open public forum for stakeholders before rule changes.
- The SPHL system has policies that are complimentary with those of other agencies. With one agency, a lab policy did not match state requirements; this was mitigated by soliciting input from the IBL Chemistry Manager who will follow-up with that lab on their next audit. In a private lab, the reporting for lead and copper was in a different format

than what DEQ wanted, so the lab worked with IBL to update the policy for correct formatting.

- The SPHL system works with state and local officials to prioritize efforts to address health needs of the community. This is done through regular meetings with the DPH Bureau of Communicable Disease Prevention (BCDP) and working with PHDs and Public Water Systems (PWS) on guidance for sampling, resampling, and testing.
- The SPHL system integrates lab issues in program planning.
- The SPHL system does not develop policies on community needs through a formal assessment.

5.2.1

- The SPHL system promotes state policies consistent with federal programs including CLIA and Division of Select Agents and Toxins (DSAT).
- The SPHL system contributes to policy development by promoting policy options with PWSs and reworking water policies with DEQ.
- The SPHL system has lab data to inform policy making process.
- The SPHL system works with appropriate officials to inform policies.

5.3.1

- The SPHL system has a mechanism in place to monitor the effectiveness of plans internally, sends out a customer service survey externally, and through monthly lab-epi meetings.
- The SPHL system collects feedback on plans and policies internally through IBL's Quality Improvement Reports (QIRs).
- The SPHL system retires out-of-date plans and contributes annually to investigative public health guidelines.
- The SPHL system develops strategies to inform communities on plans through emails and lab blast messages.

Next Steps/Priorities

- Develop goals and objectives to manage and measure effectiveness of programs (e.g., IBL Chemistry Manager to sit down with DEQ to develop strategies).
- Offer workshops to PWS and wastewater partners and use these opportunities for questions and putting faces to names.
- Provide an electronic comments/suggestion box on the IBL website for clients to offer feedback.

Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Overview of Scores

Indicator	Activity Level
Essential Service #6	**Optimal**
6.1. Laws and Regulations	**Optimal**
6.1.1. The SPH Laboratory System is actively involved in the review and revision of laws and regulations pertaining to laboratory practice.	Optimal
6.1.2. The SPH Laboratory System encourages and promotes compliance by all laboratories in the system with all laws and	Optimal

regulations pertaining to laboratory practice.	
6.2. Enforcement of Laws & Regulations	**Optimal**
6.2.1. The SPH Laboratory System has the appropriate resources to provide or support enforcement functions for laws and regulations.	Optimal

Discussion Summary

6.1.1

- IBL oversees the following areas: CMS CLIA Program, Quality Assurance for Clinical Laboratories (certification, compliance), Radiation Control/X-Ray Licensure, Laboratory fees, and Drinking Water Lab Certification.
- Rules are reviewed annually and updated occasionally. When rules are updated, IBL prefers to utilize the negotiated rulemaking process to ensure stakeholder input and opportunity to comment.
- IBL communicates with environmental labs through on-site visits (at least every 3 years, usually annually) during which changes in regulations are communicated.
- IBL communicates with Certificate of Compliance clinical labs through on-site visits every 2 years to ensure conformity with CLIA rules.

6.1.2

- Two-way communication can be increased with the DEQ drinking water program.

6.2.1

- IBL enforcement authority is codified in statute.
- For the CLIA Process, a Plan of Correction is required when deficiencies are cited. Sanctions may be levelled (monetary penalties, revocation of certification, etc.).
- The SPHL system shares information with other agencies (e.g., Region X CMS and other states, DEQ for drinking water labs) to support enforcement.

Next Steps/Priorities

- Create a Lab System Partner Group for stakeholder input in revision of rules and regulations.
- Increase two-way communication in drinking water regulations and outline communication guidelines in memorandums of understanding (MOUs).

Essential Service #7: Link People to Needed Personal Health Services and Assure the Provision of Healthcare When Otherwise Unavailable

Overview of Scores

Indicator	Activity Level
Essential Service #7	**Optimal**
7.1. Provision of Laboratory Services	**Optimal**
7.1.1. The SPH Laboratory System identifies laboratory service needs and collaborates to fill gaps.	Optimal
7.1.2. The SPH Laboratory System provides timely and easily accessed quality services across the jurisdiction.	Optimal

Discussion Summary

7.1.1

- IBL works well with PHDs when shipping samples—shipment schedule, etc. (Monday/Wednesday ship overnight to receive Tuesday/Thursday). IBL does not have a courier but does provide packaging and shipping guidance. A local courier was used in the past but was canceled due to funding constraints. There is an issue with TB sample shipment and turnaround times (doesn't meet standards). Although there is no courier service, the state epi program provides funding for PHDs to ship. For emergencies (i.e. high consequence samples), a partnership exists for state patrol to transport samples to IBL.
- IBL is not open weekends, but clients are aware of scheduling so it's not normally an issue. Laboratorians can come in on weekends for emergencies. Hours of operation do impact TB turnaround times (TAT).
- The SPHL system projects future capacity needs with partners. For example, when the Idaho State Department of Agriculture (ISDA) lab stopped providing rabies necropsy services, IBL worked with partners to fill the gap. The SPHL system also contributed to projections for Ebola and Zika virus.
- The SPHL system collaborates to seek resources to fill gaps in provision of laboratory services. This includes collaboration with Northern Plains Consortium (SPHLs of Idaho, Montana, North Dakota, South Dakota, and Wyoming) when referring HIV supplemental testing and TB NAAT samples to other states, collaboration with the CDC and Bureau of Communicable Disease Prevention (BCDP) for resources with grants, obtaining additional lab staff for surge capacity testing with pandemic flu, and obtaining analyzers for blood lead testing of kids in Eastern Idaho.
- The SPHL system coordinates the transport of specimens and samples to the laboratory. Shipping training is offered annually; shipping supplies are provided as needed; IBL pays to ship influenza. There are gaps for packaging samples to ship Category A and B (shippers must be trained regularly). Packaging and shipping materials are available at PHDs. IBL's sampling and submission guides (SSGs) provide guidance on shipping samples to IBL.

7.1.2

- The SPHL system offers human, water, food, and veterinary testing services, including rabies, plague, disease-specific tests, biological threat, and human impact diseases.
- Testing services are shared with the public through SSGs, drinking water certificates are available online, and messages sent to the appropriate audience.
- The SPHL systems assures access to consultative expertise by laboratory professionals; if staff don't know the answer, they will connect clients to the right resource in a timely manner.
- The SPHL system assures timely reporting of laboratory results/meet published TATs, for the most part. Samples that have taken a while include legionella samples, Zika referrals to CDC, and TB testing.
- Lab results for preparedness exercise scenarios are relatively timely (but they are communicated beforehand). White powder samples are deemed negative on-site. Closing the loop after exercises does not always occur. Communication between first responders, FBI, and state lab can be improved for exercises.

- Tribes typically contact their local PHD but tribal labs are not currently a part of the ISLN. The refugee health screening program is through BCDP. Jaime Delavan is the designated DPH tribal liaison.

Next Steps/Priorities

- Consider allocating funds for a statewide courier.
- Strengthen/establish communication with tribes.
- Work with the RRTs and CST to close the loop on exercises and emergency incidents.
- Increase social media presence. Consider incorporating a Facebook group for periodic posts. Keep in mind that social media may be more effective for reaching the public but not partners due to organization filters, etc.

Essential Service #8: Assure a Competent Public Health and Personal Healthcare Workforce

Overview of Scores

Indicator	Activity Level
Essential Service #8	**Significant**
8.1. Defined Scope of Work & Practice	**Optimal**
8.1.1. All laboratories within the SPH Laboratory System identify position requirements and qualifications; assess competencies; and evaluate performance for all laboratory workforce categories across the entire scope of testing.	Optimal
8.2. Recruitment & Retention of Qualified Staff	**Significant**
8.2.1. The SPH Laboratory System maintains an environment to attract and retain highly qualified staff.	Significant
8.3. Assuring a Competent Workforce	**Moderate**
8.3.1. The SPH Laboratory System works to assure a competent workforce by encouraging and supporting staff development through training, education, and mentoring.	Significant
8.3.2. The SPH Laboratory System identifies and addresses current and future workforce shortage issues.	Moderate

Discussion Summary

<u>8.1.1</u>

- Clinical labs require specific education, training, and certification (e.g., CLIA, CMS requirements). Environmental labs have position-specific requirements through DEQ, Safe Drinking Water Act, FDA, EPA, Idaho administrative rules.
- Strategies for staff retention: encourage training, engage with partners, encourage lab community building, play up the local strengths to attract out-of-state talent.
- Strategies for highly structured systems for large health networks/IBL: job description, training, competency assessments, and action plans/corrective actions for failures in competency.

<u>8.2.1</u>

- Staff retention barriers: compensation and lack of opportunities to move up in state government structure.
- Strategies for staff retention: offer opportunities to participate in outside activities, trainings, collaboration with outside entities, build a team atmosphere, and develop a sense of community.
- SPHL needs to strategically plan for turn-over and mentor staff with the understanding that training is a continual process.

8.3.1/8.3.2

- Consider outreach to high school students on laboratory careers.
- Build incentives for future laboratory workforce: school to work programs, offer internships, scholarships to retain staff in rural areas, and tuition reimbursement.
- Partner with academic institutions for internships and temporary positions.
- For environmental labs, continuing education and training are an issue.
- Need to monitor retention trends (e.g., attrition, turn-over).

Next Steps/Priorities

- Provide chain of custody and peer review training for environmental testing.
- Utilize IBL as source for initial training and SOPs to outside agencies/partners.
- Share SOPs with partners.
- Establish a Lab System Partner Group.

Essential Service #9: Evaluate Effectiveness, Accessibility and Quality of Personal and Population-Based Services

Overview of Scores

Indicator	Activity Level
Essential Service #9	**Significant**
9.1. System Mission & Purpose	**Significant**
9.1.1. The SPH Laboratory System range of services, as defined by its mission and purpose, is evaluated on a regular basis.	Significant
9.2. System Effectiveness, Accessibility & Quality	**Significant**
9.2.1. The effectiveness of the personal and population-based laboratory services provided throughout the state is regularly evaluated.	Significant
9.2.2. The availability of personal and population-based laboratory services throughout the state is regularly evaluated.	Significant
9.2.3. The quality of personal and population-based laboratory services provided throughout the state is regularly evaluated.	Significant

Discussion Summary

9.1.1

- The SPHL system has a mission known and examined annually via the Quality Management Plan. Some information is on the IBL website, but it could be more detailed.
- The SPHL system has an informal method in place to evaluate services (e.g., conversation).
    - There is currently no consensus on harmful algal blooms (HAB), as samples are being sent all over. DEQ is currently writing up HAB plan to address where should samples be sent. HAB information is on the IBL website.
- Sometimes submitters will have a sample split and sent to different labs; this can give different results. Some submitters will "lab shop" if they don't like one lab's results.

9.2.1

- There isn't a formal process in place for the SPHL system to evaluate the effectiveness of services. The lab can contract services out if needed. Can ask if the lab service enabled epidemiologists to determine their role in controlling an outbreak.
- The SPHL system has a collaborative working relationship in place. An EPA groundwater group meets twice a year. IBL meets with the drinking water group about once a year (or when something goes wrong). Stakeholders can always pick up the phone and call IBL.

9.2.2

- The SPHL system does not have a formal process to evaluate the availability of services.
- The SPHL system reviews utilization of lab services around the state in various ways. For example, through the NPC, IBL decided whether it was worth taking on a new test (HIV Geenius). The lab would determine if taking on a new test would be cost-effective. Note: the drinking water radiation program was dropped at IBL because it wasn't cost-effective.

9.2.3

- The SPHL system sends surveys to clients to evaluate the quality of services.
- The SPHL system uses results of assessments to assist with policy development or resource allocation. For example, IBL chose to send Zika IgM to CDC since IBL could not produce quality results. Feedback from one stakeholder indicated that the process with utilizing StateComm works well.

Next Steps/Priorities

- Outline a process for partners to discuss data quality and where to send out.
- Have an annual meeting with laboratory system key players to see how IBL performs on certain metrics. This will help to be more proactive versus reactive
- Consider including a survey link for a customer service survey attached to test results for customers to respond to.
- Consider making the IBL QM Plan available for the public.
- Consider posting a list of CLIA-approved hospital labs on the IBL website.
- Clarify mission statements.
- Conduct knowledge retention activities for IBL staff.

Essential Service #10: Research for Insights and Innovative Solutions to Health Problems

Overview of Scores

Indicator	Activity Level
Essential Service #10	**Moderate**
10.1. Planning & Financing Research Activities	**Moderate**
10.1.1. The SPH Laboratory System has adequate capacity to plan research and innovation activities.	Moderate
10.2. Implementation, Evaluation and Dissemination	**Significant**
10.2.1. The SPH Laboratory System promotes research and innovative solutions.	Significant

Discussion Summary

10.1.1

- The SPHL system identifies topics for research at the system level regarding bringing in new technologies. There is opportunity for growth to create a stronger research partnership with universities and other stakeholders.
- The SPHL system identified and collaborated with partners to provide guidance for research projects with the IDWR agreement with legislature for groundwater database in private domestic wells. IBL created an interactive groundwater quality map for the public to determine potential water contamination.
- The SPHL system does not have a process for recommending and evaluating projects.
- The SPHL system obtains resources for research activities.
- The SPHL system has an institutional review board (IRB) through DPH.

10.2.1

- The SPHL system draws on diverse perspectives and expertise to stimulate innovative thinking. IBL is always looking for the next innovation. Training has provided opportunities to collaborate and bring back ideas.
- The SPHL system encourages staff for innovative solutions, and the results can help enforce public health standards.
- The SPHL system contributes to partnerships by incorporating new technologies through sequencing and training opportunities on EPA methods.
- The SPHL system evaluates finds of research to foster improvement.
- The SPHL system disseminates research outcomes through two state epi conferences annually and quarterly Clinical Forum newsletters.
- The SPHL system collaborates with academic institutions to carry out clinical and translational science research. Students are in aplenty and want the training experience. IBL also collaborates with CST and first responders.

Next Steps/Priorities

- Partner with academia for research collaborations. Bring together academic researchers and stakeholders to identify common projects and funding resources.
- Utilize students for summer intern projects.
- Use current resources to expand capabilities and research activities.

Conclusion

The Idaho Bureau of Laboratories (IBL) L-SIP assessment proved to be a very positive and informative experience for all SPHL system partners as demonstrated by non-facilitator evaluation respondents (see Appendix C). Over the last few years IBL has taken an active role in soliciting customer feedback related to the quality and utility of laboratory services provided by IBL. Information from customers and objective self-reflection by the IBL management team have identified gaps and driven improvements in the way that IBL communicates with the SPHL system. Conducting this evidence based assessment was a 2017 Quality Management Plan customer service objective for IBL that sought to help us confirm that our self-identified gaps (as reported in the 2016 APHL Comprehensive Laboratory Services Survey) were accurate. The aggregate L-SIP scores (see Overall Results pg. 6) mirrored the gaps identified in our self-assessment, which speaks to the effectiveness of our system partner interactions and quality management approach. Through the L-SIP assessment process we have received more comprehensive information to help build and define the Idaho SPHL system. The L-SIP assessment enabled us to continue a focused conversation with our current system partners, identify new environmental health stakeholders, and target priorities for future quality improvement efforts.

Appendix A Flyer and Agenda

IDAHO BUREAU OF LABORATORIES

Laboratory System Improvement Program (L-SIP) Assessment

Overview

The L-SIP assessment is a day-long evaluation of how the Public Health Laboratory System supports the 10 Essential Public Health Services at state and local levels. Facilitators guide the participants through discussion using the L-SIP assessment tool.

The entire group begins with discussing one Essential Service so that everyone is introduced to the format. After a facilitated discussion, the group gives an assessment score on the performance of the Public Health Laboratory System for that Essential Service.

Following the initial evaluation, the large group breaks into three smaller groups, and discusses and scores the remaining assigned Essential Services. Theme takers record the major discussion points, ideas and issues needing more exploration for each Essential Service. After the breakout sessions, all the participants reconvene and the small groups report their findings.

At the end of the day-long event, documents will be produced outlining the assessment scores, parking lot issues, and prioritized next steps. This information can be used for planning continuous improvement activities.

Objectives

L-SIP seeks to improve the Public Health Laboratory System through the collaborative work of partners to:

- Assess the system's performance
- Plan for system improvements
- Implement improvement strategies
- Evaluate effects of strategies
- Re-assess system performance

Resources

- The 10 Essential Public Health Services
- The Core Functions of State Public Health Laboratories
- Definition of a State Public Health Laboratory System
- Essential Services Assessment Tool

May 2, 2017
Boise State University
Student Union Building
Barnwell Room
8:00 am - 4:30 pm
1700 University Drive
Boise, ID 83725
208-334-2235

Registration: Register online at https://keysurvey.com/f/1124014/20da/.
Please register by April 14th.

Agenda

8:00	Registration
8:15	Welcome and Introductions
8:30	Overview of the Assessment Day
9:30	Plenary: Essential Service (ES) #2—Diagnose and Investigate Health Problems
10:30	Break
10:45	Breakouts:
	Group A-ES #1—Monitor Health
	Group B-ES #9—Evaluate Effectiveness, Accessibility, Quality
	Group C-ES #8—Assure Competent Workforce
12:00	Lunch
1:00	Breakouts:
	Group A-ES #7—Link People to Needed Personal Health Services
	Group B-ES #10—Research
	Group C-ES #4—Mobilize Partnerships
2:00	Break
2:15	Breakouts:
	Group A-ES #3—Inform, Educate, and Empower People
	Group B-ES #5—Develop Policies and Plans
	Group C-ES #6—Enforce Laws & Regulations
3:30	Summary, Evaluation, and Next Steps
4:30	Adjourn

A lunch and refreshments will be provided.
Note: Idaho Bureau of Laboratories has limited funds to assist with travel and hotel accommodations. Please indicate on the registration form whether this would be needed for you to attend.

Contact Wendy Loumeau with questions
Phone: 208-334-0558
Email: wendy.loumeau@dhw.idaho.gov

IDAHO DEPARTMENT OF HEALTH & WELFARE
DIVISION OF PUBLIC HEALTH

Appendix B Sign-in Sheet (page 1)

IDAHO DEPARTMENT OF HEALTH & WELFARE
DIVISION OF PUBLIC HEALTH

Idaho Bureau of Laboratories L-SIP Assessment: May 2, 2017
Sign-In Sheet

Name	Signature	Email address	Assignment
Aimee Shipman		aimee.shipman@dhw.idaho.gov	Group B (Blue)
Allen Haumann		allen.haumann@dhw.idaho.gov	Group C (Yellow)
Amanda Bruesch (Theme taker)		Amanda.Bruesch@dhw.idaho.gov	Group C (Yellow)
Anne Weber (Facilitator)		anne.weber@bresnan.net	Group C (Yellow)
Ashley Fullmer (Theme taker)		Ashley.Machado@dhw.idaho.gov	Group B (Blue)
Bart Hanson		bhanson@minidokamemorial.com	Group A (Red)
Brenda Miranda		mirandab@slhs.org	Group A (Red)
Brian Crawford		brian.crawford@phd3.idaho.gov	Group B (Blue)
Brian McGovern		brian@analyticallaboratories.com	Group B (Blue)
Bruce Louks		Bruce.Louks@deq.idaho.gov	Group C (Yellow)
Bryon Johnson		bryonj@kootenaifire.com	Group A (Red)
Cheryl Brower		cheryl.brower@dhw.idaho.gov	Group A (Red)
Cheryl Craig		cheryl.craig@phd3.idaho.gov	Group B (Blue)
Christine Doran		doranc@slhs.org	Group C (Yellow)
Christopher Ball (Lab director)		Christopher.Ball@dhw.idaho.gov	Group C (Yellow)
Craig Tesch		Craig.Tesch@idwr.idaho.gov	Group C (Yellow)
Curtis Stoehr		curtis.stoehr@deq.idaho.gov	Group C (Yellow)
Dan Salmi		daniel.salmi@isda.idaho.gov	Group C (Yellow)
Denise O'Farrell		denise.ofarrell@dhw.idaho.gov	Group B (Blue)
Diana Gardner		diana.gardner@dhw.idaho.gov	Group A (Red)
Dieuwke Dizney-Spencer		dieuwke.spencer@dhw.idaho.gov	Group C (Yellow)
Doug Doney		douglas.doney@phd3.idaho.gov	Group B (Blue)
Elke Shaw-Tulloch		elke.shaw-tulloch@dhw.idaho.gov	Group C (Yellow)
Ellis Hawks		ellis.hawks@ic.fbi.gov	Group A (Red)
Emma Lindsey		elindsey@mvhospital.net	Group A (Red)
Ernie Bader (Manager)		Ernest.Bader@dhw.idaho.gov	Group B (Blue)
Gabe Kimlinger (Theme taker)		Gabriel.Kimlinger@dhw.idaho.gov	Group C (Yellow)
Jeremy McLean		jeremy.d.mclean.mil@mail.mil	Group A (Red)
Joe Hess		Joseph.Hess@ic.fbi.gov	Group B (Blue)

Appendix B Sign-in Sheet (page 2)

IDAHO DEPARTMENT OF HEALTH & WELFARE
DIVISION OF PUBLIC HEALTH

Idaho Bureau of Laboratories L-SIP Assessment: May 2, 2017
Sign-In Sheet

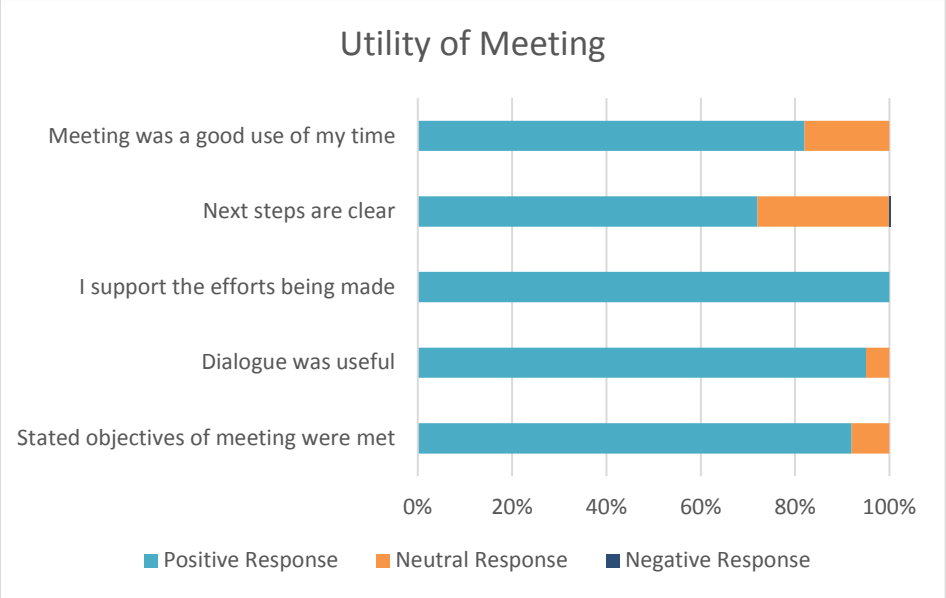
Name	Signature	Email address	Assignment
Jud King		judson.king@saintalphonsus.org	Group C (Yellow)
Kathryn Turner		kathryn.turner@dhw.idaho.gov	Group A (Red)
Ken Cornell		kencornell@boisestate.edu	Group B (Blue)
Kimberly Matulonis		kimberly.matulonis@dhw.idaho.gov	Group B (Blue)
Kris Carter		kris.carter@dhw.idaho.gov	Group B (Blue)
Lance Holloway		lance.holloway@deq.idaho.gov	Group A (Red)
Lisa Bahr		lisa.bahr@phd3.idaho.gov	Group C (Yellow)
Mary Cobos		mcobos@mvhospital.net	Group B (Blue)
Matthew Dudley		matthew.dudley@dhw.idaho.gov	Group C (Yellow)
Megan Larson		megan.larson@deq.idaho.gov	Group B (Blue)
Michael Moore		mm@analyticallaboratories.com	Group C (Yellow)
Michael Stevenson (Theme taker)		Michael.Stevenson@dhw.idaho.gov	Group B (Blue)
Michele Carreras		michele.carreras@dhw.idaho.gov	Group B (Blue)
Mike Taylor		mtaylor@eiph.idaho.gov	Group A (Red)
Misty Daniels (Theme taker)		Misty.Daniels@dhw.idaho.gov	Group A (Red)
Natalie Bodine		nbodine@cdhd.idaho.gov	Group C (Yellow)
Robb Byers		robb.byres@dhw.idaho.gov	Group A (Red)
Roy Mitchell		roymitchell6@hotmail.com	Group A (Red)
Shell Howard		shell.howard@deq.idaho.gov	Group B (Blue)
Sonja Schriever		sonja.schriever@dhw.idaho.gov	Group C (Yellow)
Susan Collins		scollins@lrmctr.org	Group C (Yellow)
Tina Su (Facilitator)		bertina.su@aphl.org	Group A (Red)
Traci Berreth		traci.berreth@dhw.idaho.gov	Group B (Blue)
Tricia Hosch-Hebdon		tricia.hebdon@idfg.idaho.gov	Group A (Red)
Troy Saffle		troy.saffle@deq.idaho.gov	Group C (Yellow)
Twila Kunde (Facilitator)		twila.kunde@state.nm.us	Group B (Blue)
Vonnita Barton (Manager)		Vonnita.Barton@dhw.idaho.gov	Group A (Red)
Wayne Harris		wharris@imd.idaho.gov	Group A (Red)
Wendy Loumeau (Theme taker)		Wendy.Loumeau@dhw.idaho.gov	Group A (Red)

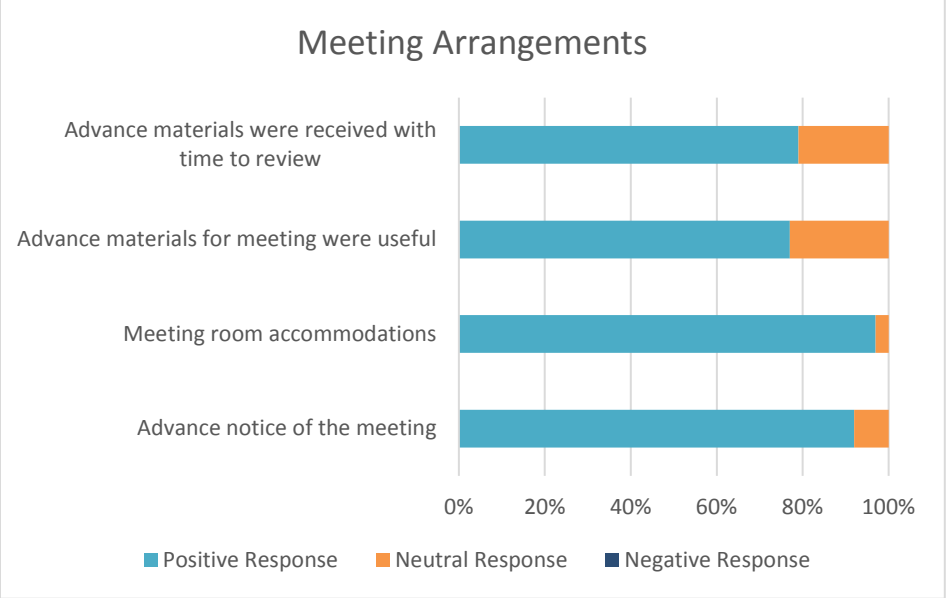
Appendix C Evaluation Summary

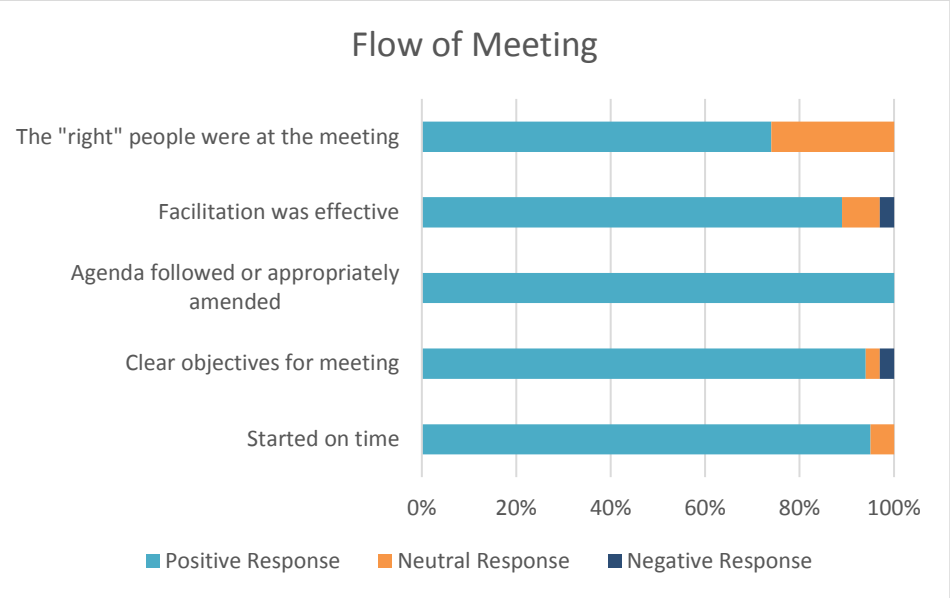
Idaho Laboratory System Improvement Program Evaluation Summary

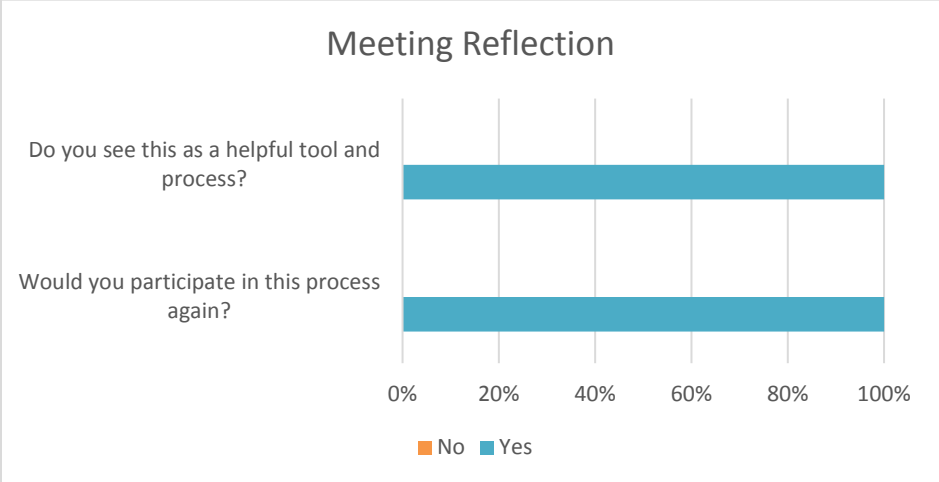
May 2, 2017 at Boise State University

Evaluations represent 40/41 non-IBL or facilitator responses









Comments: What worked?

Discussion

- Small group discussion
- Great topics and discussions
- Great opportunities for discussion

Small groups

- Random break-out groups
- Focus groups precipitated great conversations
- The mixed crowd of organizations in the audience
- Breakout sessions = smaller groups = good!

Collaboration/Networking

- Liaison, networking, available resources
- Dialogue and networking
- Sharing info, meeting partners

- Just getting together and learning about how we are doing as a state; great opportunity to collaborate

Other

- Multiple perspectives; genuine interest and participation; good job with food and beverages
- Enjoyed; learned a lot; process was great for engaging stakeholders
- Format and number of stakeholders were effective
- It all worked as expected; good job IBL!
- Identified some others who may be appropriate; did like that there were some folks from around the state
- Great having a broad group of partners!
- The overall assessment worked well and identified some needed issues

Comments: What could be improved?

Topics Not Applicable

- Some items not applicable to Idaho system
- Some topics didn't pertain to audience or couldn't be answered
- Pre-assessment of key ideas versus state structures--this would allow areas that do not align to be removed from assessment to eliminate confusion
- Some topics were redundant
- Possibly tailor some of the questions more toward this state; ones that concern how budgets are run in this state; what is within state lab control and what isn't

Meeting Organization

- Break 5-10 min during first 2 hours
- Coffee at beginning of meeting
- Didn't feel like I could contribute much to discussion; at the end of the day, it would have been helpful to have a mic so everyone could hear the summaries of the breakout groups
- More cohesive grouping (e.g., environmental, clinical, first responders); grouping based on focus (environmental, clinical, first responders) would have led to deeper, more useful conversations
- Separate people into groups by profession categories
- There was easily 2 days' worth of material crammed into 1 day
- Clearer facilitating; more direction and enthusiasm

Other

- Don't pressure folks to change their vote; this did happen (e.g., #2 in the morning when it was 50/50 significant and optimal)
- The continuation of this meeting; including more people and groups to contribute information and ideas