
Considerations for Public Health Structure and Services

ARAPAHOE COUNTY | ADAMS COUNTY

Prepared by Otowi Group, LLC
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Board of County Commissioners Study Session



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HOW TO USE THIS REPORT >>>

This report lays out a variety of considerations to help decision makers evaluate the public health structures for Adams and Arapahoe counties. Additional information provided exists in the Public Health Primer slide deck and the How a Public Health Department Decides its Services recording, in the Appendix of the PDF report. These items are intended to provide:

- Background information on the public health system
- Analysis and forecasts of future public health revenue and expenditures
- An assessment of advantages and disadvantages of a two-county district health agency versus a single county public health agency

The intended audience for this report is County Commissioners in Adams and Arapahoe counties.

Based on the scope of work, it is important to understand what this report does not do:

- Does not include perspectives from people most impacted by public health structure and service changes (i.e., TCHD staff members and clients/patients)
- Does not include community member perspectives
- Does not include a cost-benefit analysis
- Does not assess existing county infrastructures to understand cost efficiencies
- Does not include legal analysis of required structures, services nor legal aspects of transition
- Does not include verified information from public health funders
- Does not provide recommendations for or against any one structure

Where to find information in this report

- What are some comparisons to other jurisdictions? PAGE 11
- How much possible revenue could a county obtain as a single public health agency? PAGES 14,17,20
- What are the forecasted expenditures for a single public health agency? PAGES 15, 18, 21
- What are some advantages of staying as a district with TCHD? PAGE 25
- What are some disadvantages of staying as a district with TCHD? PAGE 25
- What are some of the advantages of being a single county public health agency? PAGE 25
- What are some of the disadvantages of being a single county public health agency? PAGE 25
- What are some of the costs if TCHD ceases to exist?PAGE 22, 23
- What common acronyms are used in this report? PAGE 26

PROJECT INFORMATION: SCOPE AND LIMITATIONS >>>

The information in this report is intended to inform and assist Adams and Arapahoe County Commissioners to make a decision on the structure and governance by which to provide public health services in their communities. It sets the stage for the development of the transition plan to ensure the provision of core and preferred public health services across Adams and Arapahoe Counties.

This report presents a summary of the information gathered by Otowi Group, LLC for Tri-County Health Department (TCHD), Adams County, and Arapahoe County from state laws, Colorado and national experts, TCHD division directors and county staff, and a fiscal analysis with one year forecasting model. There are many complexities in thinking about how to adjust the Tri-County Health Department, (TCHD) Adams and Arapahoe arrangement, and this information can assist in making a well-informed and thoughtful decision.

Scope

Since 1948, TCHD has provided public health services for Adams and Arapahoe counties and in 1966 Douglas County joined the district health department. In 2020, Douglas County announced its intent to explore options of creating its own public health agency. In anticipation of this departure, Adams County, Arapahoe County and TCHD leaders must make decisions on how to proceed with providing public health services in their counties.

These decisions will impact the structure of TCHD and the public health (PH) activities and services available to residents, workers and visitors. Otowi Group was engaged to provide consulting services to assist and lead two phases:

- Phase I: Collect and compile data to inform TCHD and Adams and Arapahoe Counties in deciding under what structure(s) public health services will be provided in 2023 and beyond.
- Phase II: Transition plan to be developed for implementation in 2022.

Otowi Group conducted a series of small group discussions, key informant interviews and partner surveys and presented the findings to county commissioners on September 14th, 2021. The team also compiled and analyzed organizational and financial data and information and created scenarios for decision-makers to consider.

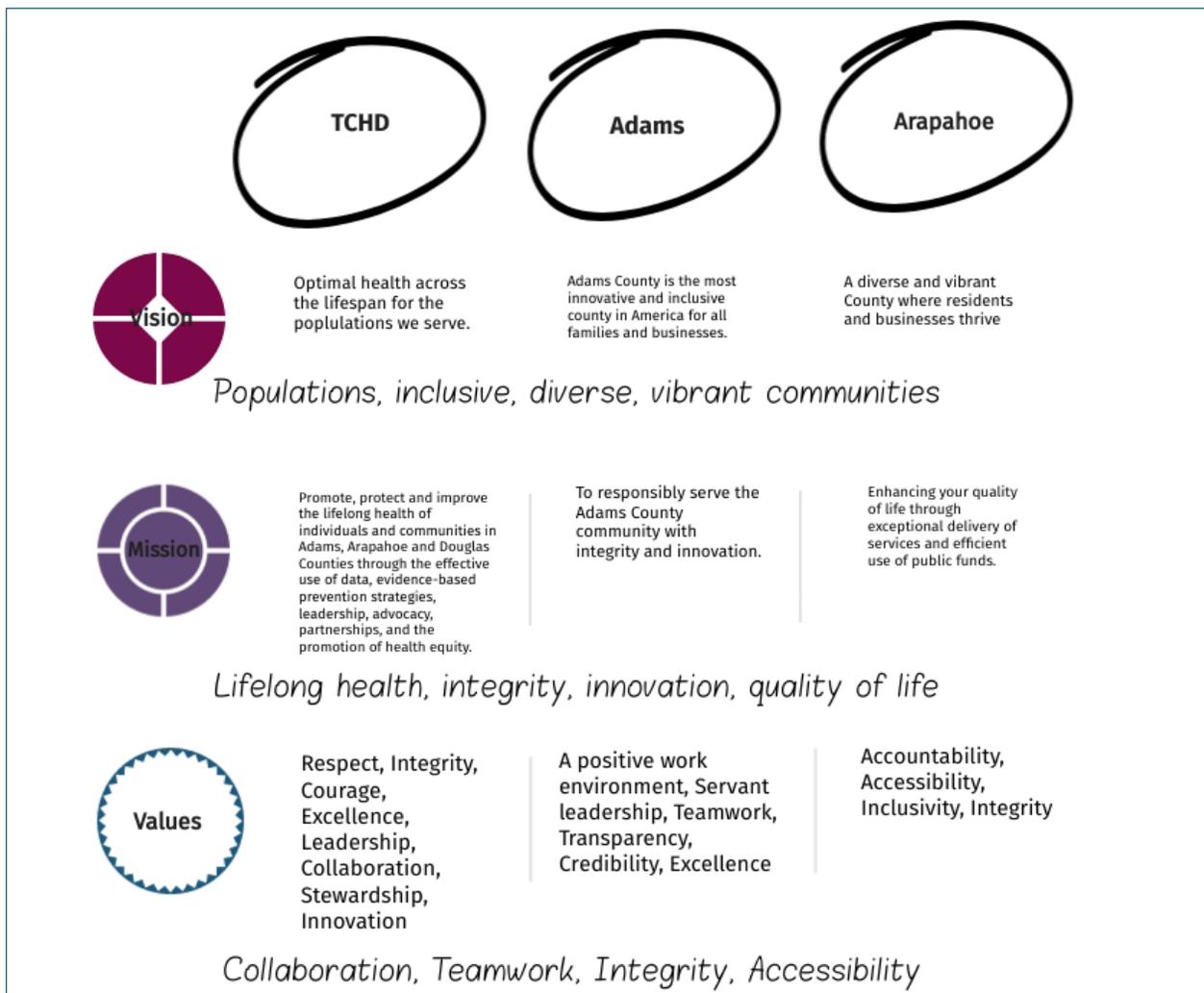
Limitations

This report relies on the current expertise, opinions, financial data and experiences of TCHD, Adams County, and Arapahoe County staff. It is an analysis and estimated forecast based on what currently exists in terms of programs, staff, infrastructure and systems within TCHD. For more accurate budgeting and forecasting, individual counties will need to apply their own staff, infrastructure and systems information and costs. It has been noted where Otowi Group learned about specific situations at the individual county level (for example, neither county currently has a negotiated indirect rate for federal funding). Assumptions were made in order to create a usable analysis and these are listed in the methods section of this report. Any attempt to reproduce these analyses should be informed by these and other assumptions. Every effort has been made to verify the accuracy of the information used to complete this report.

ADAMS, ARAPAHOE AND TCHD: SIMILARITIES AND DIFFERENCES >>>

Adams and Arapahoe counties share similarities and have some key differences related to public health. Each organization wants to ensure that residents are given the opportunity to reach and meet their ultimate health. The graphic below compares the goals and values of all three organizations, highlighting some of the similar concepts.

Values



During county commissioner and community leader key informant interviews (conducted in August and September of 2021), commonly perceived similarities and differences emerged. Overall, there is a consistent appreciation for public health and a desire to provide quality public health services in the counties. Leaders in both counties are concerned about public health topics such as mental health, substance abuse and suicide prevention. There is interest in providing services that help residents meet their basic needs such as clean water, healthy food and immunizations, and services to help families thrive such as nurse home visitors for new parents. There is a desire to help local, retail food businesses and other regulated entities succeed in providing safe environments, products and services. There are similar interests in being more involved in partnerships with the public health agency and a desire for more clarity and control of the public health services provided in the community.

Structure

Despite differences in county leadership structure, the similarities in population, income, and public health needs provide a basis for a cooperative approach. Whether to remain joined as a district public health agency is a policy decision entrusted to each county’s elected leaders.

	Adams County	Arapahoe County
County leadership structure	Traditional council-manager form of government. County commissioners delegate day-to-day management to a professional county manager.	County commissioners as administrative and policy-making body. County commissioners retain responsibility for day-to-day operations and rely on a county director and department staff to implement.
Tax authority	Citizens voted to eliminate TABOR tax revenue cap. (“De-Bruced”)	Retains TABOR tax revenue cap. (not “De-Bruced”)
Land mass	1,168 square miles	798 square miles
Largest municipality	City of Thornton has approximately 143,000 residents within Adams county	City of Aurora has approximately 330,000 residents within Arapahoe county.
Population, 2020 US Census	519,572	655,070
Population, 2040 Forecast by Colorado Demographer	722,807	801,147
Median household income	\$71,202	\$77,469

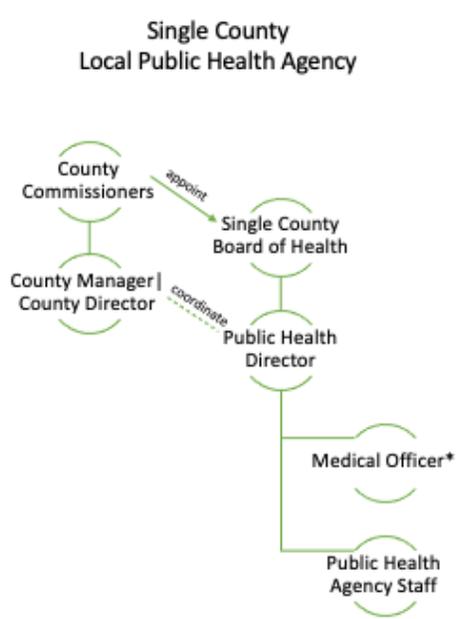
PUBLIC HEALTH STRUCTURE AND SERVICES >>>

This section provides non-financial information for consideration in this decision process. It describes possible public health structures, and policy and operational considerations. It shows comparator data from other local public health agencies. There may be additional considerations that county commissioners and county staff would like to consider. The information in this section corresponds to some costs provided later in the financial analysis and transition costs. Otowi Group did not assess any county-based costs, nor the requirements for size or quality of the systems described below.

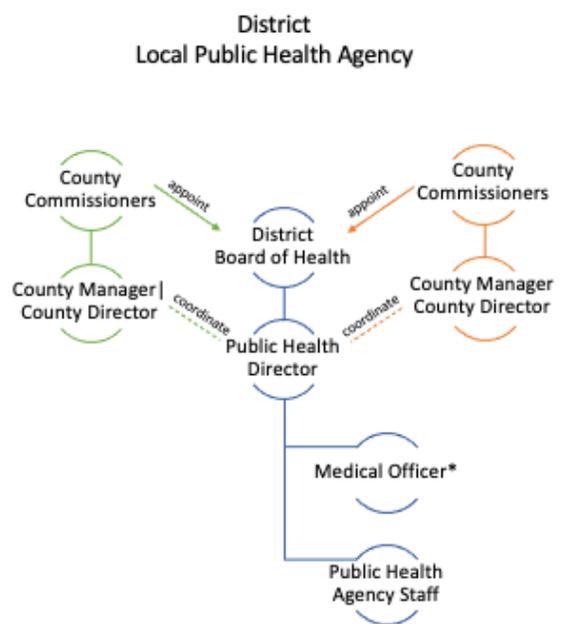
Structure and Governance

Colorado state law describes the required structure of local public health agencies in Title 25, Article 1. There are a variety of allowed structures and some existing examples. Following are 4 of the more common structures that are possible for Adams and Arapahoe Counties.

1. A single county public health agency that includes a board of health appointed by the county commissioners (at least 5 members required) which hires a public health director who then hires a medical officer and department staff.
2. A district public health agency that includes a board of health appointed by an appointments committee (with at least one representative from each county and at least 5 members) which hires a public health director who then hires a medical officer and department staff.
3. A single county public health agency that includes a board of health appointed by the county commissioners which contracts with a separate agency that includes the public health director, medical officer and all staff members. Some staff members may be housed in county offices.
4. A single county public health agency that includes a board of health appointed by the county commissioners which hires a public health director who then hires a medical officer and some department staff and contracts with a separate agency that provides some public health services.

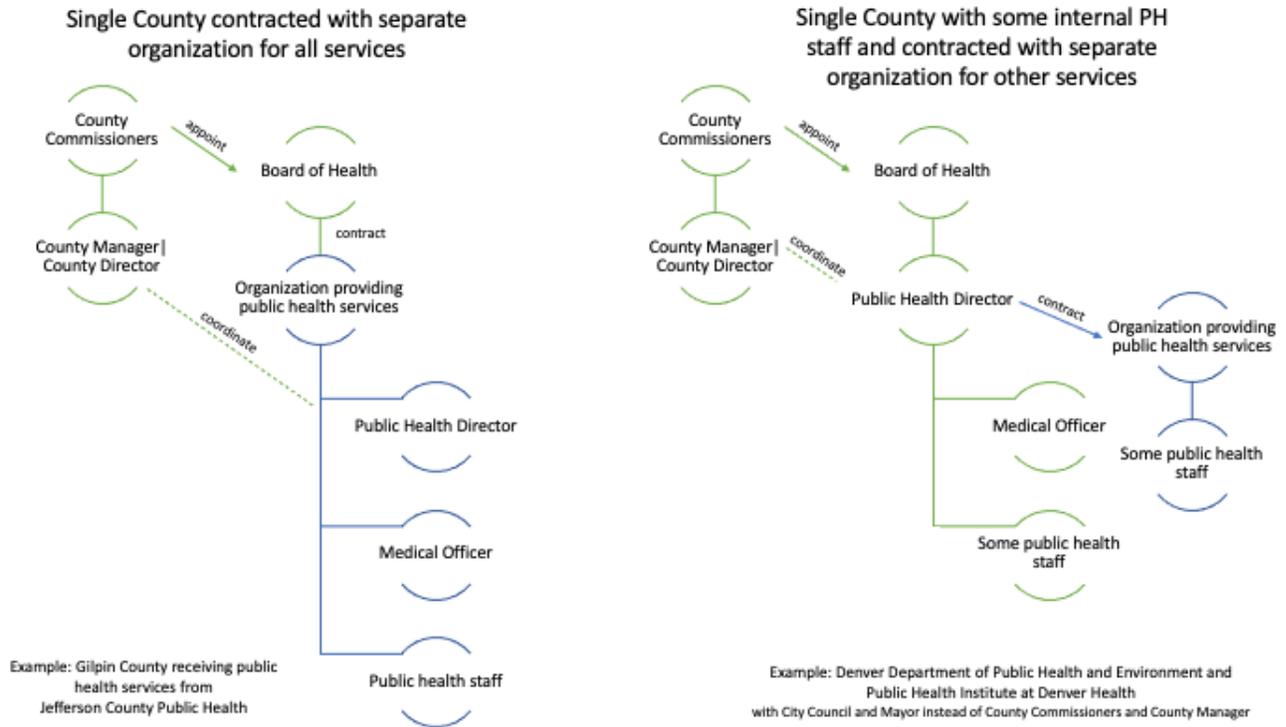


Example: Larimer County



Example: Tri-County Health Department

*If PH Director is a licensed MD or DO they can also serve as the medical officer. Example: Tri-County Health Department



Policy and Operational Considerations

Policy considerations include ways in which state law and the public health system guide what can and cannot exist within public health structures in Colorado.

Policy Requirements

All public health agency structures require:

- Board of Health that follows the membership and appointment rules set out in C.R.S § 25-1-508
- Public Health Director that meets minimum qualifications (in 6 CCR 1014-6)
- Medical Officer that meets minimum qualifications (in 6 CCR 1014-6) if public health director is not a licensed MD or DO
- Staff to accomplish the activities of the public health agency
- A dedicated public health fund to accept all public health funding and county contributions to public health activities

TCHD as a District Public Health Agency (with two counties):

- Would need to amend the board of health and county processes for board appointments
 - Current TCHD Board of Health is adopting interim bylaws in October 2021
- Should consider improvements including term limits, board assessments, goal setting and the impact of an even number of board members on simple majority voting

Adams or Arapahoe as a Single County Public Health Agency:

- Would need to create board of health bylaws and processes and appoint an independent board of health
- At least 5 board of health members must be recruited and appointed

Operational Considerations

Operational considerations include ways that organizational infrastructure and processes must exist in a successful LPHA. The following section lists operational requirements, highlights examples of TCHD's current approach, and describes implications for developing a single county LPHA. Areas are left blank where TCHD's approach is straightforward (they are a Medicaid provider) or where the single county implications are simple (they need to build a capacity). Overall, developing single county LPHAs will require adding new organizational infrastructure and customizing existing infrastructure to support the unique aspects of public health.

Financial

Mandated services with no dedicated funding source

Requirements: Some public health activities are required by state statute and do not have a corresponding set of dedicated funding - such as communicable disease surveillance and outbreak investigation. Other mandatory public health activities are partially funded (child fatality review) and LPHAs are expected to find the remaining funds to support the activities. All Colorado counties are required to contribute a minimum of \$1.50 per capita into their public health fund. In addition, the state legislature allocates funding to the Office of Public Health Practice Planning and Local Partnerships (OPHP) to be distributed to LPHAs through a formula. These funds are restricted to public health services, generally, but are not specific to one program. Categorical funding, competitive funding and indirect funding help fill the gaps and can build additional capacity.

Current Approach: TCHD gets \$24,000 in the Local Planning and Support and Public Health funding formula for serving a 3-county district, and would receive \$12,000 as a 2-county district. TCHD has competitive federal and state funding that supports a unique communicable disease surveillance and management team.

Implication for single county: As single county LPHAs, Adams and Arapahoe would be among 5 high-quality, accredited LPHAs serving over 500,000 people competing for funds statewide (Denver, El Paso, Jefferson) and one of 100 across the country.

Categorical program/service funding

Requirements: Most public health services are funded through "categorical funding" which is dedicated to a specific area of focus, population, or activity of interest to the funder. This means that in order to have a functional public health agency, public health leaders must collect fees where possible, blend and braid funding from a variety of funding sources, take full advantage of indirect funds, and seek grant and contract funds that are related to existing and desired programs.

Current Approach: TCHDs large, categorical grants have generous indirect funding which supports programs and infrastructure across the department. TCHD is especially competitive for some types of categorical funding because of its reputation, jurisdiction size, staff expertise, and grant writing and grant management capacity.

Implication for single county: Single counties have access to funding that is not specific to public health agencies, but that could be used for public health activities and programs. Single counties also have some taxing authority (within Colorado limits) that could be dedicated to public health. One example is Boulder County's Sugar Sweetened Beverage Distribution excise tax.

Accepting fees from individuals and companies

Requirements: Public health services such as restaurant inspections and immunizations involve collecting fees from individuals or companies. This includes the need to create fee structures that align with program standards, send invoices, process credit card payments, deliver receipts, and accept cash.

Current Approach: TCHD uses specialized software designed for public health agencies to manage inspections and licenses.

Implication for single county: Counties already have these types of capabilities, processes and accounting systems for other aspects of county government such as parks and recreation and business licensing. These processes could be used as a foundation but systems would need to be customized and amended to meet public health needs.

Reimbursement funding

Requirements: Much of public health funding, including grants and contracts, operates on a cost reimbursement basis – LPHAs must perform a service before they will be compensated for it. This requires substantial advanced cash flow and particular accounting and auditing practices.

Implication for single county: For some programs, single counties would need to hire staff and build capacity before seeking reimbursement. It will require working closely with individual funders to determine necessary steps for program start-up and reimbursement.

Medicaid reimbursement

Requirements: Some public health services can be billed to Medicaid or other insurances, increasing revenue to a public health agency. In some cases, LPHAs are restricted from billing a patient when they have their own insurance. To receive Medicaid reimbursement for clinical services, LPHAs must be a Medicaid provider and set up a clinical billing system and processes, including internal processes for appeals and follow-up for unpaid reimbursements. Some program standards require LPHAs to be able to accept Medicaid reimbursements (for example, to be a Vaccines for Children (VFC) provider).

Audits

Requirements: Colorado Department of Public Health and Environment (CDPHE) requires LPHAs go through a financial risk audit (FMRS) to determine reimbursement process and reporting requirements. Acceptance of federal funds over a yearly amount of \$750,000 requires that Uniform Administrative Requirements, also referred to as Super Circular, are followed and verified in a separate auditing process.

Implications for single county: Single counties may already accept similar federal funds and would need to verify they have the proper systems for managing and reporting. The CDPHE audit process would still be required.

Data, Information Technology and Software

Electronic Health Records (EHR)

Requirements: LPHAs use an electronic medical record for their clinical patients and to connect to health information exchanges to help track disease across the region. This requires a specific software system, IT maintenance and troubleshooting, secure data management, and ongoing staff training.

Implications for single county: Single county LPHAs would need to purchase individual software systems, create processes and procedures, and work with other entities to connect data securely. TCHD and counties would need to consult attorneys to determine ownership over the existing client/patient data.

HIPAA compliance

Requirements: A public health agency is a HIPAA regulated entity and requires technology infrastructure, data management policy and processes, and staff training that complies with HIPAA requirements.

Implications for single county: Adams and Arapahoe counties currently manage Personally Identifiable Information (PII) and other sensitive information. They would need to make sure they fully comply with

HIPAA requirements and other state laws regarding the collection, maintenance and use of health and public health data.

Environmental Health Software

Requirements: Environmental divisions of LPHAs use a specialized software system built to manage the large number of ongoing health inspections for services such as retail food, onsite wastewater (septic systems), and childcare centers.

Implications for single county: Single county LPHAs would need to purchase software and create systems and processes. TCHD and counties would need to consult attorneys and CDPHE to determine ownership of existing data.

Community data tracking systems, mapping and dashboards

Requirements: Community health assessments and public health improvement planning are mandated in state law and in Colorado Core Public Health Services. LPHAs have a responsibility to provide data and information about health and health-related status and trends to partners, community leaders and the public. This is accomplished through fact sheets, reports, maps, data dashboards, data visualization and presentations.

Current approach: TCHD has built a unique and highly skilled team of epidemiologists, data analysts and data visualization specialists experienced in managing the intricacies of public health and health-related data.

Implications for single county: Counties have some existing, community data tracking systems, dashboard systems, GIS and mapping capabilities and staff. This is an area where public health expertise is particularly important requiring staff with specialized skills in epidemiology, biostatistics and/or reporting and visualizing health data.

Facilities and Equipment

Facilities and Buildings

Requirements: LPHAs need office space, clinical space, meeting space, equipment storage, sensitive file storage, and spaces where community members can receive non-clinical public health services. It is important for facility locations to be near public transit and accessible throughout a jurisdiction.

Current approach: TCHD leases 3 spaces in Adams County and 2 spaces in Arapahoe county as well as its headquarters in Arapahoe County. Adams County provides one space and Arapahoe county provides 2 spaces including one that provides clinical services.

Implications for single county: Single counties would need to find space for office-based staff as well as clinical and non-clinical space to serve the public. Adams and Arapahoe have other service centers for the community which may or may not have available space for public health services.

Specialty Equipment

Requirements: A variety of specialty equipment is required to perform core public health services. Some of this equipment is mandated by program standards and is required to participate as a provider. This includes vaccine refrigerators with monitoring systems, water and wastewater testing equipment, food safety equipment and clinical equipment that requires ongoing maintenance and calibration, emergency response trailers and equipment.

Implications for single county: Some new equipment may be required if separating into two, single county agencies. Some program contracts indicate that equipment belongs to the program not the agency so counties would need to work with program funders to determine if it can be transferred.

Vehicles and Fleet Services

Requirements: Some public health staff, including inspectors and home visitors, need vehicles and equipment.

Implications for single county: Counties already maintain vehicle pools that could be used for this purpose.

Additional Considerations

Human Resources, Legal Representation, Policy Analysis and Communications

Requirements: Basic organizational needs also exist for public health agencies.

Current Approach: TCHD staff have expertise in these topic areas but in a way that is unique to public health agencies.

Implications for single county: Single counties already have capital assets, internal departments, staff and contractors who provide basic organizational needs for other county departments. Some additional staff will be necessary to manage an increased workload and the unique aspects of public health such as hiring and managing medical staff, hearings and lawsuits arising from public health regulatory action like closing a restaurant, support for medical staff testifying in legal cases, and isolation/quarantine orders.

Accreditation

Requirements: There is a voluntary, national accreditation system for LPHAs. All of the Colorado LPHAs serving more than 500,000 people are accredited, as is CDPHE.

Current approach: TCHD is accredited as a 3-county district health department with re-accreditation due in 2023. TCHD is in contact with the Public Health Accreditation Board (PHAB) regarding the possibility of re-accreditation as a two-county district.

Implications for single county: It is unclear how PHAB would approach the consideration of accreditation for new, single county health departments separated from an accredited district health department. Typically, the entire accreditation process can take approximately 18-24 months and the LPHA should be fully operational before beginning accreditation.

Other Public Health Agencies: Comparators

TCHD is a unique model in across the United States due to a combination of: 1) being a multi-county district, 2) serving a large population, and 3) being located adjacent to a major city in a metropolitan area.

Multi-county health agencies exist across the US, and there are four other district health departments in Colorado, however many are in more rural areas. There are more than 50 health departments with jurisdictions that serve more than one million people in the US - some of those are in very large cities such as Los Angeles, Chicago and New York. There are more than 100 health departments that serve populations between 500,000 and 1 million people in the US. (Source: NACCHO)

One way to think about potential structure and size is to look to other, similar jurisdictions and public health agencies. Colorado public health is based upon a state-local relationship that provides significant autonomy at the local level. Some states have less autonomous local public health agencies; and therefore are not as relevant comparisons for Colorado. States like Ohio, Michigan, Minnesota, Oregon and Washington have decentralized state-local relationships mirroring those structures in Colorado.

In Colorado, three, single-county public health agencies that serve between 500,000 and 750,000 people. These are Jefferson, El Paso, Denver counties. While Denver has a similar population size, its structure makes it a bit difficult to compare at the budget and service level. Boulder County Public Health has a smaller population size but more funding and FTE comparable to its larger counterparts. Across the US, there are examples of large and mid-sized city suburbs with some similarities to the TCHD jurisdiction. The Otowi team selected two of these – Ramsey County, Minnesota and Summit County, Ohio. County commissioners can use this information to understand how other jurisdictions structure and support their public health agencies.

COMPARISONS OF SIMILAR PUBLIC HEALTH AGENCY JURISDICTIONS					
	Ramsey County, Minnesota (St. Paul)	Summit County, Ohio (Akron - South of Cleveland)	Jefferson County, Colorado	El Paso County, Colorado	Boulder County, Colorado
Population, 2020 Census	552,352	540,428	582,910	730,395	330,758
Median household income	\$ 64,660	\$ 57,181	\$ 82,986	\$ 68,779	\$ 83,019
Land mass	152 sq mi	413 sq mi	764 sq mi	2126 sq mi	726 sq mi
Accredited department	Yes	Yes	Yes	Yes	No
FTE in public health	291		168	162	151
Total PH budget 2019	\$ 53,500,000	\$ 27,200,000	\$ 18,000,000	\$ 17,000,000	\$ 17,384,837
County funds	\$ 10,300,000	\$ 8,630,675	\$ 8,000,000	\$ 3,700,000	\$ 6,948,811
% of public health budget from local funds	19%	32%	44%	22%	40%

Note: County funds in Summit County, Ohio include funding provided by cities within the county.

FISCAL ANALYSIS AND FORECAST MODELS >>>

The financial modeling interprets features of TCHD's current operations. The aim was to build a representation of a potential budget if Adams and Arapahoe counties were to create independent public health agencies. This was accomplished by combining key accounting, finance, and business metrics to build an abstract representation, or model. The models are intended to be used as decision-making tools and may elicit more questions. The following methods and assumptions were applied during the analysis and budget modeling.

Revenue Projections and Funding Formulas

Data sources:

1. 2021 TCHD income statements, balance sheets and expenditures
2. 2021 TCHD Adopted Budget
3. Data gathered from TCHD leadership to determine proportional allocation, where possible. This included funding sources, current staffing patterns and costs, and ability to retain funding
4. State funding data provided by CDPHE
5. TCHD Division Directors provided detailed information about funding sources and formula information
6. CDPHE provided information about some contracts to TCHD

Assumptions:

1. Competitive grants are not transferable to single county agencies
2. Funding formulas, provided by the state and others, were accurate
3. The analysis did not include the longer term viability of future funding
4. Funding sources ending in 2021 were not included
5. Some revenue would not be available to single counties

Methods:

1. Each funding source was assessed to determine if that funding would likely be obtained by the counties individually
2. When funding formulas were located for related sources, they were used to determine a more precise estimate of program revenue (i.e., Public Health Emergency Preparedness)
3. For programs with more than one funding source, the same percentage distribution used to estimate total funding was used to estimate funding by source
4. Upon completion of analysis, financial numbers were rounded to whole numbers

Expenditures

Data sources:

1. 2021 TCHD income statements, balance sheets and expenditures
2. 2021 TCHD Adopted Budget
3. Data gathered from TCHD leadership to determine proportional allocation, where possible. This included funding sources, current staffing patterns and costs, and ability to retain funding
4. Current TCHD vendor contracts

Assumptions:

1. TCHD expenditures in 2021 are reasonable and accurate

Methods:

1. 2021 TCHD expenditures were used to model the forecasted District and Single County Public Health Agencies
2. FTE needs were determined by a review of existing program staffing patterns at TCHD and guidance from TCHD Division Directors estimation of need in each county
3. In general, travel, supplies, and operating costs were adjusted based on percentage FTE for each program
4. Contract services that were proportionately large were adjusted based on the purpose of contract and need estimated by TCHD staff and Otowi Group, under the different scenarios
5. Supply expenditures that could be directly attributable to program services were adjusted to the number of clients served
6. Upon completion of analysis, financial numbers were rounded to whole numbers

Human Resource Allocation

Data sources:

1. TCHD existing personnel data including position title, division, program, FTE and annualized salaries
2. Data gathered from TCHD leadership to determine proportional allocation, where possible. This included funding sources, current staffing patterns and costs, and ability to retain funding

Assumptions:

1. Salaries and staffing levels were based on current TCHD operations
2. Programs were assigned individual staff positions in a way that prioritized using whole individuals and assigned varying position levels (associate, senior, etc.) and varying roles (nurse, admin, etc.)
3. For larger, more complex programs, a percentage of the whole team was designated based on the work anticipated to run an equivalent program in the county
4. Where some staff positions were budgeted but are not currently filled, Otowi Group assigned a related staff position
5. Public health director and medical officer required

Methods:

1. TCHD Division Directors analyzed each of their programs and allocated FTE to each county based on their knowledge of the program outputs, current service needs (for example, number of retail food facilities) and existing program FTE
2. Division Director information was cross matched with existing TCHD human resources information about every employee's assigned program and current salary
3. Some positions were not included because the counties already have some staff in areas such as human resources, IT, communications and finance
4. A Cost of Living Adjustment (COLA) of 4% was applied to all 2021 salary amounts provided
5. TCHD HR staff compared county salary ranges to TCHD salary ranges

Overall Assumptions

1. TCHD financial data supplied was accurate
2. TCHD Division Directors, as experts in their field, predicted the needs of a separate county accurately
3. Discrepancies less than .001% of revenues of the total budget were deemed non substantial
4. Current programs are already built and provide an adequate level of service
5. Single county forecasts based on a similar level of service as currently provided by TCHD

DISTRICT PUBLIC HEALTH AGENCY FORECAST

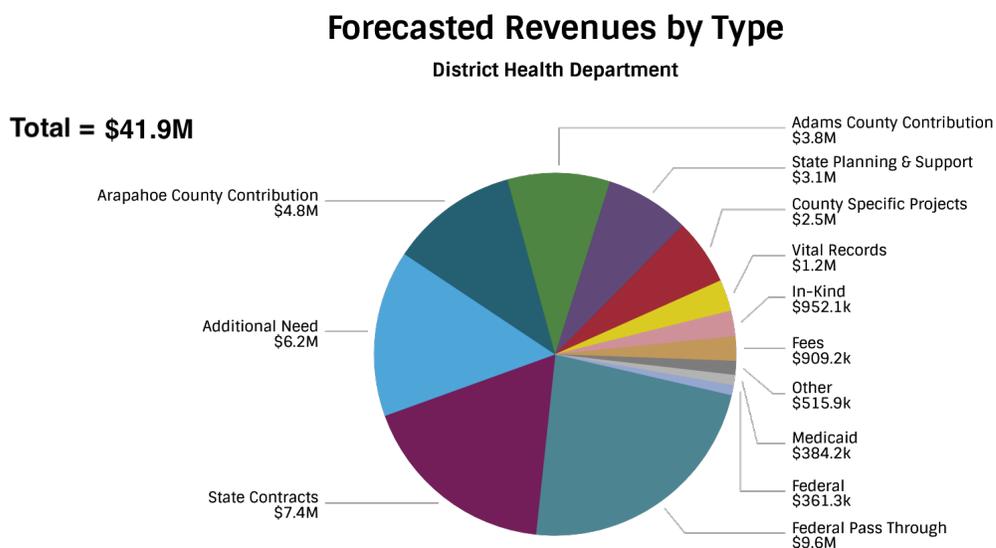
FORECASTED REVENUES AND EXPENDITURES >>>

The following charts articulate **forecasted revenues and expenditures** for a combined Adams and Arapahoe district public health agency scenario. This estimate does not include any contracting with Douglas County. Revenues are forecasted for one year and based on TCHD 2021 Adopted Budget information. This scenario includes:

- A two-county district, with similar services and service levels to TCHD would need a budget of approximately \$42,000,000 and 366 FTE.
- It would require an estimated \$6,200,000 in new/replacement funding.
 - This includes the removal of revenue used in 2021 but assumed to be unavailable in the future: interest income, COVID funding indirect funds, and fund balance.
 - Increased expenses are due to some infrastructure costs that are for the whole organization and can not be reduced in a two county scenario. Examples include shared FTE and some IT costs.
- The FTE estimate in this scenario is high in order to preserve capacity and programs.
 - Approximately 30 FTE, with a cost of approximately \$2,000,000 were retained in this budget. These FTE are in program areas of nursing, nutrition and environmental health, and provide direct services to the community. This is an opportunity for additional reduction.

TCHD has already created a 2022 budget for a two-county district LPHA and contracted services to Douglas County. The estimates in this forecast are less accurate than that budget document.

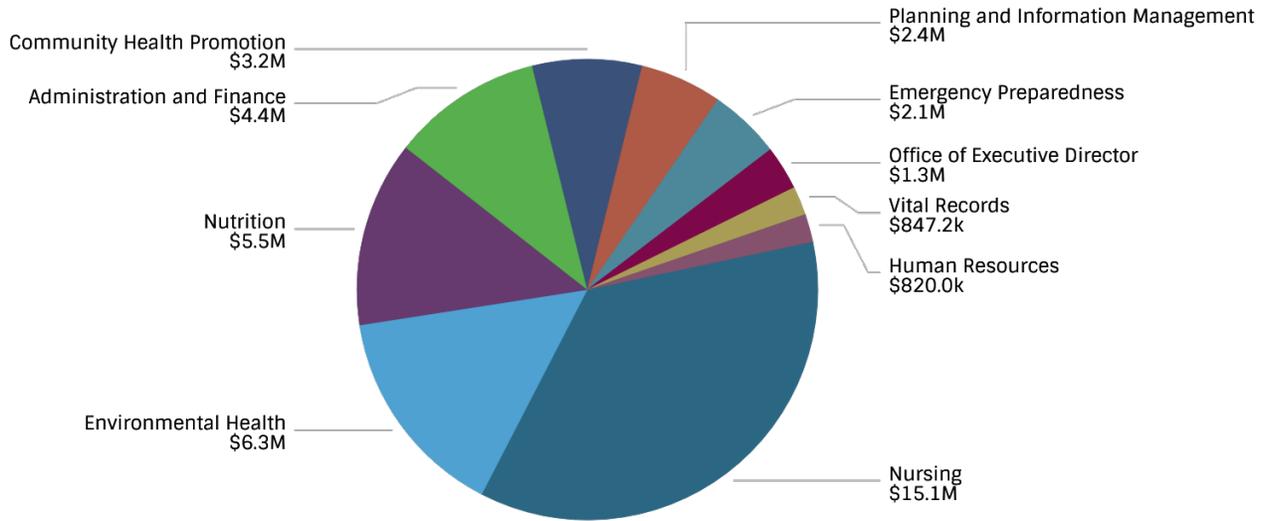
Forecasted Revenues



Forecasted Expenditures

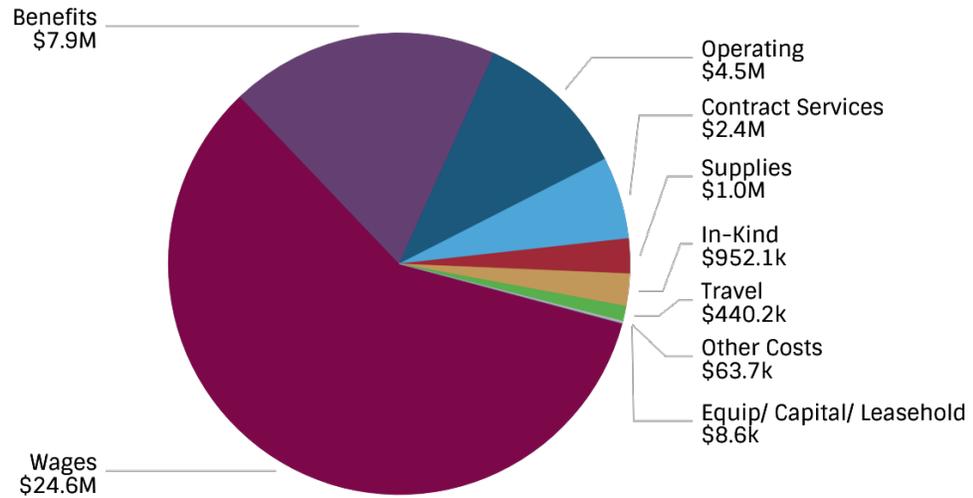
Forecasted Expenditures by Division

District Health Department



Forecasted Expenditures by Category

District Health Department



ARAPAHOE COUNTY PUBLIC HEALTH AGENCY FORECAST

FORECASTED REVENUES AND EXPENDITURES >>>

The following charts articulate **anticipated revenues and expenditures** for a single county public health agency scenario for Arapahoe County. This includes all revenues related to Arapahoe County directly. It is forecasted for one year and based on 2021 TCHD Adopted Budget information. This scenario includes:

- A single county public health agency, with services reduced to those for which Arapahoe County could obtain funding currently held by TCHD.
- Total public health budget of approximately \$22,100,000 and 197 FTE.
- An estimated \$1,700,000 of Local Planning and Support funding from CDPHE which is considered highly likely, and approximately \$12,000,000 of grant and contract funding considered likely.
 - Of the funding considered likely, \$9,800,000 would require public health specific infrastructure that Arapahoe County would need to develop.
- Arapahoe County contributing an estimated \$8,400,000 (38%) of an estimated \$22,100,000 budget.
- For comparisons of budget, local contributions and FTE with other public health agencies, see page 11.

Services not included in this scenario:

- Diabetes prevention
- Worksite wellness
- Advanced breastfeeding
- Health eating and active living
- Heathy beverage initiative
- Syndromic surveillance
- Industrial hygiene
- Medical epidemiology
- Dietetic internship
- Regional health connectors

Reduced services:

- Data analytics
- Communicable disease
- Organizational operations

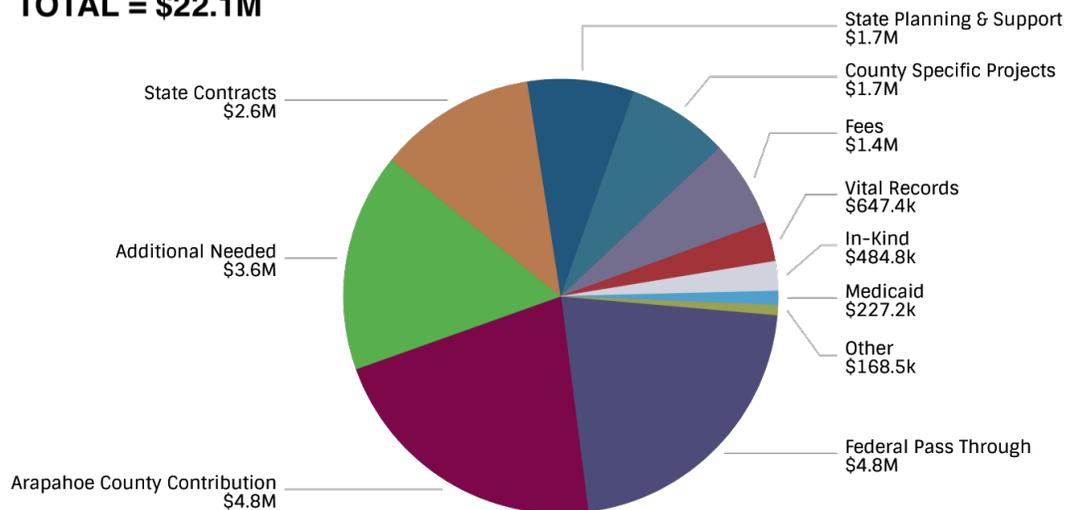
Forecasted Revenues

LIKELIHOOD OF ARAPAHOE COUNTY RECEIVING CURRENT REVENUES		
Highly likely	Likely	Unlikely
~\$1,755,000	~\$11,496,000	~\$1,468,000
<p>All this funding is from the State Office of Public Health Practice, Planning and Local Partnerships. It does not include the funding that Arapahoe county currently contributes. It is based on a formula and predicated on an agreement with CDPHE.</p>	<p>This includes, but is not limited to, programs such as Emergency Preparedness (Federal Pass Through), Nurse Family Partnership, WIC, Tobacco, Immunization, Restaurant Inspections (fees) and Vital Records (fees).</p> <p>Arapahoe County would have to compete prior to receiving in some, but not all, cases. In all cases, infrastructure would need to be pre-established and much of it is cost reimbursement or fees. This means Arapahoe County has to provide services first and then bill for reimbursement. This is all categorical funding and therefore must be used for the specific programs (designated funding for a particular purpose).</p>	<p>This is an estimated loss of program funds and fees that TCHD currently receives as a district health department. It includes all competitive grants through Amendment 35 funds, some emergency preparedness funds, dietetic internship.</p> <p>This is a regional loss and the amount that affects Arapahoe specifically has not been calculated. These are only revenues and don't reflect any other potential losses such as current liabilities, penalties or other losses.</p>

Forecasted Revenues by Type

Arapahoe County

TOTAL = \$22.1M



Forecasted Expenditures

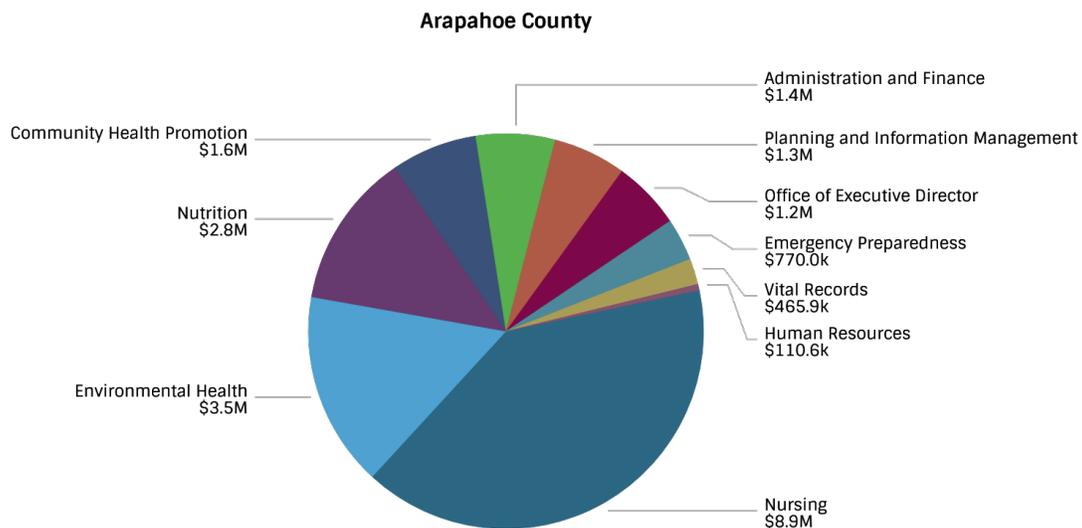
The decreased contribution compared to the district scenario IS NOT a result of lower costs, but rather a reduction in services due to revenue unavailable to Arapahoe County.

- If funding was not likely to be received, it was assumed the work would not be done.
- Many of the programs run by the lost funding also used unrestricted county and state funds which would no longer be needed to support those programs.

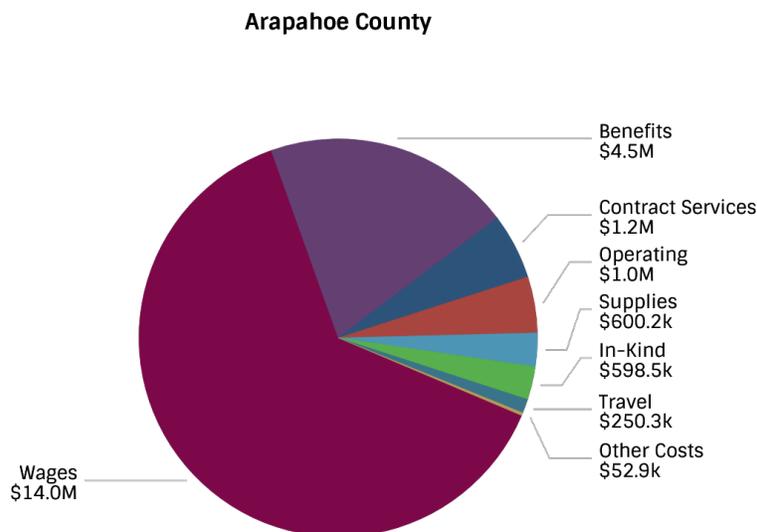
Costs not included:

- Some administrative and IT costs were removed because they may be duplicated at the county level, but they were not replaced with corresponding costs that would be incurred by the individual counties.
- Each county will need to determine the cost for the added FTE and public health agency specific requirements to their existing infrastructure and add those costs to those listed here.
- Arapahoe County salaries are between 2% and 17% higher than similar TCHD positions.

Forecasted Expenditures by Division



Forecasted Expenses by Category



ADAMS COUNTY PUBLIC HEALTH AGENCY FORECAST

FORECASTED REVENUES AND EXPENDITURES >>>

Adams County Public Health Agency Forecast

The following charts articulate **anticipated revenues and expenditures** for a single county public health agency scenario for Adams County. This includes all revenues related to Adams County directly. It is forecasted for one year and based on 2021 TCHD Adopted Budget information. This scenario includes:

- A single county public health agency with services reduced to those for which Adams County could obtain funding currently held by TCHD.
- Total public health budget of approximately \$18,500,000 and 158 FTE.
- An estimated \$1,400,000 of Local Planning and Support funding from CDPHE which is considered highly likely, and approximately \$10,600,000 of grant and contract funding considered likely.
 - Of the funding considered likely, \$7,800,000 would require public health specific infrastructure that Adams County would need to develop.
- Adams County contributing an estimated \$6,500,000 (35%) of an estimated \$18,500,000 budget.
- For comparisons of budget, local contributions and FTE with other public health agencies, see page 11.

Services not included in this scenario:

- Diabetes prevention
- Worksite wellness
- Advanced breastfeeding
- Health eating and active living
- Heathy beverage initiative
- Syndromic surveillance
- Industrial hygiene
- Medical epidemiology
- Dietetic internship
- Regional health connectors

Reduced services:

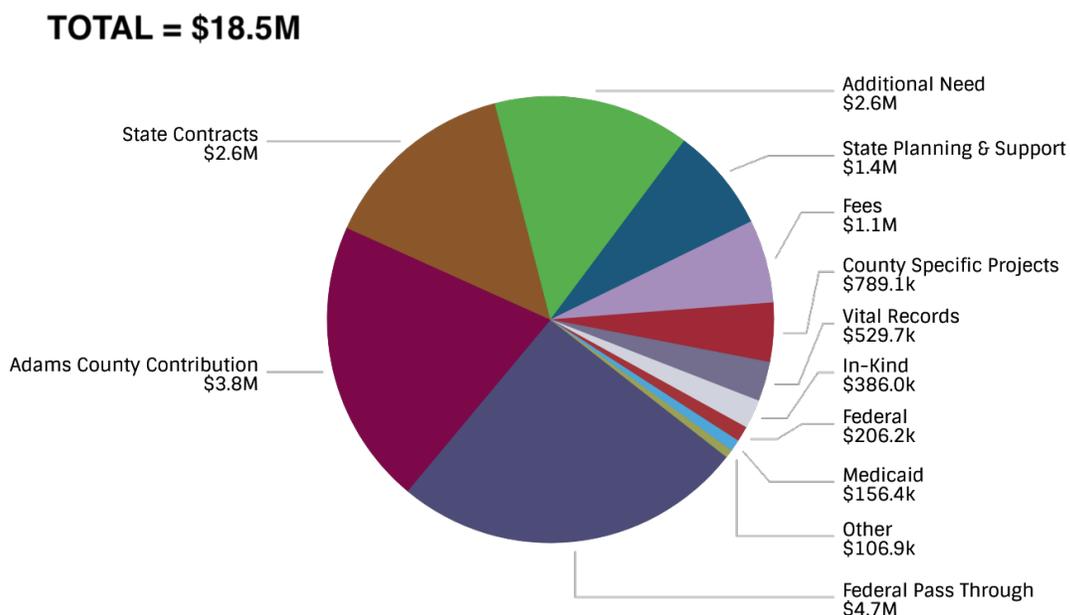
- Data analytics
- Communicable disease
- Organizational operations

Forecasted Revenues

LIKELIHOOD OF ADAMS COUNTY RECEIVING CURRENT REVENUES		
Highly likely	Likely	Unlikely
~\$1,400,000	~\$10,185,000	~\$1,468,000
<p>All this funding is from the State Office of Public Health Practice, Planning and Local Partnerships. It does not include the funding that Adams County currently contributes. It is based on a formula and predicated on an agreement with CDPHE.</p>	<p>This includes, but is not limited to, programs such as Emergency Preparedness (Federal Pass Through), Nurse Family Partnership, WIC, Tobacco, Immunization, Restaurant Inspections (fees) and Vital Records (fees).</p> <p>Adams County would have to compete prior to receiving in some, but not all, cases. In all cases, infrastructure would need to be pre-established and much of it is cost reimbursement or fees. This means Adams County has to provide services first and then bill for reimbursement. This is all categorical funding and therefore must be used for the specific programs (designated funding for a particular purpose).</p>	<p>This is an estimated loss of program funds and fees that TCHD currently receives as a district health department. It includes all competitive grants through Amendment 35 funds, some emergency preparedness funds, dietetic internship.</p> <p>This is a regional loss and the amount that affects Adams County specifically has not been calculated. These are only revenues and don't reflect any other potential losses such as current liabilities, penalties or other losses.</p>

Forecasted Revenues by Type

Adams County



Forecasted Expenditures

The decreased contribution from the district scenario IS NOT a result of lower costs, but rather services lost due to lost revenue.

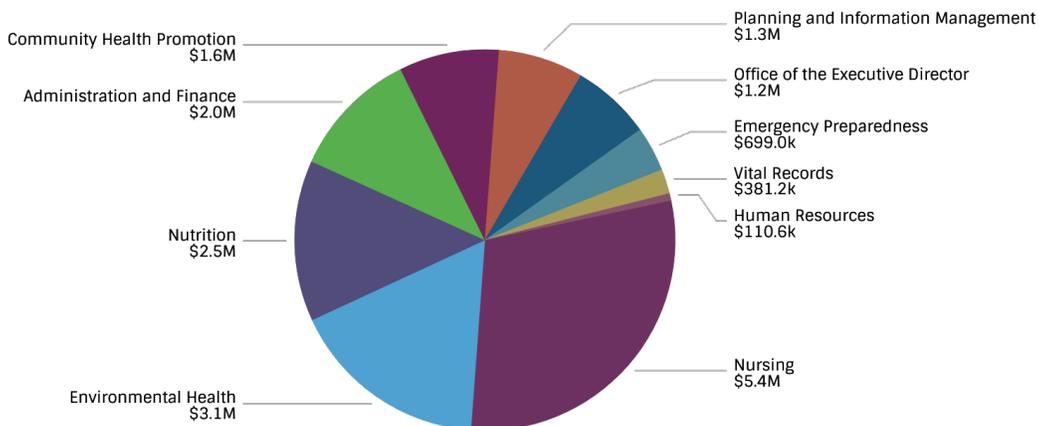
- If funding was not likely to be received, it was assumed the work would not be done.
- Many of the programs run by the lost funding also used unrestricted county and state funds which would no longer be needed to support these programs.

Costs not included:

- Some administrative and IT costs were removed because they would be duplicated at the county level, but they were not replaced with corresponding costs that would be incurred by the individual counties.
- Each county will need to determine the cost for the added FTE and public health agency specific requirements to their existing infrastructure and add those costs to those stated here.
- Adams County salaries are between 2% and 32% higher than similar TCHD positions.

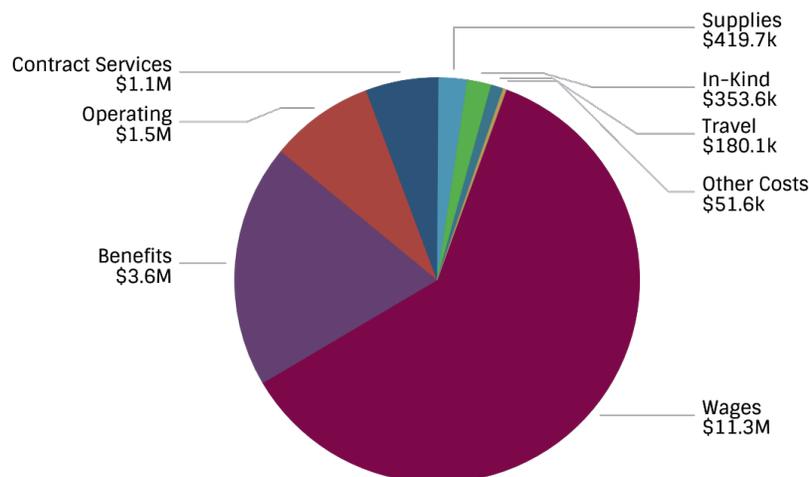
Forecasted Expenditures by Division

Adams County



Forecasted Expenditures by Category

Adams County



OTHER FISCAL IMPLICATIONS: TRANSITION COSTS >>>

Potential and real transition costs or up-front costs that would be needed as a result of a separation are a critical consideration for this decision. The anticipated transition costs identified at the time of this report are **\$61,643,070**.

Transition costs are the reasonable costs and the expenditures, labor, and materials that would be incurred through a separation. This chart explains known transition costs at the time of this report

Costs not quantified:

- Attorney fees for transition
- Family Medical Leave Act (FMLA) obligations
- Office equipment leases and vehicle leases
- Staff pay bands (equivalent staffing costs are higher in both counties than in TCHD)
- Disruption Costs: costs associated with change such as lost productivity, cost of personnel changes, etc.

Start-up Costs			
Type of Cost	Explanation	One Time Cost	Yearly Cost
Electronic Health Records System	Electronic patient registration, charting and documentation; interoperability with other electronic health systems; billing; data and reporting	\$900,000	\$200,000
Environmental Health Software System	Tracking of regulated facility owners and properties, permitting, inspections, licensing, service requests, complaints, data and reporting, licensing, manage enforcement, septic system permitting and inspections, invoicing, tracking certified professionals, tracking staff education for FDA voluntary standards requirements, public facing inspection look-up	\$950,000	\$150,000
Women Infant and Children (WIC) Program	Start up costs per employee (\$2,500) and per clinic equipment needing to be established (\$5,000)		
	Adams (31 FTE and 3 clinics)	\$93,500	
	Arapahoe (37 FTE and 5 clinics)	\$108,500	

Dissolution Costs			
Type of Cost	Explanation	One Time Cost	Yearly Cost
Public Employee Retirement Association (PERA)	PERA calculated penalty for dissolving TCHD *It has not yet been determined if and when this amount would be due and whether there are any financial obligations if TCHD dissolves and has no remaining assets.	\$50,000,000	
Paid Time Off payout	Funds needed to close out obligations for vacation and sick leave to current employees as of September 15th, 2021	\$2,642,266	
Workers Compensation	Reserves needed to ensure funding for open claims as of September 2021	\$17,000	
Records and Document Storage	Contract is with Iron Mountain Storage. Assumptions are that these costs would be split between the counties. Documents for any of historical work is required to be retained at different intervals and must		\$35,000
Administrative Building Lease Buyout	Costs to close the administrative building in Arapahoe County	\$3,400,000	
Service Building Lease Buyouts	Costs to cancel leases for TCHD buildings in Adams and Arapahoe counties	\$3,111,804	
	TOTAL KNOWN COSTS	\$61,258,070	\$385,000

OBSERVATIONS AND INSIGHTS >>>

This report does not point conclusively to one best model for public health services for Adams and Arapahoe counties. Rather, the findings validate that this is a complex decision in which multiple considerations must be taken.

Creating a new single county-based model, allows counties to create a focused and uncompromising organization, centered solely on the needs of people living and working in the individual jurisdictions. Modeling done in this report appears to require more costs and infrastructures to be established and strengthened within a county. This county-based infrastructure will be necessary for single county LPHAs to succeed. These new capacities may be beneficial to the county itself. In the short term, separate, single county public health agencies would have access to less public health revenue, and perhaps services, and would incur transition costs for start-up and dissolution of TCHD. In the long term, the expected revenues would likely support a health department like others in the Denver metro area. A new single county LPHA would allow counties to wholly envision a health department to be what they want and need, from the ground up.

Retaining the district public health agency model ensures that the capacity to provide a wide variety of services to Adams and Arapahoe counties is not lost or interrupted. It also models a cost that is in alignment with other local public health agencies of similar size and is forecasted to be a lower cost than separate, single county agencies. Savings, as a district public health agency, are attributed to shared governance and administrative costs. TCHD has the size, breadth and depth of staff expertise, good reputation, grant writing and management capacity, and status as Colorado's largest health department that allows the agency to procure funding not generally available to other health departments in Colorado. To continue forward successfully, TCHD would need to undergo a strategic reorganization and re-visioning to fulfill the current and future interests and needs of the counties. This is necessary to realize a broadened focus on areas such as community engagement, equity, more connection to counties and cities, and more integration into other county level services.

Recommendations for additional understanding

Counties must discuss what infrastructure and internal resources are available, the public health specific resources they would need and desire, and understand any additional costs of recruitment, hiring and training the necessary staff to perform the public health services. In the single county scenarios, Otowi has removed many of the TCHD infrastructure costs. Counties will need to assess their current structure and determine additional costs to add to this analysis.

Opportunities to enhance connections of county work to TCHD work

Otowi Group had a unique vantage point with opportunities to see ways to enhance the connection of county work with TCHD work. If a district structure is chosen, these insights will be used in the transition plan. Examples include:

- Establishment of a TCHD leader/liaison to each county
- Changes to Board of Health membership, bylaws and operations
- Intentional alignment with county priorities
- Revisit attempts to co-locate TCHD staff and county departments, such as human services
- Regular and consistent meetings with leadership
- TCHD leader participation in county department director meetings and planning sessions

Advantages and Disadvantages

In summary, many factors should be considered when deciding what direction to take in the structure of public health services for Adams and Arapahoe Counties. The center of this chart represents areas that could be perceived as either advantages or disadvantages, depending on your perspective.

DISTRICT LPHA ADVANTAGES

- Structures and processes already in place (during a pandemic)
- An existing and well-established infrastructure focused solely on the advancement and interests of public health
- Influence as largest health department in Colorado
- Established reputation with funders and public health system
- Potentially more competitive for grants and contracts
- Existing teams of qualified staff with specialized expertise
- Flexibility with rapid purchasing, contracting and re-organizing
- Lower county contribution required
- Accredited health department

SINGLE COUNTY LPHA ADVANTAGES

- Do not have to compromise with another county
- Builds new capacities at county level
- Singular focus on county needs
- Potential for more natural integration into other county services
- More local control
- Ability to more closely tie to county vision and strategic plan
- Entire board of health appointed by county commissioners
- Some current infrastructure (i.e., HR) can be used

DISTRICT LPHA DISADVANTAGES

- Complex jurisdiction with many school districts, municipalities, health care providers, etc.
- Current organizational structure means fewer direct leadership connections in counties
- Harder to localize and target programs
- Perception of decreased local control
- Board of Health mandates and orders must fit for two counties
- More localized data reporting is desired
- Board of Health structure and processes need to change

SINGLE COUNTY LPHA DISADVANTAGES

- Can afford fewer specialized staff due to less work in specialized areas
- Some current funding lines are not guaranteed
- Some required capacities are only relevant to public health
- Accreditation process will take time
- Structures and capabilities will be needed before some funding will come (i.e., Medicaid)
- Some public health professionals work at Tri-County because of its size, breadth and representation – the counties will not have that reputation
- More competition among LPHAs of similar size

OTHER CONSIDERATIONS

- Board of health can seem disconnected from elected officials
- Analysis shows that county salaries are higher than TCHD
- Maintains regional approach
- Pre-COVID, Public Health staffing and funding trends were decreasing
- Need a clearer understanding of direct benefit to residents
- Relationships built during COVID can be built upon

APPENDIX A: ACRONYMS

Colorado Department of Public Health and Environment – CDPHE

Full Time Equivalent – FTE

Health Insurance Portability and Accountability Act – HIPAA

Local Public Health Agency – LPHA

National Association of County and City Health Officials – NACCHO

Office of Public Health Practice, Planning and Local Partnerships – OPHP

Personally Identifiable Information – PII

Public Health Emergency Preparedness – PHEP

Taxpayer’s Bill of Rights – TABOR

Tri-County Health Department – TCHD

APPENDIX B: PUBLIC HEALTH PRIMER

Public Health System Background Information

FOR ADAMS AND ARAPAHOE COUNTY COMMISSIONERS

Created by Lisa VanRaemdonck, MPH, MSW
CU Denver School of Public Affairs

The following background information was created for Adams County and Arapahoe County Commissioners and staff to help explain fundamental elements of the public health system.

It shows general information from the US and Colorado public health systems.

It does not show Tri-County Health Department data, funding, staffing or structure.

It was created in the context of conversations about Tri-County Health Department and is not intended to be comprehensive, nor intended to provide legal advice nor policy analysis.

It is intended to answer some basic questions that have been directly and indirectly asked by staff and commissioners.

HOW TO USE THIS DOCUMENT

Look for yellow boxes in the top right corner tips on how to use the information.



TABLE OF CONTENTS

State and Local Governance Relationships

- Q: What other health departments around the US are most comparable to TCHD, Adams and Arapahoe?

Local Board of Health Requirements

- Q: What are the duties and responsibilities of the board of health?

Public Health Structures and Services

- Q: What public health structures are mandated by state law?
- Q: What public health services are mandated by state law?
- Q: What are the Colorado Core Public Health Services?

Public Health Funding

- Q: What are the funding sources for public health agencies?
- Q: How much local funding is commonly used in public health agencies?

Public Health Staffing

- Q: What types of staff positions are typical of large health departments?
- Q: How many FTE are typically employed by large health departments?

State-Local Governance

State and Local Public Health Governance Relationships

The relationship between state and local public health agencies varies across states.

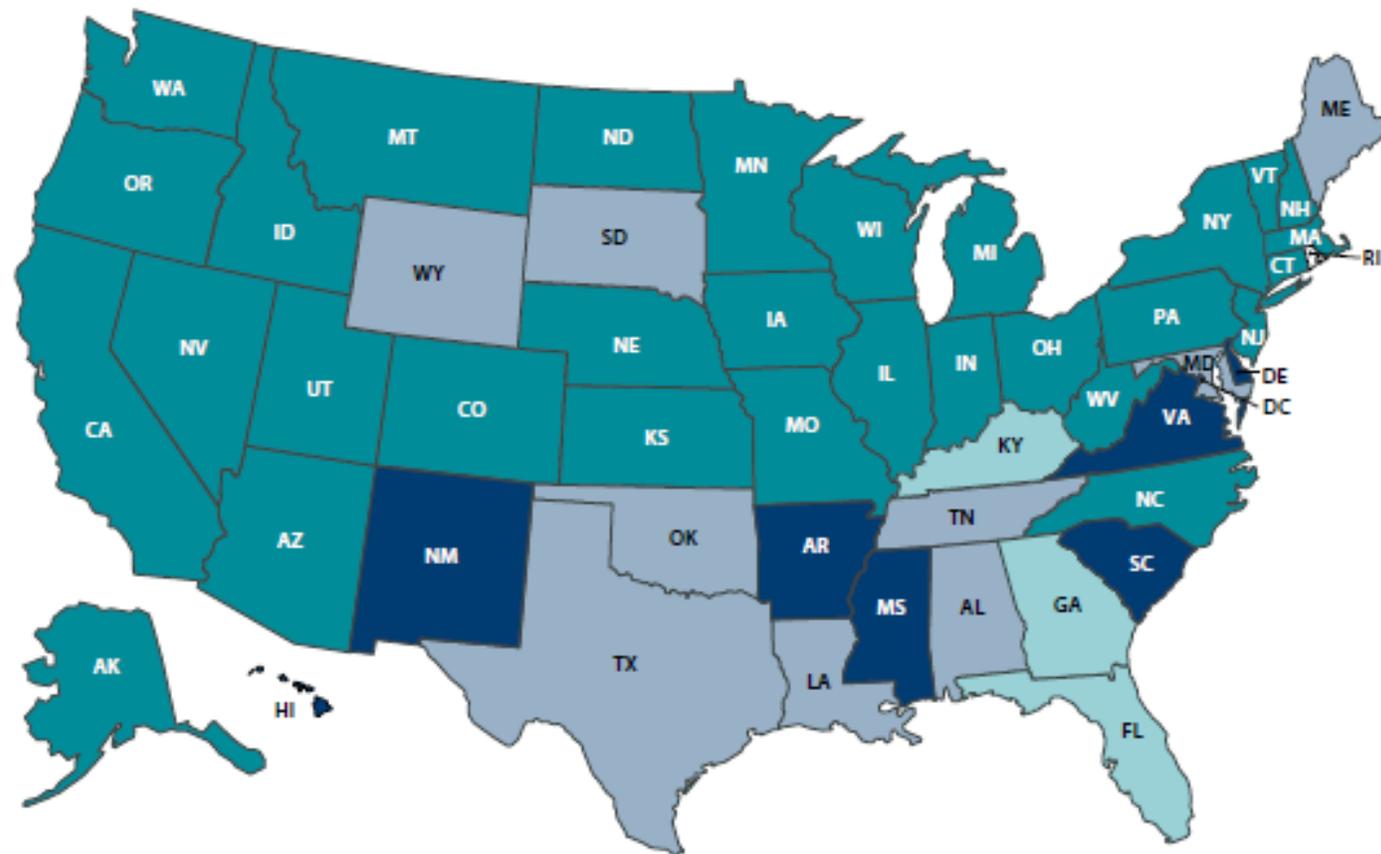
In Colorado, LPHAs are agencies of local government

(referred to as locally governed or decentralized)

Others are local or regional units of the state health department (referred to as state-governed). Some are governed by both state and local authorities (called shared governance).

Figure 2.4 | Type of LHD governance, by state

- Local (all LHDs in state are units of local government)
- State (all LHDs in state are units of state government)
- Shared (all LHDs in state governed by both state and local authorities)
- Mixed (LHDs in state have more than one governance type)



Use this information to compare with other public health agencies in the dark green states

RI was excluded from the study
N=2,459

Back to TOC

Local Boards of Health

Local Board of Health

Colorado Local Board of Health Responsibilities and Membership Requirements are detailed in the

[Pocket Guide for
Local Boards of Health](#)



In Accordance with
the Colorado Public Health Act of 2008
C.R.S. 25-1-501 et seq.

revised January, 2017

Board of Health Duties: Administrative Oversight

PERSONNEL AND FACILITIES

- **Hire** Public Health Director.
- **Employ** or contract with a Medical Officer.
- Provide, equip, and **maintain suitable offices and facilities.**

MEETINGS

- Hold Board of Health **meetings at least once every three months.**
- Request Director or another to **serve as board secretary**, responsible for maintaining all records and ensuring public notice of meetings.

Board of Health Duties: Administrative Oversight

AUTHORITY

- Follow orders, rules, and standards of the **Colorado Board of Health**.
- **Hold hearings**, administer oaths, subpoena witnesses, and take testimony in all matters relating to the respective powers and duties of a local board of health, (e.g., local regulation variances, appeal of a cease and desist order, removal of a license, etc).

PLANNING AND ADVISING

- Act in an **advisory capacity** to the public health director on all matters pertaining to public health.
- **Approve the five-year local public health improvement plan**, and then submit to the State Board of Health for review.
- **Determine necessary services and set local priorities** consistent with state public health laws and rules, according to local needs and the resources available, and consistent with the state and local public health improvement plans.

Board of Health Duties

POLICY MAKING

- Determine **general policies** to be followed by the public health director, **in administering & enforcing public health laws, orders, & rules.**
- Develop and promote the **public policies** needed to secure the conditions for a healthy community, by considering the advice and expertise of the local public health agency.
- **Issue orders & adopt rules** consistent with the laws, rules & orders of the state & the state board, for public or environmental health issues that pose no immediate health threat (e.g. nuisance abatement).

Board of Health Duties

FINANCIAL OVERSIGHT

- Annually **review the costs of maintaining the local public health agency** for the ensuing year and submit to board of county commissioners or district LPHA finance committee.
- **Assess fees** (where they are not set in state statute) to offset the direct costs of local environmental health services.
- Accept and, through the public health director, **use, disburse, and administer all appropriated funds** for public health functions.
- Certify that claims or demands made against the local public health agency fund were **expended only for the duties of the agency**.

Mandated Services

Structures Mandated in State Statute

Local Public Health Agencies (LPHA) must consist of:

- Board of Health
- Public Health Director
- Medical Officer
(if PH Director does not have MD or DO)
- And any staff to perform the activities of the LPHA

Community Assessment and Planning activities are required:

- Community Health Needs Assessment
- Public Health Improvement Plan
- Planning and Evaluation

Services Mandated in State Statute

The public health services and programs that are explicitly mandated in state law are **not intended to comprise an adequate local public health agency**. Many, but not all, of the related statutes are in Colorado Revised Statutes Title 25. Others appear throughout state law in a fragmented manner.

REQUIRED SERVICES

- Vital records
- Communicable disease surveillance and control
(including reportable conditions and specifically Tuberculosis)
- Immunizations (specifically for children without insurance)
- Onsite wastewater (septic systems)
- Land use cases
- Nuisance abatement

Core Public Health Services

State law gives the Colorado State Board of Health the authority to promulgate a formal **rule to describe Core Public Health Services** that local public health agencies must provide or assure the provision of, in their communities.

This rule is 6 CCR 1014-7

If LPHAs do not have the funding to provide all of the core public health services, they must prioritize based on the needs of the community.

The Colorado Core Public Health Services are intended to be **broad enough that local public health agencies can customize** the programs and services they provide within the framework.

The services explicitly mandated in state statute also map onto the Core Public Health Services.

COLORADO CORE PUBLIC HEALTH SERVICES

FOUNDATIONAL CAPABILITIES

A1. ASSESSMENT AND PLANNING

A2. COMMUNICATIONS

A3. POLICY DEVELOPMENT AND SUPPORT

A4. PARTNERSHIPS

A5. OPERATIONAL CAPABILITIES

(a) LEADERSHIP AND GOVERNANCE

(b) HUMAN RESOURCES

(c) LEGAL SERVICES AND ANALYSIS

(d) FINANCIAL, CONTRACT, PROCUREMENT, & FACILITIES

(e) INFORMATION TECHNOLOGY AND INFORMATICS

(f) ACCOUNTABILITY, PERFORMANCE MANAGEMENT & QUALITY IMPROVEMENT

A6. EMERGENCY MANAGEMENT & RESPONSE

A7. HEALTH EQUITY & SOCIAL DETERMINANTS OF HEALTH

FOUNDATIONAL SERVICES

B1. COMMUNICABLE DISEASE PREVENTION INVESTIGATION AND CONTROL

B2. ENVIRONMENTAL PUBLIC HEALTH (B2)

B3. MATERNAL, CHILD, ADOLESCENT AND FAMILY HEALTH

B4. CHRONIC DISEASE, INJURY PREVENTION & BEHAVIORAL HEALTH PROMOTION

B5. ACCESS TO AND LINKAGE WITH HEALTH CARE

Crosswalk of state law and Core Public Health Services rule

PUBLIC HEALTH SERVICES EXPLICITLY IN STATE LAW

Local Public Health Agencies (LPHA) must consist of:

- Board of Health
- Public Health Director
- Medical Officer (if PH Director does not have MD or DO)
- And any staff required to perform the activities of the LPHA

Community Assessment and Planning Activities are required:

- Community Health Needs Assessment
- Public Health Improvement Plan

Additional required programs (some do not have dedicated funding sources)

- Vital records
- Communicable disease surveillance and control (including reportable conditions and specifically Tb)
- Immunizations (specifically for children without insurance)
- Onsite wastewater (septic systems)
- Land use cases
- Nuisance abatement

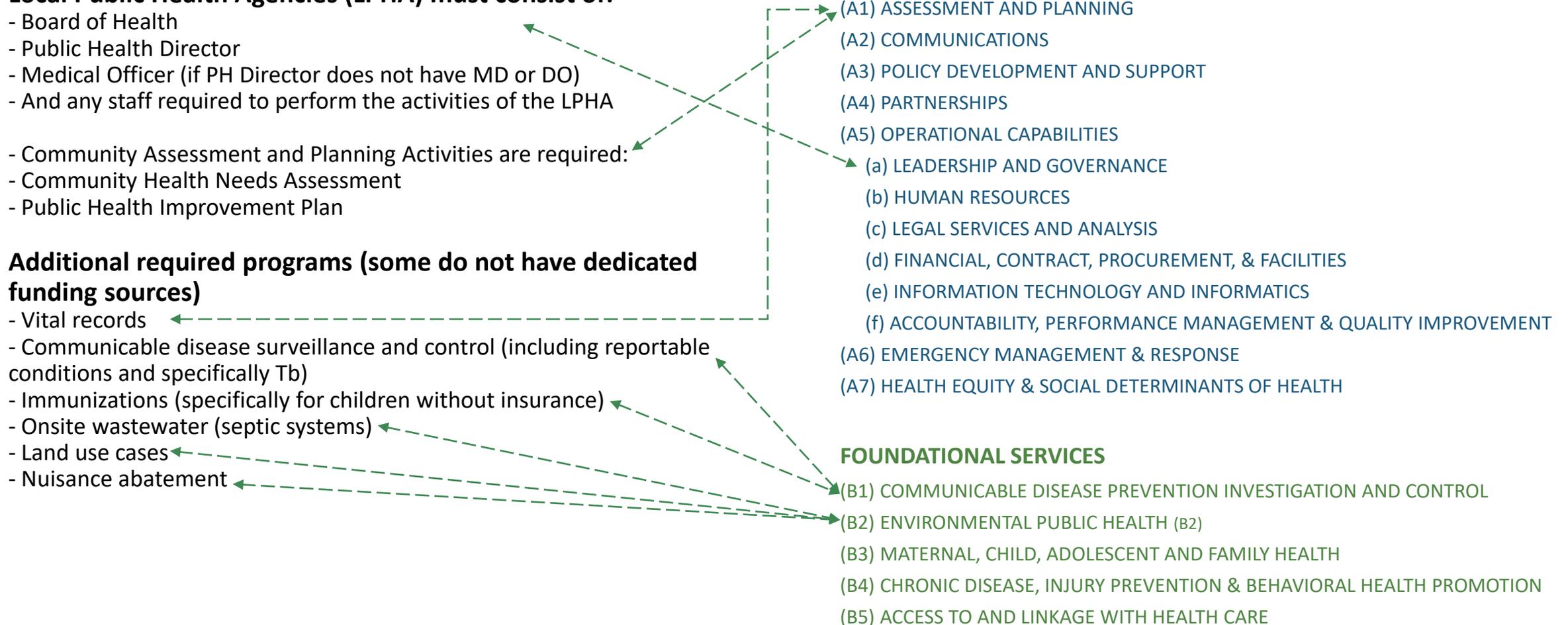
COLORADO CORE PUBLIC HEALTH SERVICES

FOUNDATIONAL CAPABILITIES

- (A1) ASSESSMENT AND PLANNING
- (A2) COMMUNICATIONS
- (A3) POLICY DEVELOPMENT AND SUPPORT
- (A4) PARTNERSHIPS
- (A5) OPERATIONAL CAPABILITIES
 - (a) LEADERSHIP AND GOVERNANCE
 - (b) HUMAN RESOURCES
 - (c) LEGAL SERVICES AND ANALYSIS
 - (d) FINANCIAL, CONTRACT, PROCUREMENT, & FACILITIES
 - (e) INFORMATION TECHNOLOGY AND INFORMATICS
 - (f) ACCOUNTABILITY, PERFORMANCE MANAGEMENT & QUALITY IMPROVEMENT
- (A6) EMERGENCY MANAGEMENT & RESPONSE
- (A7) HEALTH EQUITY & SOCIAL DETERMINANTS OF HEALTH

FOUNDATIONAL SERVICES

- (B1) COMMUNICABLE DISEASE PREVENTION INVESTIGATION AND CONTROL
- (B2) ENVIRONMENTAL PUBLIC HEALTH (B2)
- (B3) MATERNAL, CHILD, ADOLESCENT AND FAMILY HEALTH
- (B4) CHRONIC DISEASE, INJURY PREVENTION & BEHAVIORAL HEALTH PROMOTION
- (B5) ACCESS TO AND LINKAGE WITH HEALTH CARE



Public Health Funding

Public Health Agency Funding

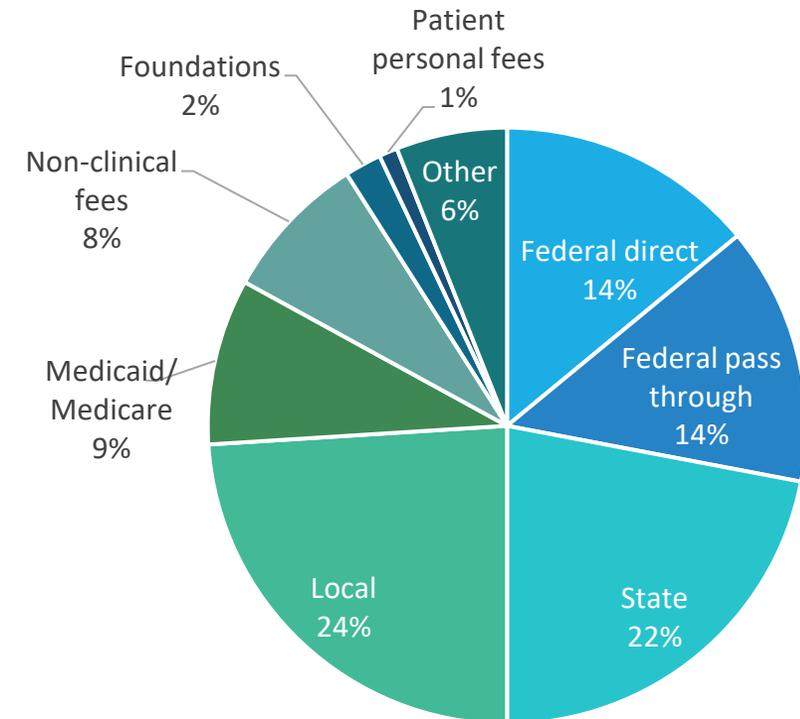
Use this information to compare to proportion of funding sources across the US.

Public health agencies are typically funded by a wide variety of funding sources.

Some sources do not cover all of the needed expenses for that service and some sources provide some administration (or indirect) funding that can be used across the organization.

One of the challenges of public health is the amount of funding that is 'categorical' or intended for one program or service.

Proportion of Revenue By Source of Funding (LPHAs serving over 500,000 population in US)



Per Capita Public Health Funding in the US

In most national reports, public health funding 'per capita' is often referred to as the total public health budget divided by the jurisdiction population.

Use this information to compare to average and median local funding across the US.

In some cases, it is useful to look at the 'per capita' calculation for only the locally contributed funding only.

Per capita calculation of LOCAL contributions		
Local Agency Characteristics	Mean per capita (local)	Median per capita (local)
500,000+ population	\$9	\$19
West/Midwest regions	\$19-\$21	\$19-\$21
Local governance	\$13	\$21
Urban location	\$10	\$17

Public Health Staffing

Public Health Agency Staffing

Use this information to compare to average staffing across the US.

Public health agency staffing depends on the services provided in the agency.

Two ways to think about staffing is in terms of number of FTE for a whole population or number of FTE based on a population served.

TYPICAL NUMBER OF STAFF AND FTE IN A HEALTH DEPARTMENT (PRE-COVID)				
Population served	Average # of Employees	Median # of Employees	Average # of FTE	Median # of FTE
250,000–499,999	155	114	143	104
500,000–999,999	304	255	269	218
1,000,000+	846	489	769	456

TYPICAL NUMBER OF FTE PER 10,000 PEOPLE	
Population served	FTE per 10,000 people
250,000–499,999	4.2
500,000–999,999	3.9
1,000,000+	3.5

Typical Public Health Agency Staffing

It's also useful to look at the types of staff positions that are common across US health departments.

TYPICAL TYPES OF STAFF POSITIONS BY JURISDICTION POPULATION SHOW AS PERCENTAGE OF LHDS THAT EMPLOY THESE POSITIONS				
TYPE OF STAFF POSITION	POPULATION SERVED			All LHDS
	250,000 - 499,999	500,000 - 499,999	1,000,000+	
Office and administrative support staff	96%	99%	100%	90%
Preparedness staff	94%	96%	97%	62%
Registered nurse	100%	96%	100%	94%
Agency leadership	97%	94%	100%	83%
Epidemiologist/statistician	85%	94%	100%	28%
Health educator	87%	93%	91%	59%
Business and financial operations staff	79%	90%	100%	53%
Environmental health worker	91%	90%	74%	74%
Nutritionist	84%	85%	89%	49%
Public health physician	67%	80%	94%	30%
Public information professional	67%	75%	86%	23%
Community health worker	70%	73%	71%	35%
Information systems specialist	60%	70%	74%	18%
Licensed practical or vocational nurse	50%	62%	77%	33%
Behavioral health staff	33%	55%	46%	16%
Oral healthcare professional	35%	48%	71%	20%