



# Five-Year Blueprint

Health Informatics and Technology

---

*Jefferson McMillan-Wilhoit*

*Director, Health Informatics and Technology*

# Our Roadmap Going In to 2020

## Reset

Organization Data Needs Assessment  
New KPI Dashboards  
Data Governance Framework  
Identity and Access Management  
ITSM with RequestIt and AnswerIt  
Teams Re-launch  
Teams Rooms in Board Room  
Teams Rooms in Conference Rooms  
Technology Satisfaction Survey  
LCHD Strategic Plan  
Deploy LCHealthdata.org

## Consolidate

Internal data collection mechanisms to data warehouse  
Virtual Desktop Interface  
Unified Application Look and Feel  
New EHR Request for Proposal  
Replace Manual Data Capture Tools  
Community Health Improvement Plan  
Self-service Data Marts

## Modernize

New Workflows  
Unified CHNA for County Hospitals

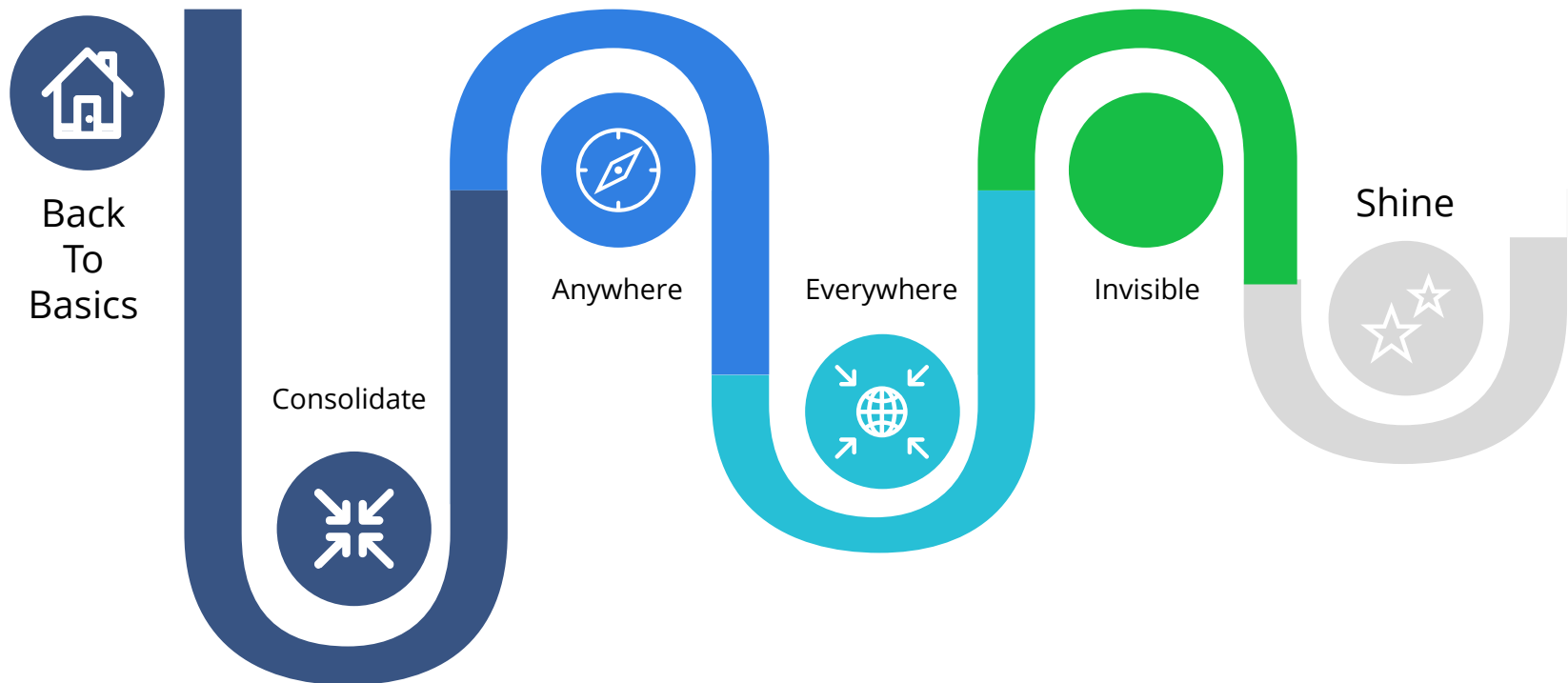
## Innovate

# Our Accomplishments

2020 - 2021

- Successfully Integrated Teams Into Workflow
- **Maintained Productivity and Accuracy in Non-traditional Work Environment**
- Handled a significant increase in electronic messaging
- Prenatal ultrasound interface
- Joint Commission EHR requirement changes
- **Implemented telehealth**
- **Integrated new applications (Atlassian, Salesforce, Mulesoft, IntelliJ)**
- Re-designed DASA registration template
- Implemented Medical Necessity Tool
- COVID-19 NextGen Billing
- WorkforceOne Application
- **AllVax Application**
- ProConnect Application
- Community Care Application
- CareQuality Integration
- AccuVax and AccuShelf Inventory and order Management
- IM-CANS State Upload
- **COVID-19 Data Hub**
- COVID-19 Vaccine Visualization
- COVID-19 Community Transmission Visualization
- COVID-19 School Metrics Visualization
- Sharing COVID-19 data with Jail
- Progress Towards Robust Community Health Assessment
- Childhood immunization outreach with Patient Access Center and Immunization Team
- Communicable Disease Support and Supplemental Staffing
- Lake County FQHC Community Health Needs Assessment
- **Teams Voice**
- LastPass
- **Five9 Virtual Contact Center**
- New Asset Tracking System
- Boardroom Teams Room
- Conference Room Teams Room
- Data Lake Migration
- eCIVIS Grants Management
- Password changes to be more secure
- Support of a mobile workforce
- Transferred technology to multiple sites as needs shifted
- **AlertUs**
- **Mass Vaccination On-site support**
- Mass Vaccination Site Networking
- Mass Vaccination site computer hardware procurement and setup
- Dental Summary Dashboard
- Depression Screening
- **Diabetes Analysis, Support, and Expansion**
- Creation of new data source tables
- Migration from Business Objects and i2i
- Financial Department Dashboards that are used daily
- IM-CANS Dashboards
- Telehealth Analysis and Audits
- BH Appointment Wait Time Analysis
- Women's Health Provider Scorecard
- Psychiatry OPPE Workbook
- Creation of Data Governance Group
- Development of unified business terms
- Implemented self-service analytics

# Our Roadmap – Reimagined as a Blueprint





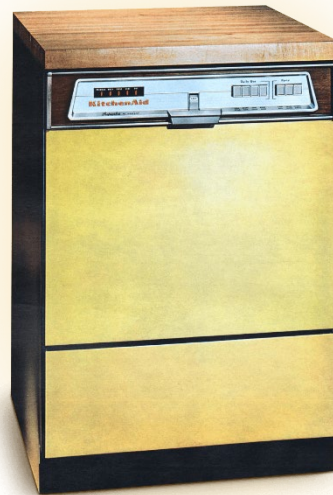
# Consolidate



43  
Applications



# Consolidate





# Consolidate



Cereal  
Bowls



Glasses



Forks



Spoons



Knives



Cutting  
Boards



Serving  
Platters



Large  
Plates



Small  
Plates



Coffee  
Cups



Whisks



Graters



Salad  
Bowls



Soup  
Bowls



Fine  
China



Pots and  
Pans





# Consolidate







# Consolidate

What you will see

- More **versatile** platforms
  - Our apps will be built on platforms
- Less direct off the shelf purchases
- **Consolidated** license costs
- Higher cost during **period of transition**



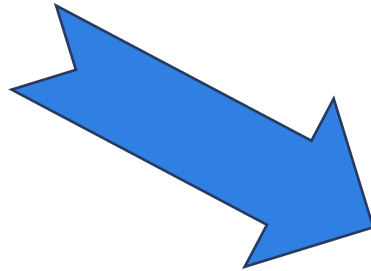
# Anywhere

[Intentionally Left Blank]



# Anywhere

[Intentionally Left Blank]





# Anywhere

A Change In The Way We Do Business

- Highly **accessible**
- Highly **secure**
- Highly **reliable**



# Anywhere

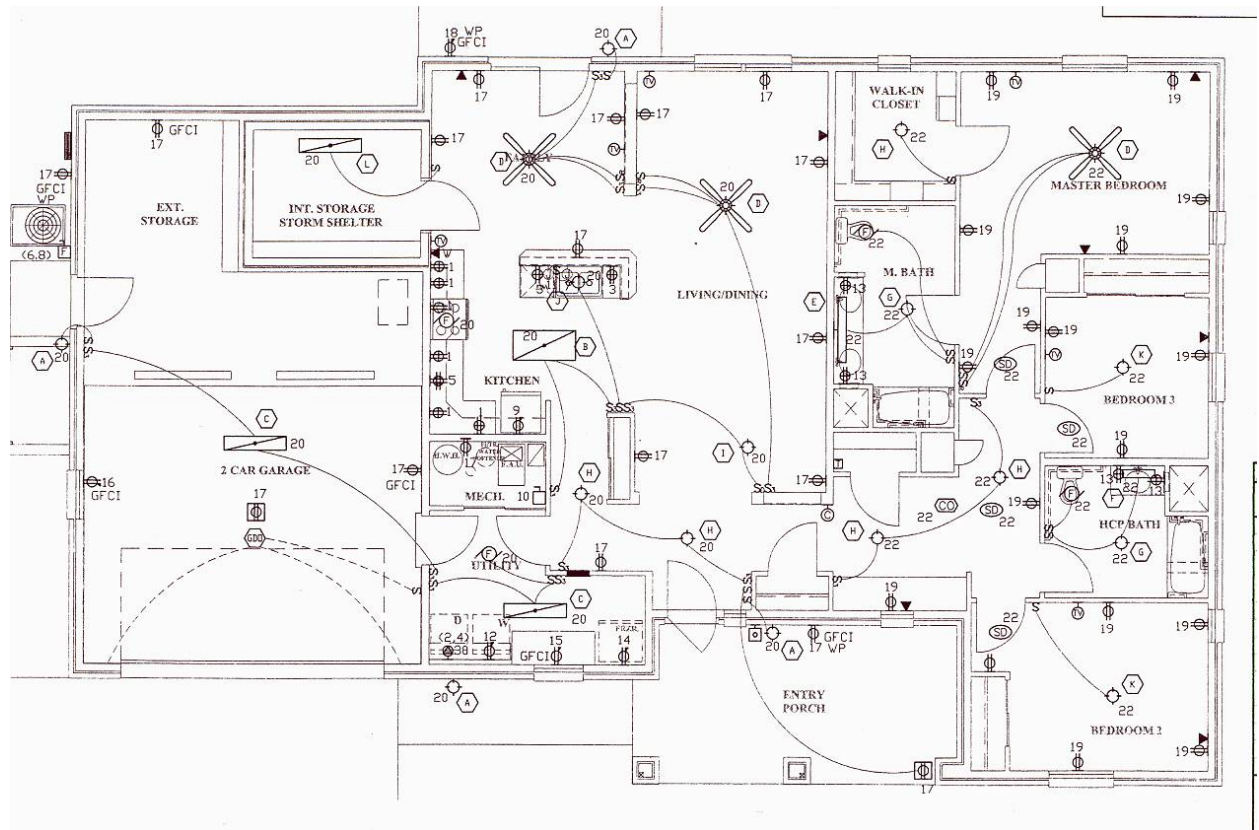
A Change In The Way We Connect Our Business





# Anywhere

A Change In The Way We Connect Our Business





# Our Five-Year Milestones

2022 - 2026

**2022**

- Design Thinking
- NextGen Upgrade
- Workforce One
  - Governance



**2023**

- Community Portals and Community Care
- Cloud Migration
- Artificial Intelligence and Predictive Modeling
- Virtual Care Innovation



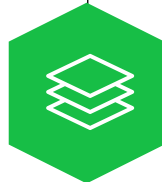
**2024**

- Nearly Paperless
- Zero Trust
- Fully integrated to health and health-related systems
- API Driven Architecture available to our community
- Access Anywhere



**2025**

- Passwordless and Domainless
  - Citizen Data Scientists
- Community Health Record
- Community Pulse Surveying



**2026**

# RISK: Our Staff

HIT FY22 Budgeted Staff = 34 full-time, 1 contractual

- **Technical literacy** of all agency staff
- Ability to **find technical staff** to develop and support our architecture

# RISK: Our Staff

Finding Technical Staff

HIT FY22 Budgeted Staff = 34 full-time, 1 contractual

	Estimated Market Salary	LCHD Average Salary
--	----------------------------	------------------------

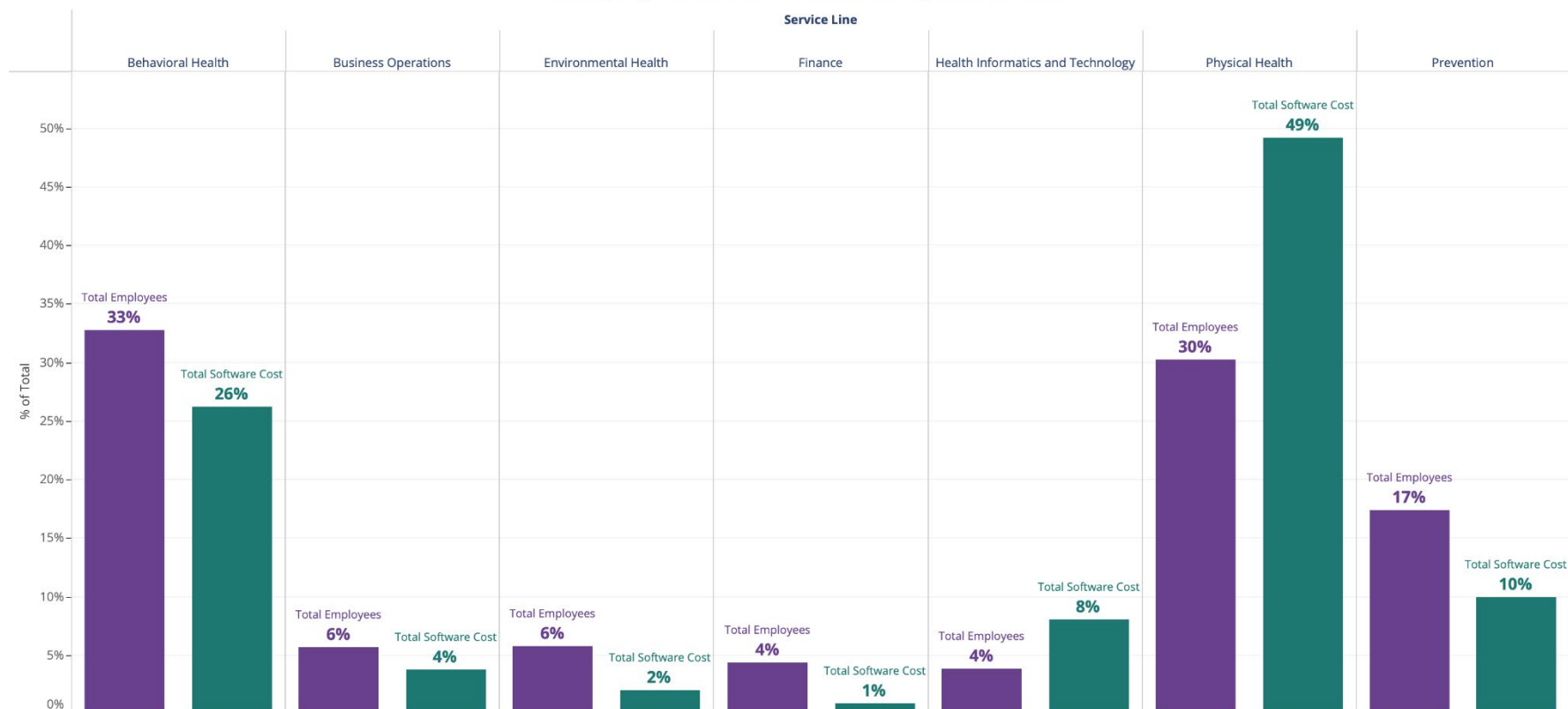
Software Developer	\$89,000	\$75,427
--------------------	----------	----------

Enterprise Architect	\$135,000	\$80,453
----------------------	-----------	----------

Data Analyst	\$82,000	\$65,615
--------------	----------	----------

# RISK: Changing Costs

Total Employees and Software Costs By Service Line



Percentage totals may add up to more than 100% due to rounding.

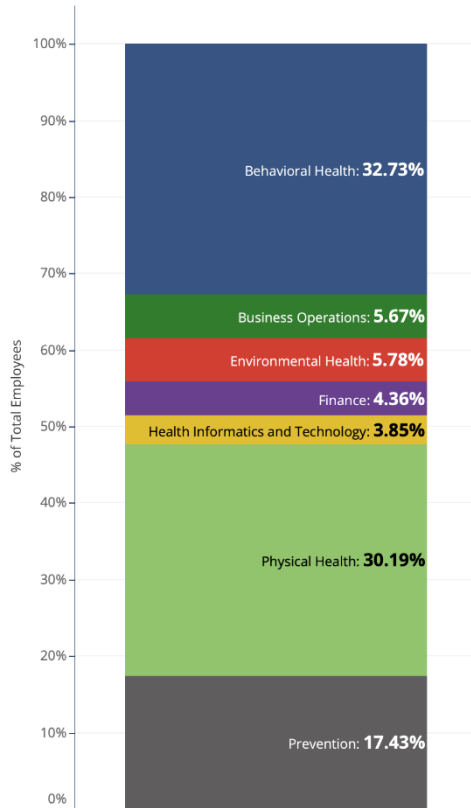
Method for allocation of employee to a service line: The reporting director to which the employee ultimately reports

Method of allocating cost to a service line:

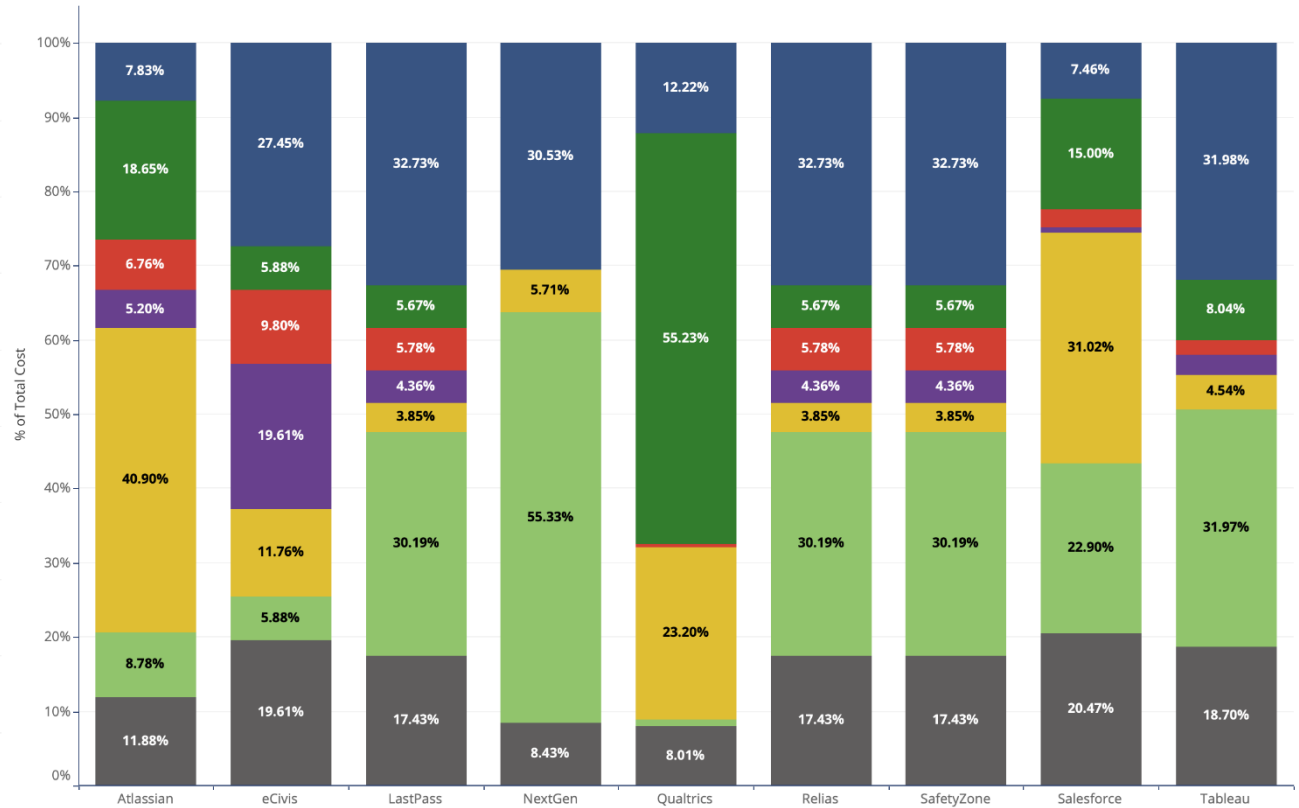
1. Some costs (NextGen, Citrix, etc.) have a shared cost algorithm applied.
2. Where a software's cost is based on users, the number of employees with an assigned user licence was used.
3. Where a software is based on usage (number of responses, total CPUs, etc.), the amount of utilization by the service line was used.

# RISK: Changing Costs

Employees By Service Line



Individual Software Cost By Service Line



Percentage totals may add up to more than 100% due to rounding.

Method for allocation of employee to a service line: The reporting director to which the employee ultimately reports

Method of allocating cost to a service line:

1. Some costs (NextGen, Citrix, etc.) have a shared cost algorithm applied.
2. Where a software's cost is based on users, the number of employees with an assigned user licence was used.
3. Where a software is based on usage (number of responses, total CPUs, etc.), the amount of utilization by the service line was used.



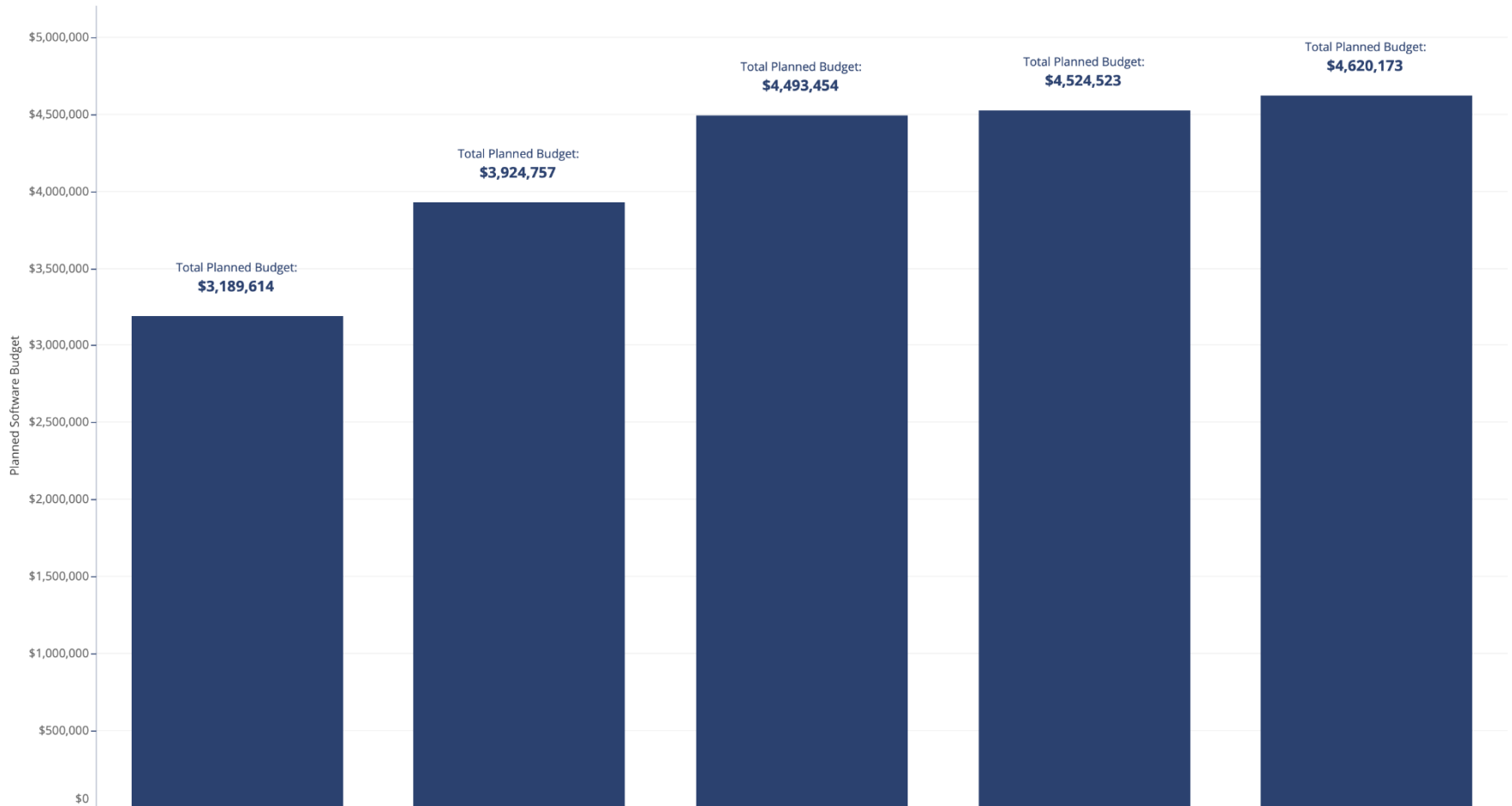
LakeCounty

Health Department and  
Community Health Center



# RISK: Changing Costs

## Five-Year Software Budget Projections



# RISK: Unknowns

Plan for what we can, but expect the unexpected

- Changes to **staffing levels** across the agency
- **Cloud migration** process and cost
- An ever-changing **regulatory environment** that requires new additions to the blueprint
- Value-based care investments/implementation



---

3010 Grand Avenue, Waukegan, Illinois 60085  
(847) 377-8000  
[health.lakecountyil.gov](http://health.lakecountyil.gov)



HealthDepartment



@LakeCoHealth



HealthDepartment