



# Advancing Public Health Data Modernization

# ADVANCING PUBLIC HEALTH DATA MODERNIZATION

## Objectives

- Level-set on current national modernization efforts
- Provide guidance on near-term action you can take
- Provide overview of current key ASTHO data modernization efforts

# Why Data Modernization Matters

Covid-19 exposed weaknesses in our data infrastructure:



Over 100 CDC-maintained surveillance systems for a variety of diseases, conditions and uses



AGING data systems



Inability to handle HIGH DATA VOLUME

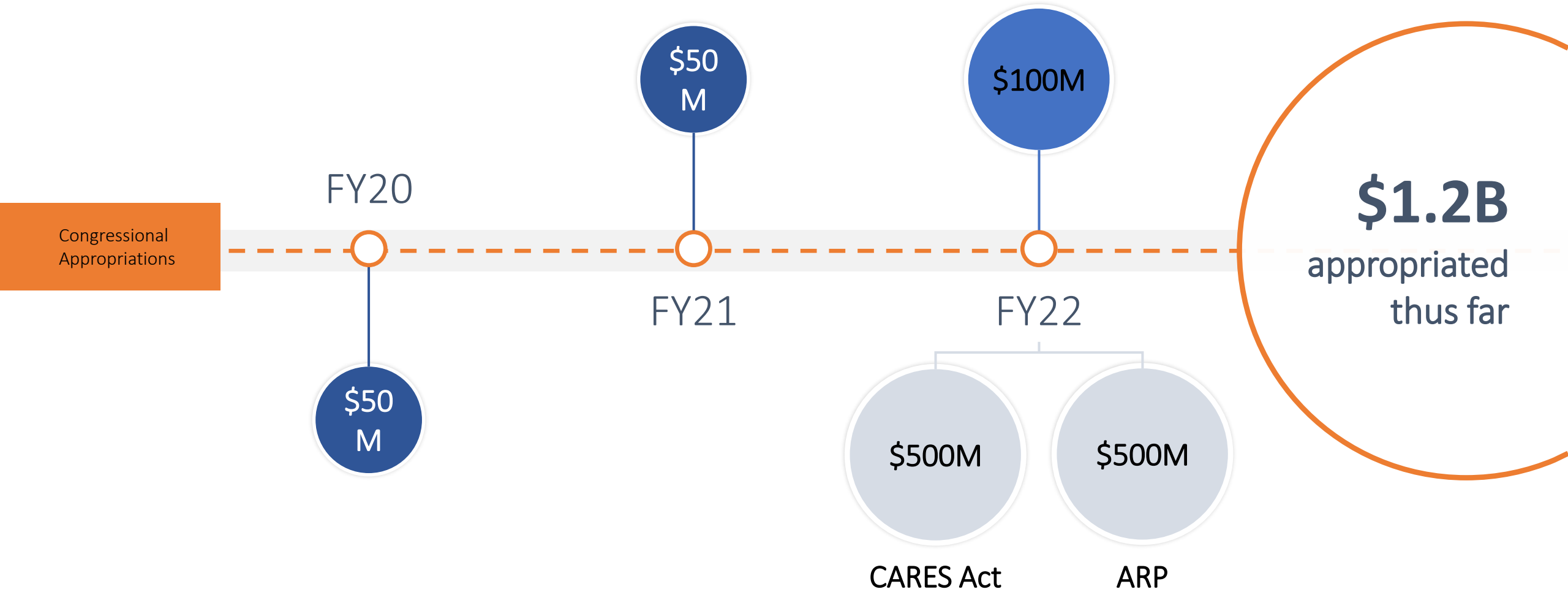


Low INTEROPERABILITY & LACK OF COMMON data standards



POLICY & LEGAL CONCERNS

# Progress: A Down Payment on Modernization



# Future Investments Needed

Healthcare Information and Management Systems Society (HIMSS) investment recommendation over the next decade:

Electronic case reporting and contact tracing

Electronic laboratory results reporting

Establish a nimble rapid cycle learning health system

Syndromic disease surveillance

Immunization registry reporting and query

Interoperable platforms to facilitate broad-based data exchange

Nationwide notifiable disease surveillance

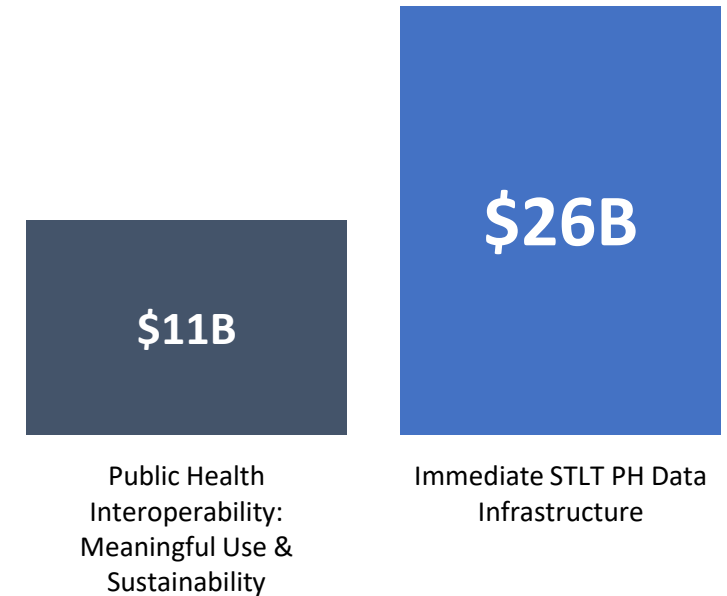
Health IT innovations and workforce capacity

Ongoing licensing costs, software updates, hardware updates

Vital records reporting

Trusted and secure access to multi-modal health data

**\$37B** proposed 10-year investment

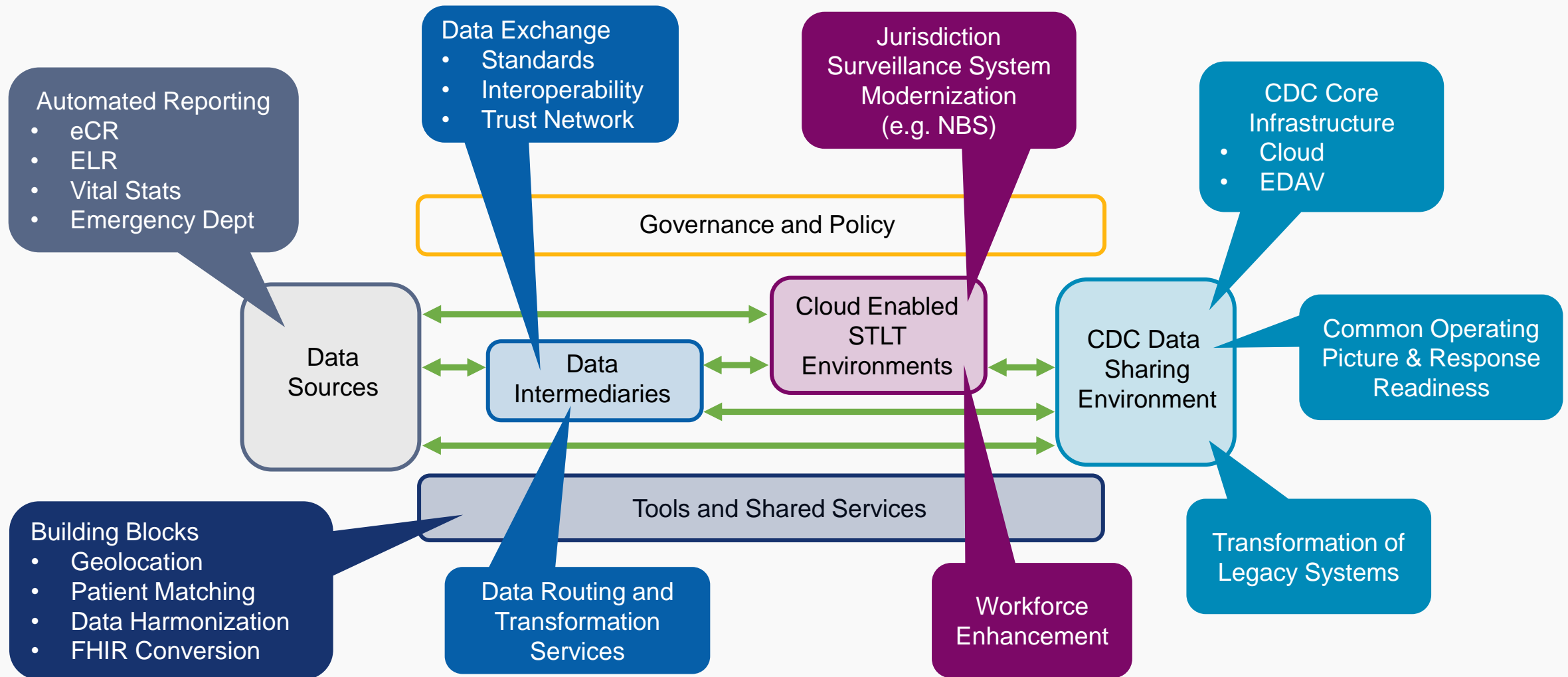


# Challenges in Public Health Data Ecosystem

- Public Health Informatics workforce is not sufficient
- Programmatic funding mechanisms produce data silos
- Funding for maintenance of information systems is not sufficient
- Technology leaders are not drawn to public health



# The big picture: where DMI efforts are focused



# Leveraging Interoperability for Public Health



Rapidly design, test, and scale **FHIR-based solutions** for high-priority public health use cases

## USCDI+ for Public Health

**Align data sets, standards, and implementation specifications** with similar efforts underway within and beyond public health, and **adopt on a national scale**

Support advancement to **EHR certification**



Develop use cases and policy/technical requirements for **integration of health care delivery and public health systems**

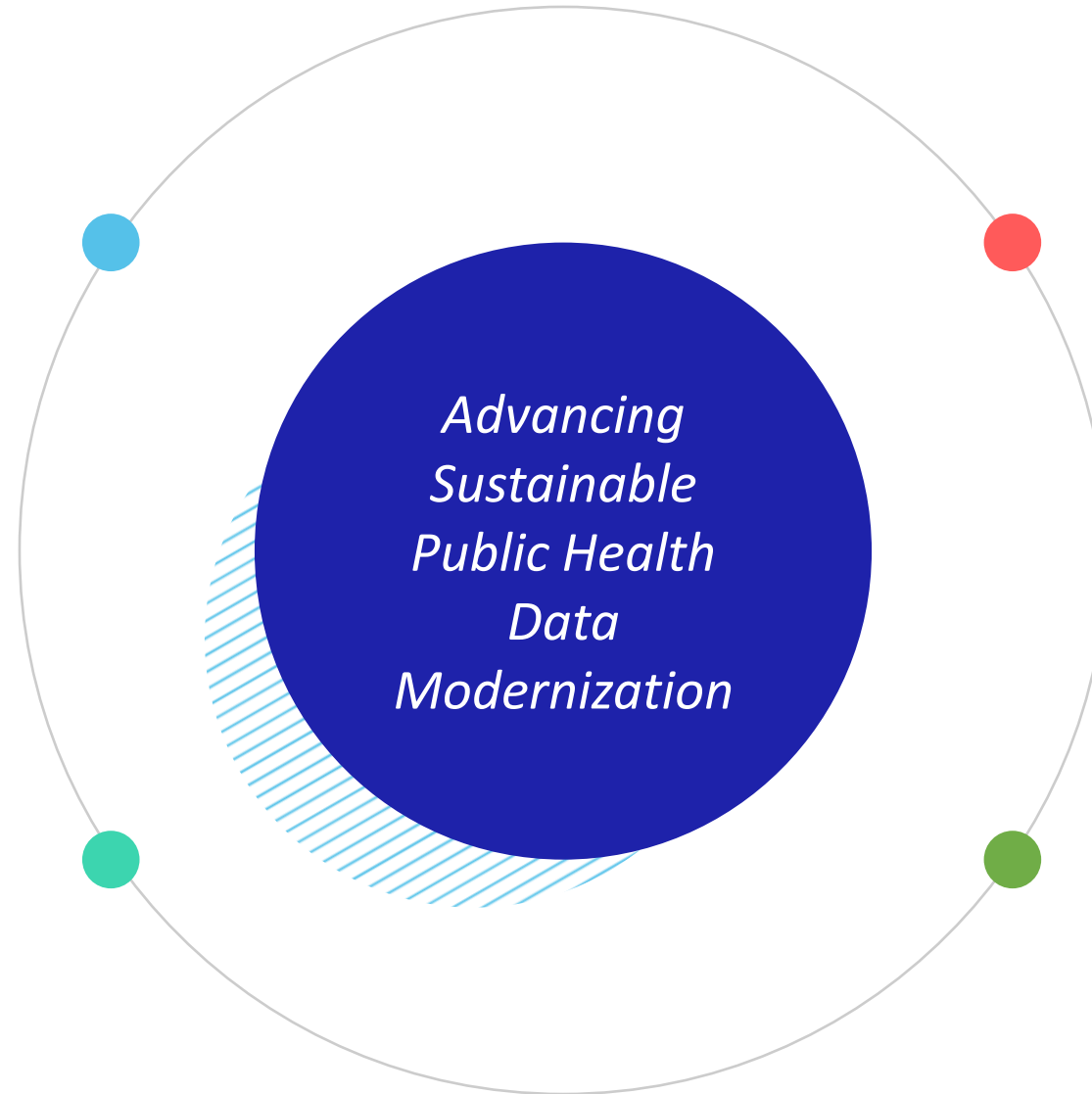
## “North Star” Architecture



Assist CDC and public health community with infrastructure approaches to **ease the burden** and **increase the effectiveness** of public health data systems and applications

Improve **STLT access** to actionable intelligence

# ASTHO's Data Modernization Strategic Priority



## *Advocacy*

We need sustainable and flexible funding solutions to advance data modernization over the long-term.

## *Innovation*

Cultivate innovation through public-private partnerships between public health and the technology sectors to foster leading-edge, transformative solutions for response and practice.

## *Roadmap*

Develop and deploy a state and territorial public health data road map to guide modernization.

## *Workforce*

Increase agency capacity to integrate advances in informatics and respond to related workforce development needs.

# ASTHO Recommendations Today to State Public Health Leaders and Agencies about DMI

## People

- Determine all the state and vendor stakeholders inside and outside of public health that will impact your public health data modernization success
- Some roles or positions could be the same individuals due to CDC designations
- Engage with your DMI Lead, Informatics lead, ELC coordinator, Lab Director, State Epidemiologist, Vital Statistics Registrar, Immunization Director, and Immunization Information System manager
- If you are in one of the 31 states with centralized IT management, engage the state CIO, CTO or Technology Services Director
- Establish an executive-level data modernization/informatics/data science deputy positions

# ASTHO Recommendations Today to State Public Health Leaders and Agencies about DMI

## Planning & Implementation

- Establish a path toward enterprise management of data
- Procure resources that adhere to current interoperability standards

## Operating Environment

- Map out your organization's workflows for data management – what comes in, what comes out, and how?
- Understand what TA needs you will have before the next ELC funding guidance is released
- Centralized IT? What new considerations must be included?

# ASTHO's Data Modernization and Informatics Portfolio

- **DMI Implementation Roadmap**
- **Informatics Director Peer Network**
- IIS/HIE Integration - ONC IDEAS Project
- **FHIR Implementation Collaborative**
- Addressing Impediments to Data Sharing
- Google Health's VSI
- **Supporting CDC's CSELS DMI**
- **North Star Architecture – Governance**
- Support directly to SHOs



# DMI's Impact on Public Health Beyond COVID-19

- ALL practice areas are impacted by our national data infrastructure
- Including: Chronic disease, Maternal and Child Health, Behavioral Health, Vital Statistics
- In a post-DMI world, practice areas would maintain the *data* for their work, but the system will be maintained by the enterprise
- DMI is not a COVID-19 initiative



# Data Modernization and Informatics- Alaska Perspective



New York Times Article, *Very Harmful' Lack of Data Blunts Response to Outbreaks* highlights challenges and need for continued funding and policy changes in Alaska and nationwide

*The health department's highly trained specialists "didn't have the capacity to be the epidemiologists that we needed them to be because all they could do was enter data," said Dr. Anne Zink*

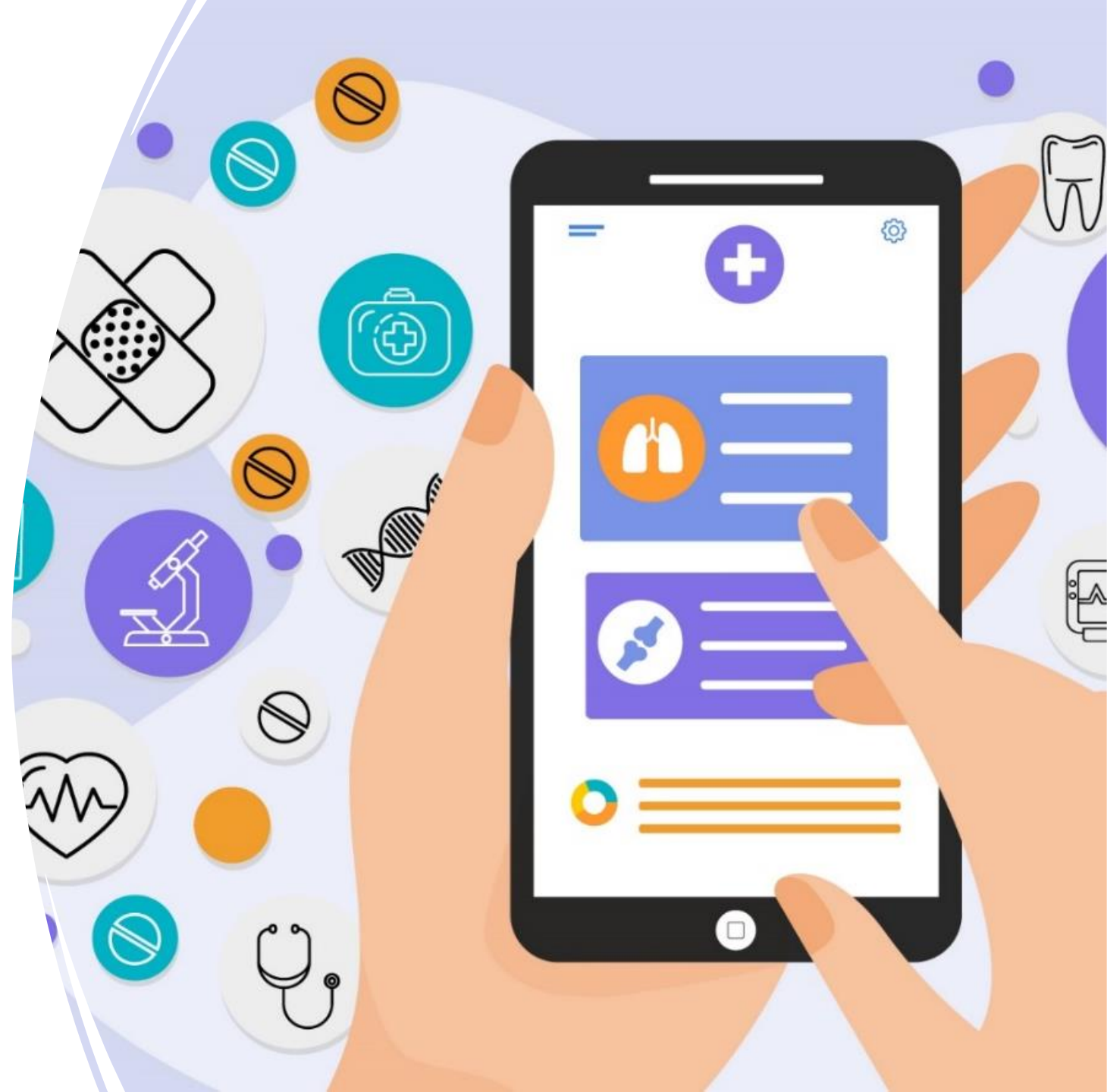


# Data Modernization and Informatics- Alaska Perspective

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Alaska Department of Health,  
Division of Public Health  
completed **assessment** and  
developing **strategic plans** to  
address challenges and  
opportunities.

***Opportunity to collaborate!***



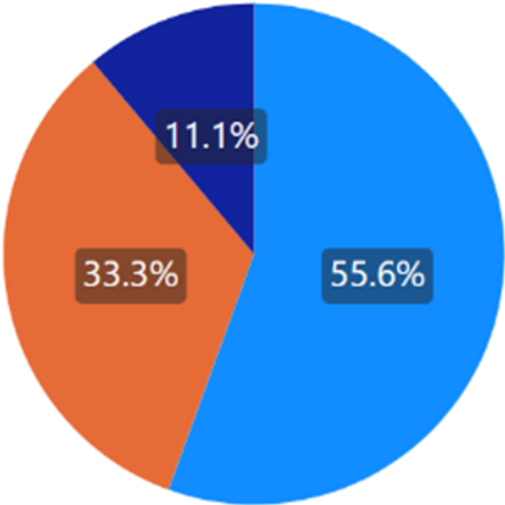
# Data Modernization Assessments- Alaska Perspective

Key Findings from the DMI Assessment of the Division of Public Health – Data Exchange Opportunities

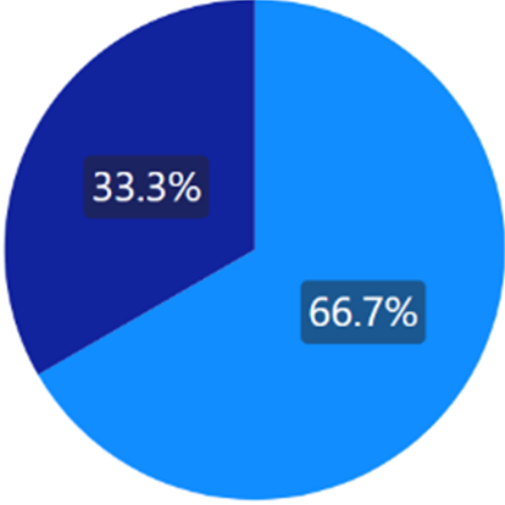
## Existing Data Sharing Platform:

- No
- In Progress
- Yes

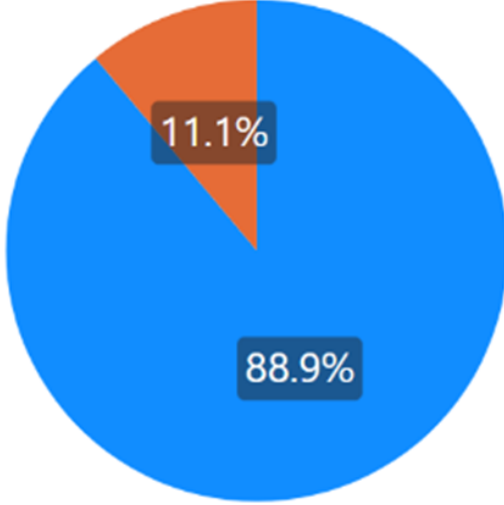
### Internal



### Public



### Local Partners



# Data Modernization Assessments, Alaska Perspective

Key Findings from the DMI Assessment of the Division of Public Health – Staff Capacity Supporting the DMI

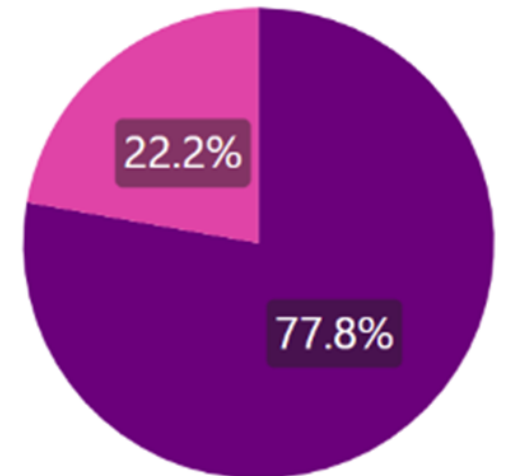
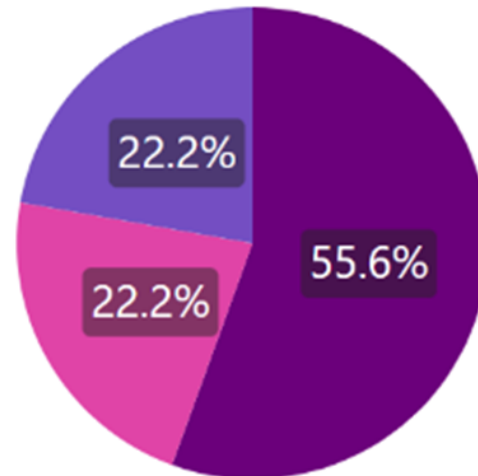
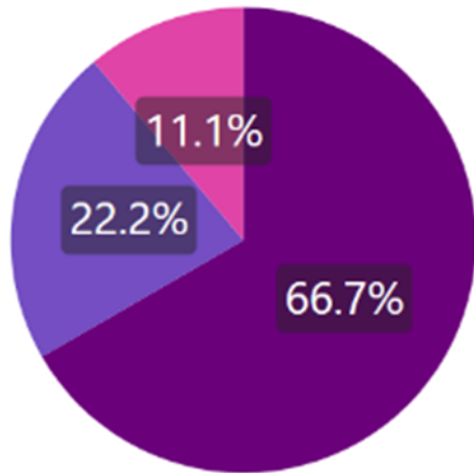
DMI Area:

Assessing Health Information Systems

Data Exchange and Interoperability

Data Analytics and Reporting

- Insufficient
- Unsure
- Sufficient



## Data Modernization Assessment Theme- Alaska Perspective

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Manual processes are  
limiting staff bandwidth

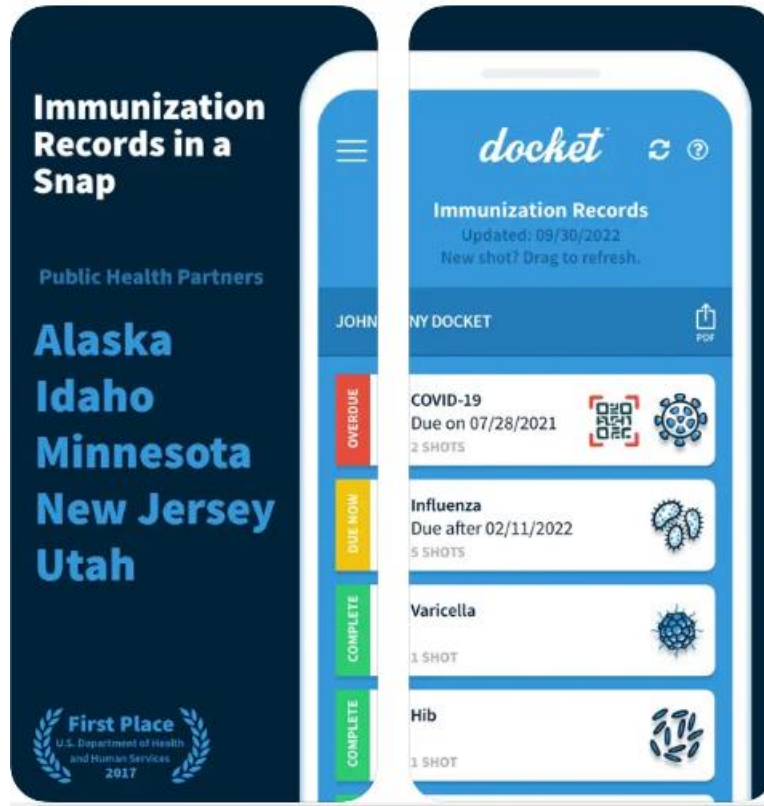


Help is needed for  
modernization



# Alaska Department of Health Update- DIGITAL TOOLS/API

- NEW Mobile Application
  - Docket Immunization



- NEW Medicaid Application Programming Interface (API)
  - Medicaid Claims available to Alaskans via approved mobile applications



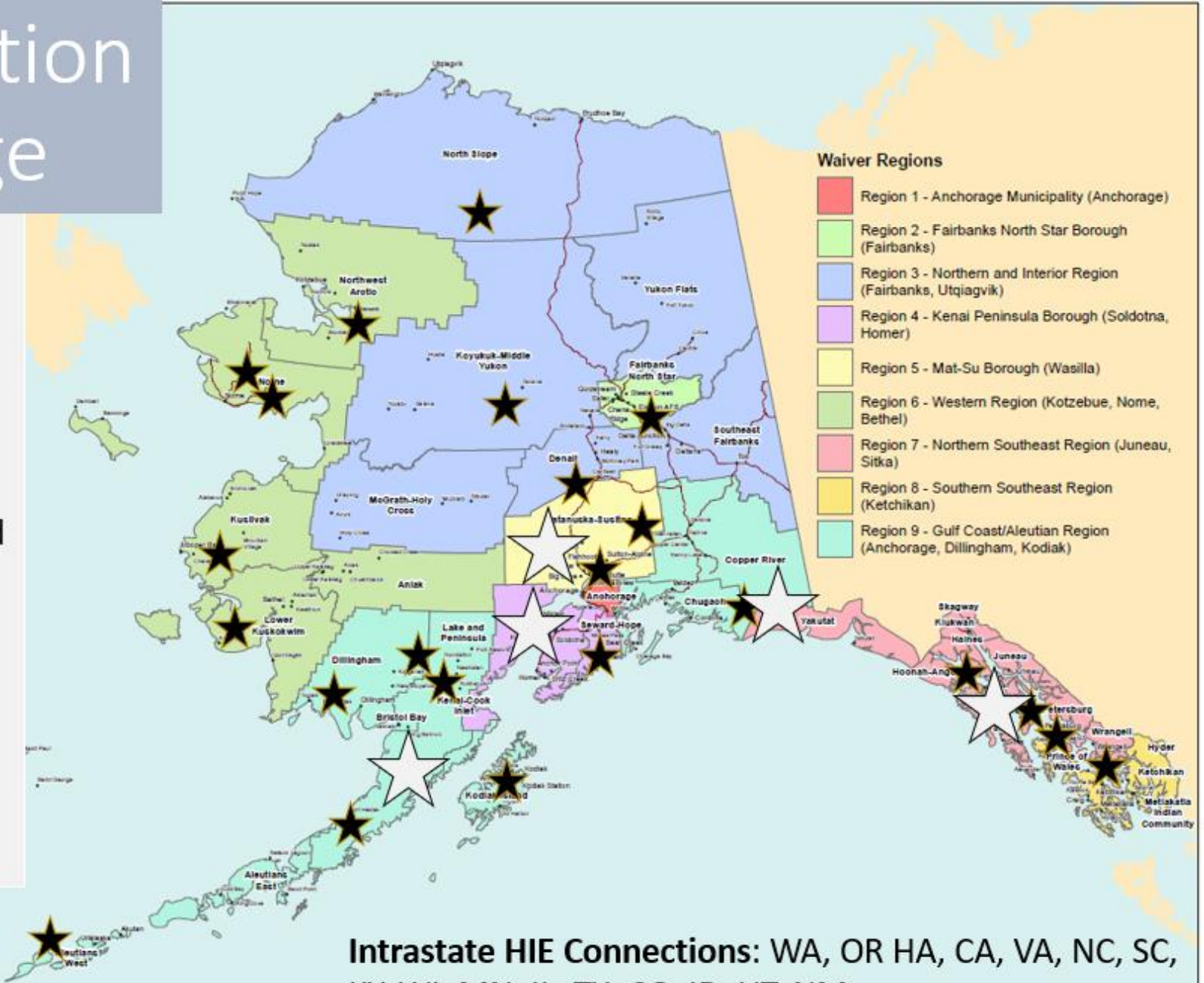
- <https://docs.oneupdocs.com/alaska-public/>

# AK Health Information Exchange Coverage

★ Patient records, alerts and Direct Secure Message- State HIE; Edie-shared care plans, alerts

☆ Active State HIE Portal and Data Users; increasing participation and value to participants

**National Network Connections**  
**Connected to AK HIE: VA/DOD, CVS Health, CareQuality**



**Intrastate HIE Connections: WA, OR HA, CA, VA, NC, SC, KY, WI, MN, IL, TX, CO, ID, UT, NM**



Thank You!

