Good afternoon, members of the Health Information Technology Advisory Committee, and thank you for the privilege of addressing you today. In the fourteen months and four days since we identified our first case of COVID-19 in Louisiana, nearly 10,500 families have lost loved ones and all of us have made sacrifices of varying degrees. The team at the Louisiana Department of Health—some of the most committed and tireless public servants I have had the pleasure of working with—continues to work diligently to provide the data that informs decisions as large as statewide mitigation measures and acute care capacity expansions and as granular as when family might feel comfortable coming together after months of distancing. Our team benefited from strategic investments in public health data technology infrastructure in the years following Hurricanes Katrina and Gustav. We also identified our fair share of gaps and vulnerabilities and are eager to continue addressing these. I would like to share some of our successes, opportunities and lessons with you.

The experience of repeated severe weather events and particularly large, disruptive storms such as Hurricanes Katrina and Gustav, led to strategic investments in health information infrastructure which have bolstered responses to public health threats in the years since. One such example is the development and deployment of Louisiana’s Emergency Support Function-8, or ESF-8, Portal. The ESF-8 Portal, a home-grown communications system made possible
through HHS Hospital Preparedness Program (HPP) grant funding, provides for bidirectional communications with all hospitals, nursing homes, assisted living facilities, intermediate care facilities and other facilities licensed by the Department of Health. Separate modules exist for bed availability and surge capacity, operating status including generator and fuel status, security status and situational awareness updates. Formal rulemaking in Louisiana has established a requirement for daily updates from most licensed facilities, of which about 1,500 are currently enrolled comprising approximately 4,000 individual users. This Portal has been instrumental in our ability to coordinate hospital and nursing home evacuations as experienced most recently during Hurricane Laura, and route mass causality incident patients to appropriate facilities.

During the COVID-19 response Louisiana’s ESF-8 Portal proved invaluable in three key areas. First, as cases and hospitalizations rose exponentially in March 2020 threatening the capacity of our acute care system, the real-time hospital census information available to us through the Portal allowed for effective load-leveling of patient volume throughout the state. It also allowed for predictive modeling of short-term hospital and ICU census spikes which informed our critical investments in alternative care sites and auxiliary licensed care providers. Second, the Portal afforded real-time visibility on usage and supply of ventilators throughout the state allowing targeted redistribution and informing emergency procurement decisions. And third, as the data requests by HHS on hospitals evolved throughout the pandemic we were able to integrate additional data fields into the Portal, sync with the HHS TeleTracking platform, and save hospitals the burden of duel reporting. Identified areas for improvement in Portal capability
include interoperability with electronic medical records to alleviate the need for manual data entry by hospitals and other faculties, and improved end-product GIS mapping capability.

An additional success during the COVID-19 response has been our experience integrating disparate data sources to improve the completeness of racial and ethnic demographic data pertaining to testing and vaccinations. Similar to many other states our “first-pass” demographic data suffered from an unacceptable level of incompleteness. In the rush to launch the vaccine campaign, unoptimized electronic medical record linkages with our immunization information system (IIS), incomplete entries by vaccine providers, and inconsistencies within our own IIS yielded reliable demographic data in only about half of all in-state vaccine administrations. We were able to mitigate this by cross referencing our vaccine administration database with existing data sources such as Medicaid enrollee logs, hospital admit/discharge/transfer notifications, and Office of Motor Vehicle records. The ability to reference with Medicaid records was particularly enabled by Louisiana’s 2016 expansion of the Medicaid program and the housing of that program within the Department of Health’s umbrella structure. This cross-referencing improved Louisiana’s racial demographic completion rate to 93% of all vaccines doses administered in the state.

Our biggest data challenges to date during the pandemic were seen in the need to rapidly scale up and staff up our information system operations. Years of defunding have trimmed public health departments like ours to leaner organizations not easily able to surge when a crisis emerges. The data systems we relied on during the pandemic required significant staffing resources to onboard new users, troubleshoot technical problems, and conduct provider relations and quality-assurance checks on incoming data. We found the quality and timeliness
of the data entered into Louisiana’s ESF-8 portal, lab management system and IIS suffered when staff were not available to monitor users’ inputs and quickly address insufficiencies. It is labor-intensive work for which our pre-pandemic workforce was undersized. While we benefited greatly from external vendors and the contracting process was eased considerably by virtue of the declared public health emergency, there is simply no substitute for qualified in-house expertise. We appreciate the federal funding currently available and hope the pandemic experience will allow for continued investment in public health information technology personnel and infrastructure.

Interoperability between providers and disparate public health systems remains a challenge as well. Epidemiologic, laboratory, immunization and emergency preparedness systems rarely connect with one another or leverage others’ connections with provider and hospital electronic medical records. With the medical records of an overwhelming majority of hospital inpatients in Louisiana being maintained by one notable large electronic medical record system there exists great opportunity for this type of connectivity. There is no need to wait for an emergency to build interoperability.

We are particularly excited about CDC’s Electronic Case Reporting (eCR) program and are eager to implement it more broadly. By leveraging the wide electronic medical records coverage throughout the state and building smart automated query connections between medical record systems and our Office of Public Health, timelier and more reliable notification can be given for emerging infectious disease threats. Importantly, this would potentiate our professional staff and allow them to work closer to the top of their training. Freed of the need to manually liaison with reporting health care facilities to collect pertinent clinical information
(a time-consuming endeavor), our epidemiologists could devote more time to tracking, describing and projecting the course of infectious disease threats. We view the eCR program as a best-practice example of leveraging the power of electronic medical records and cross-agency interconnectivity, and urge HHS to devote additional resources in the near future towards its expansion and further implementation.

Members of the Committee, I would like to thank you for your time and attention to these critical issues, and I would like to particularly thank my team members at the Louisiana Department of Health for their steadfast dedication during this most challenging of years. I am eager to engage in further discussion, learn from others represented here, and answer any questions you may have.