

To: Harris County Commissioners Court

Through: Gwen J. Sims, Interim Executive Director, Public Health Services
..prepared

Prepared By: William, Director, Office of Financial and Support Services

Subject: COVID-19 Contact Tracing Fund Request
..end

Project ID (If applicable):

Purpose and Request:

..title

To request one month of operational funding from April 1, 2021 to April 30, 2021, for contact tracing operations in the amount of \$1.44 million.

..end

Background and Discussion:

Harris County Public Health (HCPH) has been formally responding to the COVID-19 pandemic since March 2020. Among other services, HCPH is currently providing COVID-19 vaccinations, testing, and contact tracing. On March 9, 2021, Commissioners Court asked HCPH to review its contact tracing operations and related funding request.

Fiscal Impact:

The funds are requested from the Public Improvement Contingency (PIC) fund. Contact tracing is not FEMA reimbursable. HCPH has a plan to right-size its contact tracing operations.

Fiscal Summary			
Expenditures	FY 20-21	FY 21-22 Projected	Future Years Projected [3 additional years]
Service Impacted: <i>[Please provide service or division where expenditure will be used]*</i>			
Existing Budget	<u>\$21,927,072.00</u>	<u>\$1,999,459.00</u>	
Additional Appropriation Requested	<u>\$0.00</u>	<u>\$1,440,000.00</u>	
Total Expenditures	<u>\$21,927,072.00</u>	<u>\$3,439,459.00</u>	
Funding Sources			
Existing Department Budget			
Please Identify Funding Source (General Fund, PIC, Special Revenue, Grant, Etc.)			
[INSERT FUNDING SOURCE HERE]*	<u>PIC</u>	<u>PIC</u>	
Total Sources			

Alternatives:

N/A

Alignment with Strategic Objective:

SO23 Reduce Cases of Preventable Infectious Diseases

SO29 Increase Reported Levels of Preparedness in Communities

Attachments:

Gwen J. Sims, MEd, RD, LD
Interim Executive Director
2223 West Loop South
Houston, Texas 77027
Tel: (713) 439-6000
Fax: (713) 439-6080



Harris County
Public Health
Building a Healthy Community

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Services
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COVID-19 ITEM

March 24, 2021

The Honorable Judge Lina Hidalgo
and Commissioners Court
Harris County Administration Building
1001 Preston, Room 938
Houston, Texas 77002

Dear Court Members:

On March 5, 2020, the County Judge's Office authorized departments to make any necessary purchases to expedite the County's response to COVID-19 health concerns. Departments were advised to work with the Purchasing Agent and track all costs incurred for review by Commissioners Court and possible reimbursement.

We request approval of one of the following three options with respect to contact tracing operational funding for April 1, 2021 to April 30, 2021.

	Option 1	Option 2	Option 3
Contact Tracer	26	18	8
Case Investigator	122	87	51
Support/ Management	52	33	21
Total Headcount	200	138	80
Subtotal	\$ 1,306,214	\$ 895,764	\$ 524,482
Less Grant/Volunteers	\$ (128,917)	\$ (128,917)	\$ (128,917)
Monthly Total	\$ 1,177,298	\$ 766,847	\$ 395,565
Services	Contact tracing and case investigation for general population and congregate settings such as schools, nursing homes, workplaces, etc. This will also address surveillance of new variants and antigen-related probable cases.	Contact tracing and case investigation for general population (scaled down from option 1) and congregate settings such as schools, nursing homes, workplaces, etc. This will also address surveillance of new variant and vaccine adverse event investigations, as well as antigen-related and probable cases.	No contact tracing or case investigation for general population, but does provide for congregate settings such as schools, nursing homes, workplaces, etc. This will also address surveillance of new variant and vaccine adverse event investigations, as well as antigen-related and probable cases, but at a reduced level.

NOTE: There will be an initial increase in the recovery rate reported on the Data Hub through either of the options above, as CT/CI calls to active cases will not expedite cases' recovery status.

HCPH is the local public health agency for the Harris County, Texas jurisdiction. It provides a wide variety of public health activities and services aimed at improving the health and well-being of the Harris County community.

Follow HCPH on Twitter [@hcphtx](https://twitter.com/hcphtx) and like us on [Facebook](https://www.facebook.com/hcphtx)

If you have any questions or concerns regarding this matter, please contact William Hudson, HCPH Director of Office of Financial and Support Services at (713) 439-6000 or William.Hudson@phs.hctx.net.

Sincerely,



Gwen J. Sims, MEd, RD, LD
Interim Executive Director

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Case Investigation / Contact Tracing Assessment

Executive Summary

It is premature to eliminate the program considering the broader COVID-19 environment; however, right-sizing the capacity of the program to reflect areas of success and known issues with community-wide contact tracing is appropriate.

- Assessing contact tracing effectiveness has been a problem across the United States and most of the world. Dr. E. Susan Arimian Ph.D., leader of Rice University's Texas Policy Lab, coauthored a report published in the *Clinical Infectious Disease Journal* in August 2020 identifying political, social, economic, and uncontrolled community spread that have inhibited the success and ability to measure contact tracing effectiveness. Dr. David Lakey, MD, Director of the University of Texas System and the CDC has also identified the asymptomatic nature (up to 40%) of SARS-CoV-2 and inadequate rapid testing as significant factors contributing to the ineffectiveness of contact tracing.
- Peer / Near-Peer Benchmark: As of this writing, public health departments supporting large urban areas in Texas including Dallas and Tarrant Counties as well as Houston and San Antonio Public Health Departments continue to conduct contact tracing.
- Financial Relief: The American Rescue Plan Act of 2021 has earmarked \$7.6 billion for State and local public health response support, including case investigation and contact tracing. In addition, another \$47.8 billion is being dedicated to building national public health capacity including case investigation and contact tracing.
- Outbreak Uncertainty: The full impact of opening Texas, lifting the mask order, spring break, and B.1.1.7. variant will not be realized for several more weeks.

Recommendation

The following recommendations will result in a 30-40% reduction in current staffing levels and a reduction \$550,000 reducing expenses from \$1.99 million to \$1.44 million per month:

- Reduce "Active Case" contact tracing capacity to a level commensurate with the current workload and case priority strategy plus a small surge capacity.
- Retain MDT/PC (congregate and school setting program) in full. Additional reductions may be possible at the end of the school year (June 2021).
- Reduce 'intake' in proportion to active case reductions.
- Re-evaluate monthly based on trends and projected health threats and funding potential from outside sources.
- *Non-Contact Tracing*: Temporarily increase funding to support CRP database management. Due to shifting priorities, maintenance of the CRP database has fallen behind. Developed with the data team, an initial estimated increase from 20 to 60 maintenance/coding hours per week is needed to catch up on current workorders and make requested improvements.

Benchmark with Peer / Near-Peer Jurisdictions

To glean perspective, a survey of the large public health departments by Harris County contact tracing leadership and an internet search by Rice University's Texas Policy Lab was conducted. The findings are a mixed bag of continuing and discontinuing contact tracing programs. Dallas and Tarrant Counties, as well as Houston and San Antonio Public Health continue to contact trace although all are currently evaluating the utility of their programs. Dallas County intends to stop in May 2021. Nationally, other large counties have continued their programs including Cook County (Chicago), Los Angeles County, and Maricopa County (Phoenix). Several small counties including Hunt, Galveston (Feb 2021) and Denton have stopped contact tracing. Austin Public Health appears to stop their program during surges and reinstate it during troughs in the epidemiological curve. States who have stopped contact tracing include Wyoming and, temporarily, New Hampshire (see Near-Term Outlook) although contact tracing continues below the state level.

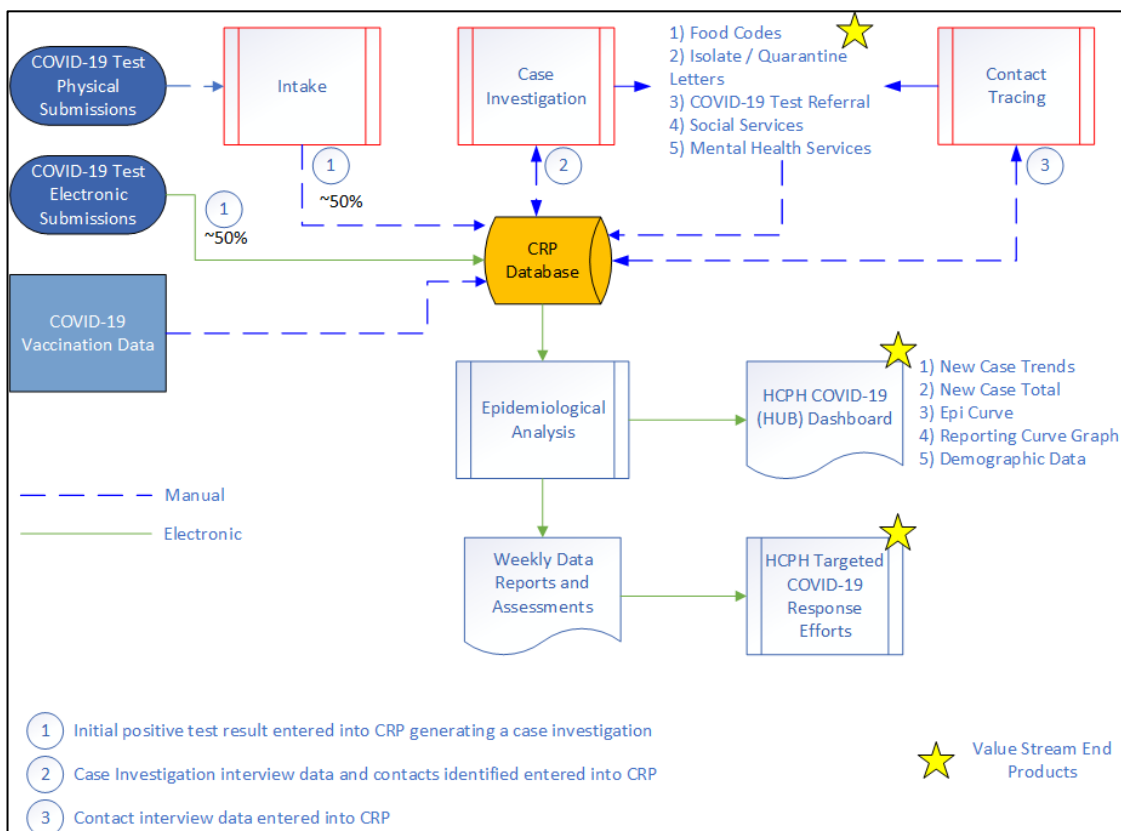
Near-Term Outlook

The near-term outlook, 30-60 days, has several competing influences needing consideration. On a positive side, the vaccination program and the American Rescue Plan Act of 2021 offer hope of an improving COVID-19 landscape. Nationwide, vaccine production is accelerating to reach President Biden's goal of having a vaccine dose available for 100% of the population by the end of May. On March 8th, the America Rescue Plan signed into law providing \$7.66 billion (Section 2501) to support State and local public health departments with response staff to include case investigators and contact tracers. In addition, another \$47.8 billion (Section 2401) is earmarked to build a federal "public health corps" of 100,000 staff to assist State and local governments with testing, contact tracing, surveillance, and mitigation activities.

On the negative side, the significance of the 100% opening of Texas and lifting of the mask mandate combined with Spring Break and SARS-CoV-2 variant B.1.1.7 is yet to be known. Of the four new variants in circulation, the B.1.1.7. circulating in Harris County is of particular concern. It is responsible for a resurgence in Italy and is the reason New Hampshire recently reinstated their contact tracing program this month.

Information Flow and Value Stream

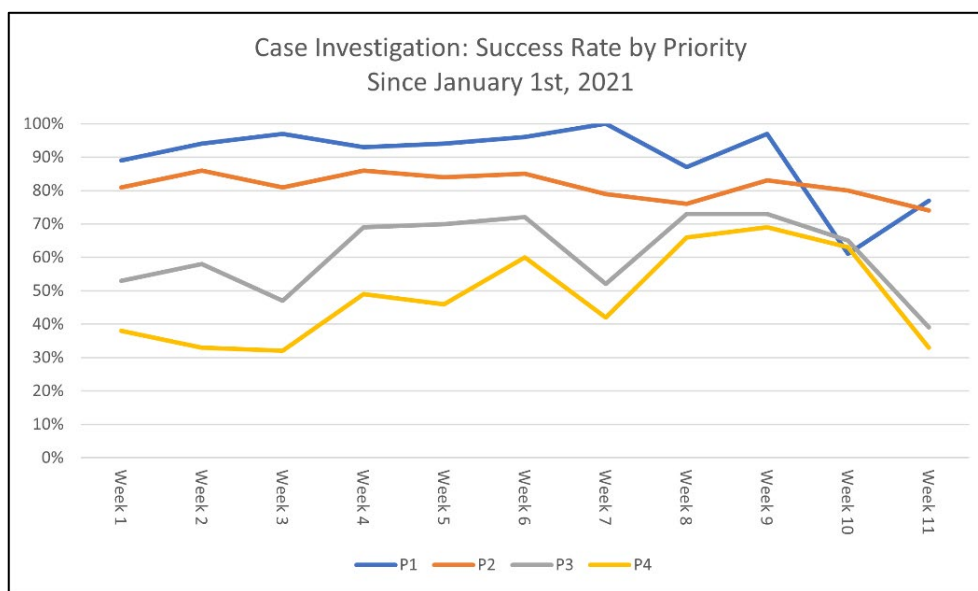
This diagram illustrates data flow and value stream impacted by the contact tracing program. Value is defined as a product for internal use by another area or service provided to a citizen. The processes in red identify the contact tracing functions. The “Yellow Stars” identify ‘value’ touch points for citizens, Harris County products, and programs - specifically: direct social support services, the Harris County / City of Houston [COVID-19 Data Hub](#), and on-going targeted response efforts in long-term care, schools, and business settings are impacted by the contact tracing program. Reductions should not impact the current value stream and product delivery.



Program Performance

In January 2021, the need to develop individual and program performance metrics was identified to understand program capacity and better manage the program. Since that time, contact tracing leadership has successfully developed and implemented individual and program key performance indicators (KPIs).

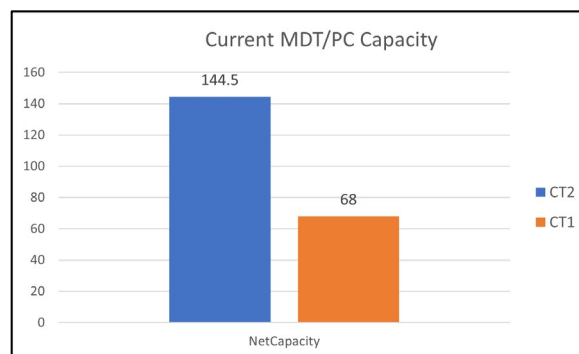
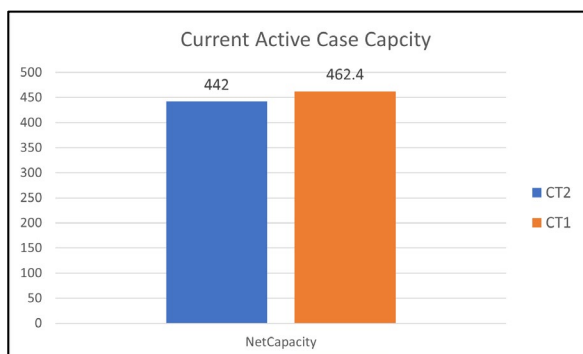
Priority Level	Time from Collection
Priority 1	<24 hours
Priority 2	<48 hours
Priority 3	<72 hours
Priority 4	<96 hours



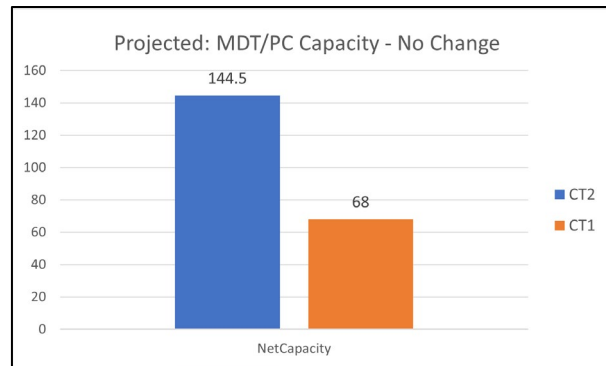
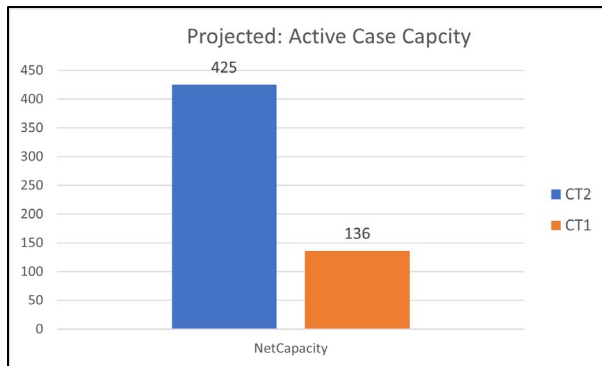
The prioritization process was extended to contacts in January. The team is still working on capturing the data to generate metrics.

Capacity Baseline

Case Investigation developed baseline performance requirements in coordination with improved quality control procedures at the individual level. Pilot results indicate a potential 300% increase in productivity while improving quality of case investigations. Full program wide implementation began in March 2021. These charts estimate case investigation and contact tracing capacity based on the pilot for the two mission areas of the program.



Projected Capacity:



Attachment A: Case Investigation Effectiveness

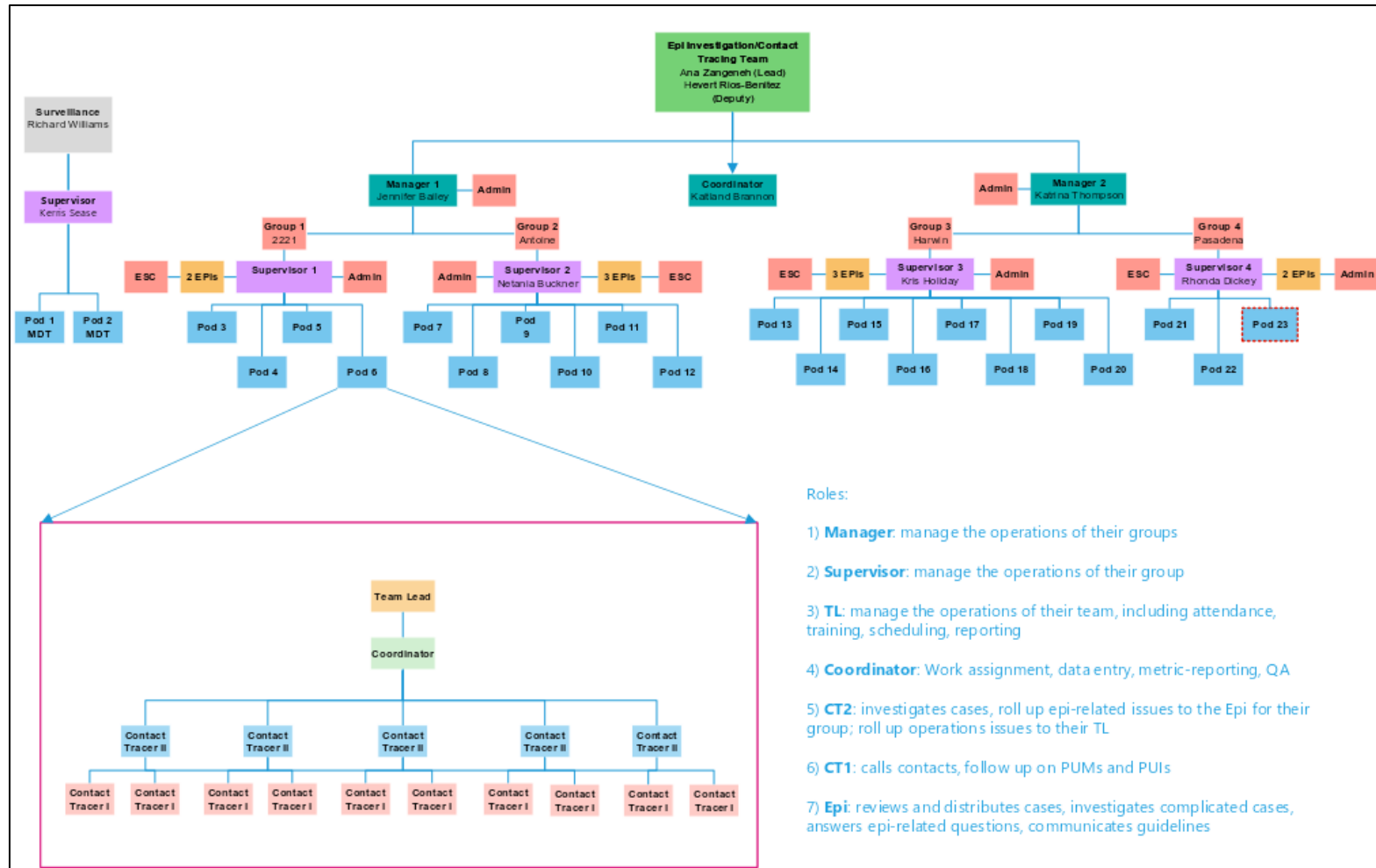
Case Investigation Attempted & (Reached) Percentages											
Priority Level	Week of 2021-01-04	Week of 2021-01-11	Week of 2021-01-18	Week of 2021-01-25	Week of 2021-02-01	Week of 2021-02-08	Week of 2021-02-15	Week of 2021-02-22	Week of 2021-03-01	Week of 2021-03-08	Week of 2021-03-15
Priority 1 (<24 Hours)	89.36% (89.36%)	97.35% (94.69%)	97.53% (97.53%)	96.95% (93.91%)	100% (94.7%)	98.94% (96.81%)	100% (100%)	100% (87.01%)	100% (97.83%)	95.24% (61.9%)	77.78% (77.78%)
Priority 2 (<48 Hours)	97.91% (81.43%)	98.83% (86.6%)	95.34% (81.08%)	99.1% (86.92%)	99.11% (84.57%)	99.64% (85.8%)	97.72% (79.25%)	98.42% (76.92%)	98.79% (83.04%)	99.67% (80.36%)	90.91% (74.13%)
Priority 3 (<72 Hours)	64.17% (53.39%)	67.09% (58.2%)	55.85% (47.5%)	86.87% (69.35%)	87.26% (70.58%)	98.41% (72.95%)	79.3% (52.03%)	94.39% (73.17%)	98.6% (73.22%)	98.54% (65.64%)	71.57% (39.87%)
Priority 4 (<96 Hours)	44.33% (38.88%)	40.13% (33.86%)	38.47% (32.78%)	61.02% (49.04%)	60.56% (46.78%)	87.65% (60%)	49.94% (42.2%)	86.79% (66.48%)	97.31% (69.26%)	92.66% (63.38%)	60.09% (33.49%)
Overall	68.24% (57.5%)	76.38% (66.6%)	68.9% (58.93%)	85.42% (72.25%)	84.75% (70.18%)	95.57% (74.39%)	77.31% (58.85%)	95.06% (74.05%)	98.12% (73.57%)	96.28% (68.53%)	70.09% (44.86%)
HCPH Data. Distribution: Not approved. For HCPH Leadership only. Updated: 2021-03-17											

Submitted on 03/19/2021 by:

Thomas A. Jones, PMP; T&L Jones Services, LLC, (210) 262-3118, TomJones@tljonesservices.com

Attachment B: Organization Structure Change

Current Structure

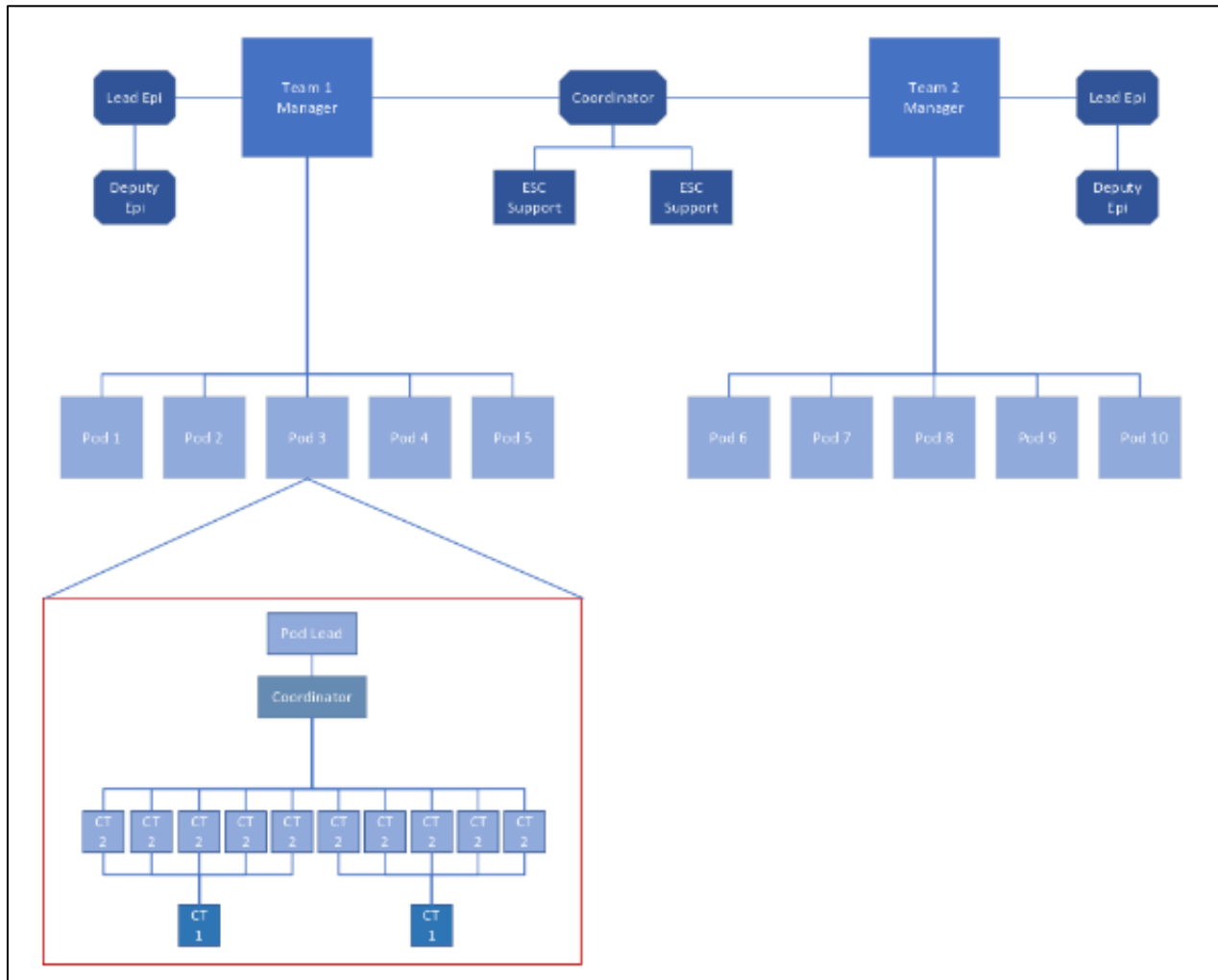


Submitted on 03/19/2021 by:

Thomas A. Jones, PMP; T&L Jones Services, LLC, (210) 262-3118, TomJones@tljoneservices.com

Projected Structure

- 1) Consolidates from 20 to 10 PODs.
- 2) Eliminates the “Supervisor” level of management.
- 3) Reduces and consolidates support staff for efficiency.



Submitted on 03/19/2021 by:

Thomas A. Jones, PMP; T&L Jones Services, LLC, (210) 262-3118, TomJones@tljonesservices.com

THE STATE OF TEXAS §

COUNTY OF HARRIS §

The Commissioners Court of Harris County, Texas, Met in a regular session at its regular term at the Harris County Administration Building in the City of Houston, Texas, on _____,

with the following members present:

Lina Hidalgo	County Judge
Rodney Ellis	Commissioner, Precinct No. 1
Adrian Garcia	Commissioner, Precinct No. 2
Tom S. Ramsey, P.E.	Commissioner, Precinct No. 3
R. Jack Cagle	Commissioner, Precinct No. 4

and the following members absent: _____,

constituting a quorum, when among other business, the following was transacted:

ORDER AUTHORIZING HARRIS COUNTY PUBLIC HEALTH to approve a request for contact tracing operational funding.

Commissioner _____ introduced an order and moved that Commissioners Court adopt the order. Commissioner _____ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

	Yes	No	Abstain
Judge Hidalgo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Ellis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Ramsey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comm. Cagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The meeting chair announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order adopted follows:

IT IS ORDERED that the County Judge is authorized to approve Harris County Public Health (HCPH) to approve a request for contact tracing operational funding. The funding period is April 1, 2021 to April 30, 2021.

The documents are attached hereto and incorporated herein and incorporated as if set out in full word for word. Harris County is authorized to do any and all things necessary or convenient to accomplish the purpose of this Order.