



The Best Laid Plans . . .

Managing Risk During a Global Catastrophe

Joe Macaluso, JD, RN, CPHRM
Director of Risk Management

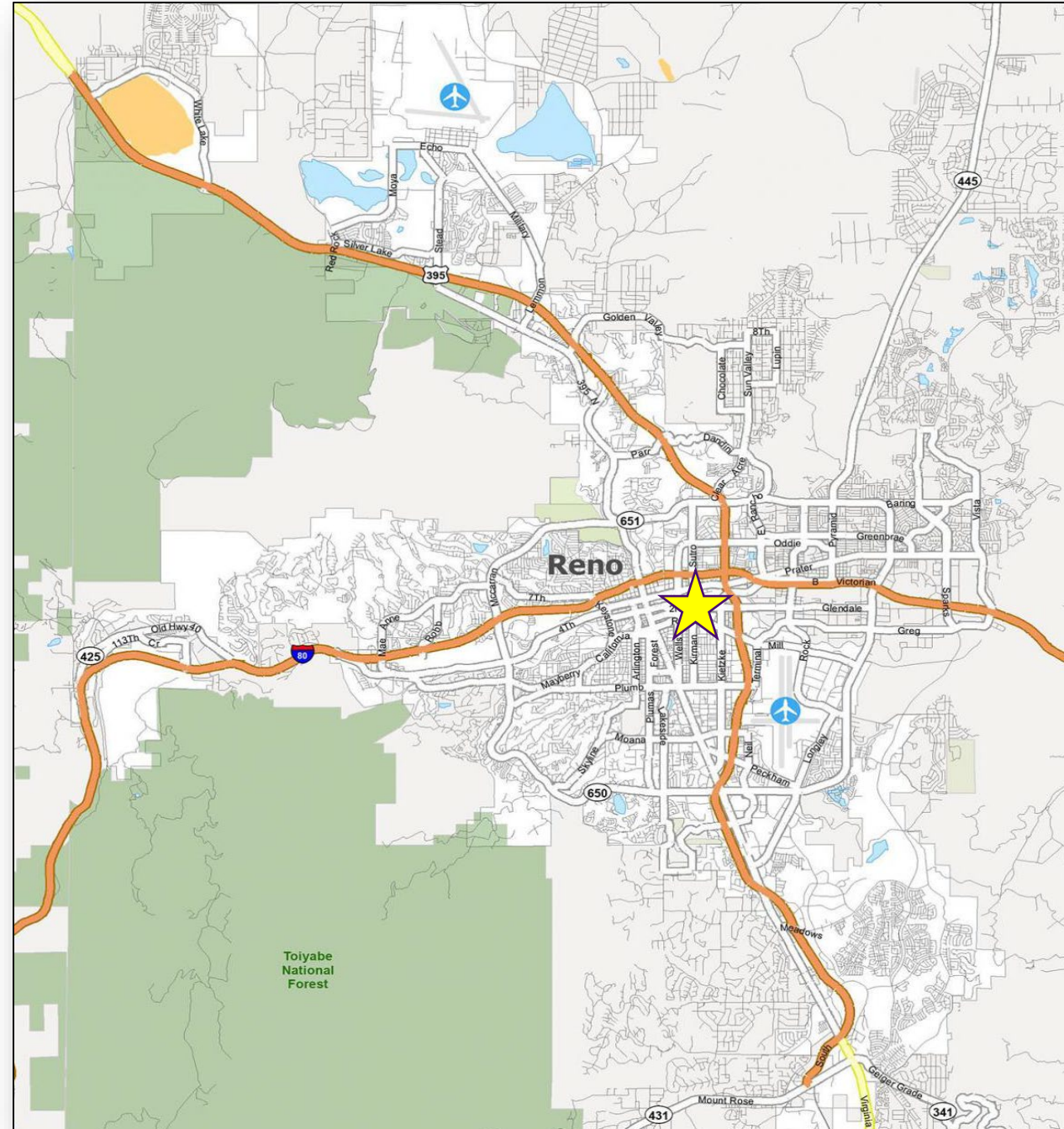
Renown[®]
HEALTH

Disclaimer

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A Bit About Reno

- “Biggest Little City”
- 540,000 residents
- Eastern slope of the Sierra Nevada mountains
- Six acute care hospitals
- Three healthcare companies plus the VA
- Renown’s main facility is in the heart of the city



A Bit About Renown Health

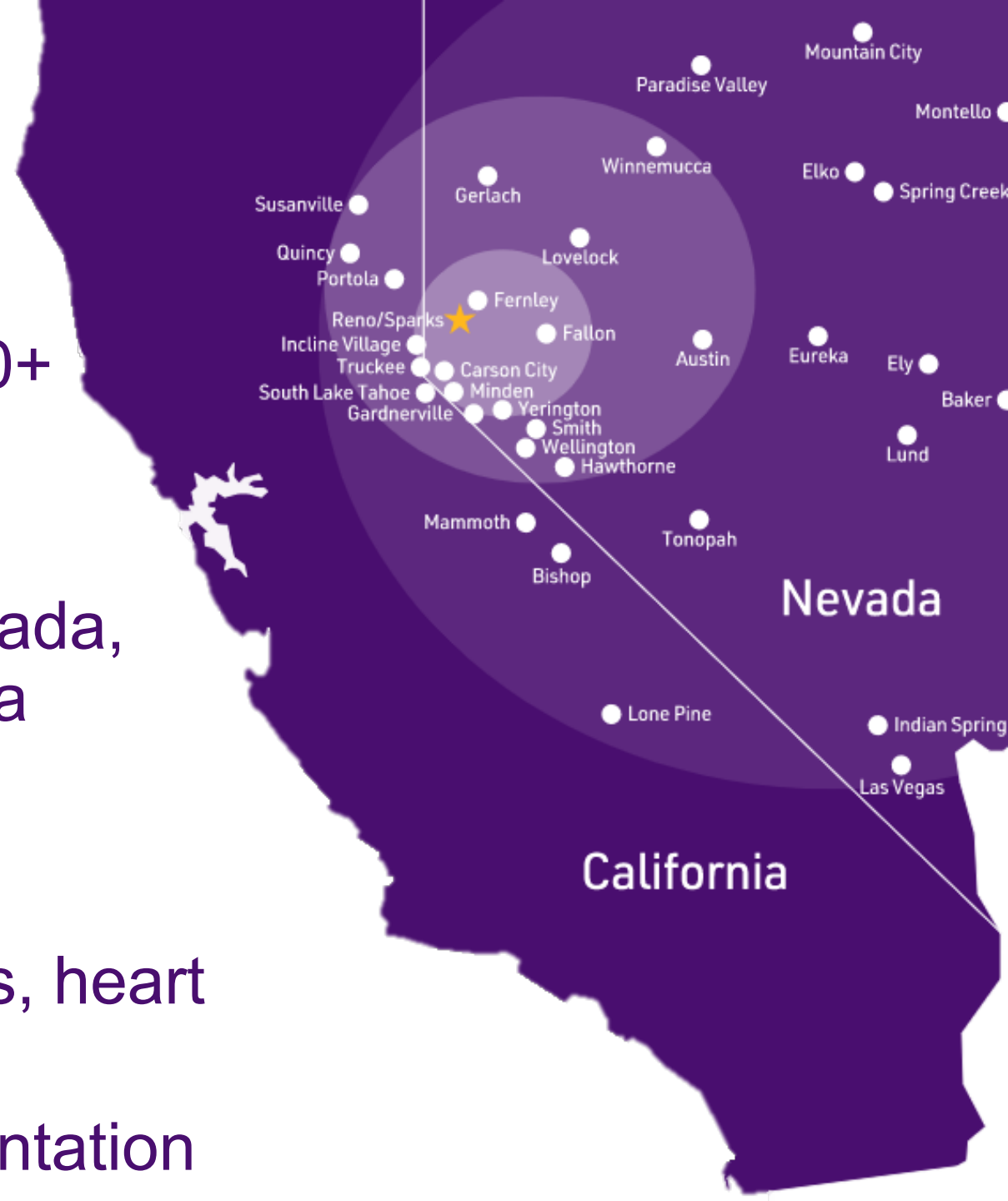


Renown
REGIONAL MEDICAL
CENTER

↑ EMERGENCY

A Bit About Renown

- Founded in 1862
- Three acute care hospitals and 70+ outlying facilities
- Health plan
- 100,000 square miles across Nevada, Lake Tahoe and Eastern California
- Level II Trauma Center
- Pediatric Trauma Center
- Cancer care, neurology, pediatrics, heart care and women's health
- ECMO and soon Kidney Transplantation



RENOWN BY THE NUMBERS

IN ONE YEAR



54,383

TOTAL HEALTHY NEVADA PROJECT PARTICIPANTS



28,925

INPATIENT & SAME-DAY SURGERIES



82,533

ER PATIENTS TREATED



123,304

TOTAL ER VISITS AT RENOWN REGIONAL AND SOUTH MEADOWS



197,087

DAYS OF HOSPITAL CARE



908

REHABILITATION PATIENTS



200,446

PATIENTS SEEN BY MEDICAL GROUP PROVIDERS



41,107

KIDS SEEN BY RENOWN MEDICAL GROUP PEDIATRIC PROVIDERS



145,957

URGENT CARE VISITS



946

LICENSED BEDS



4,340

BABIES DELIVERED



25,146

HOURS SERVED BY VOLUNTEERS



400

PATIENTS SERVED THROUGH MUSIC THERAPY



12,556

PATIENTS VISITED BY 27 PET THERAPY TEAMS



470,813

SAME-DAY TESTS AND DIAGNOSTICS



1,238

TOTAL PROVIDERS WITH PRIVILEGES AT OUR HOSPITALS



1,061,313

VISITS TO RENOWN.ORG



223,546

EPIC MYCHART USERS



137,000

INSURANCE PLAN MEMBERS



2,880,401

TESTS AT RENOWN LABS



2,038,574

CUSTOMER CALLS

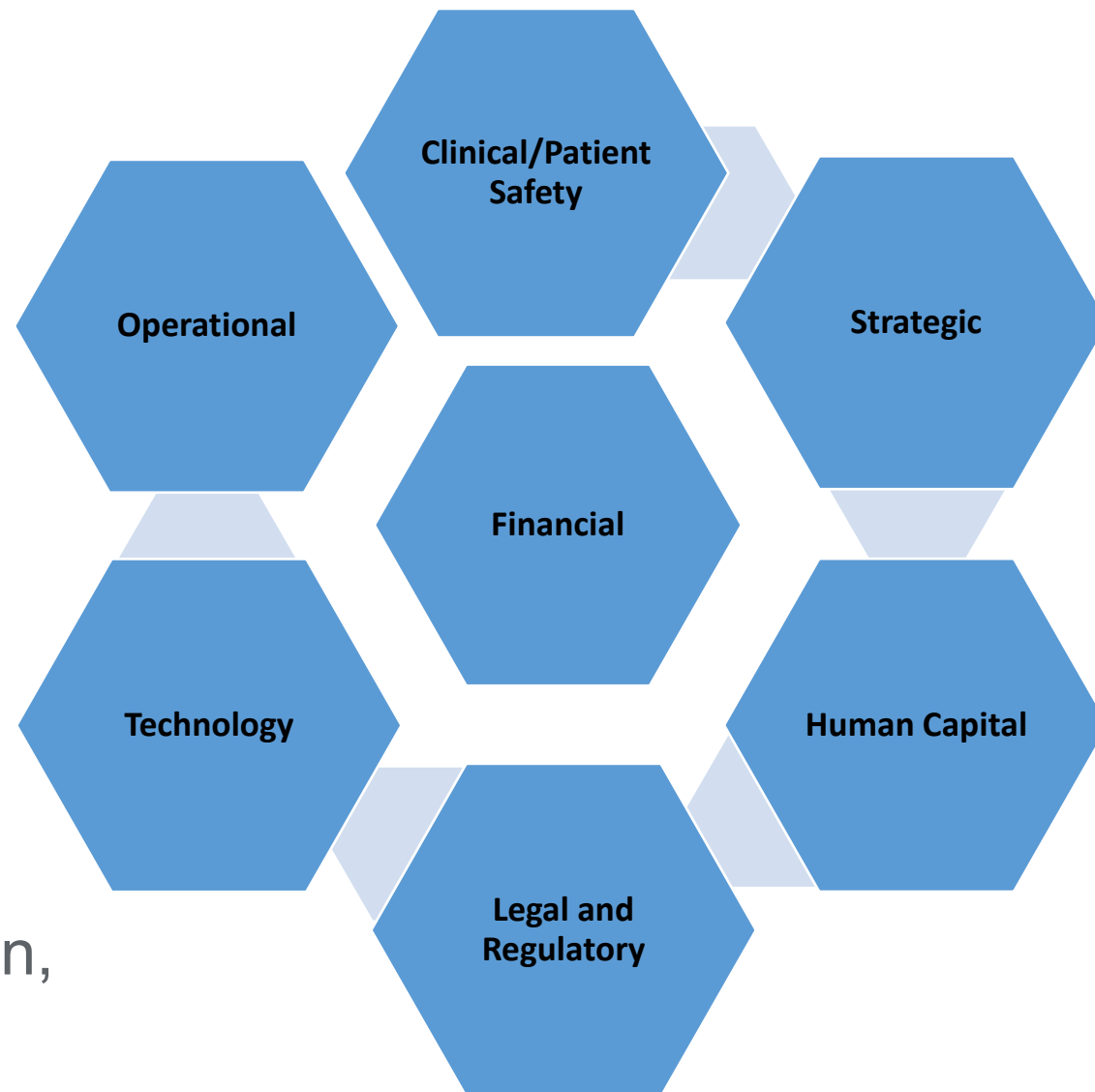


278

NOT-FOR-PROFIT ORGANIZATIONS SUPPORTED

Enterprise Risk Mgmt. – Risk Domains

- **Clinical/Patient Safety**
 - Care delivery
- **Operational**
 - Process, people, systems
- **Technology**
 - Hardware, software, EMR
- **Strategic**
 - Reputation, future plans
- **Human Capital**
 - Workforce, recruitment, retention, safety



February 2nd, 2020

- **Punxsutawney Phil doesn't see his shadow**
- **Kansas City Chiefs win the Superbowl. Their first since 1970.**
- **The next day DHS redirects flights from China into the US for enhanced screening.**



March 2020

- **NV Governor declares a state of emergency**
- **11 cases identified in the state**
- **Hospital Incident Command System (HICS)**
- **Renown sets up “deployable medical facility” in ER parking lot.**







Renown
HEALTH

renown.org

Handwashing for Your Health

The CDC recommends washing your hands with soap and water for 20 seconds to reduce germs and prevent illness. To take a little time to wash your hands and help yourself stay healthy.

And follow these simple tips to help prevent the spread of illness.

- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Avoid contact with people who are sick.
- Stay home when you are sick.
- Cough or sneeze into a tissue or your elbow.

Renown
HEALTH

Deployable Care Site

- **Up to 12 patients**
- **Two nurses**
- **ED physician**
- **Patients seen and triaged**
- **Released or transferred to main hospital**



[Tracking Home](#)

[Data Visualizations](#)

Global Map

[U.S. Map](#)

[Data in Motion](#)

[Tracking FAQ](#)

Cases | Deaths by
Country/Region/Sovereignty

US

28-Day: 959,794 | 9,451
Totals: 103,804,263 | 1,123,836

Japan

28-Day: 418,671 | 2,804
Totals: 33,329,551 | 73,046

Germany

28-Day: 355,168 | 2,275
Totals: 38,249,060 | 168,935

Russia

28-Day: 350,549 | 989
Totals: 22,086,064 | 388,521

Korea, South

28-Day: 290,039 | 396
Totals: 30,615,522 | 34,093

Taiwan*

28-Day: 216,931 | 778
Totals: 9,970,937 | 17,672

Brazil

28-Day: 170,852 | 1,613
Totals: 37,085,675 | 699,310

Austria

28-Day: 148,431 | 197
Totals: 5,961,143 | 21,970

Italy

28-Day: 115,344 | 1,050
Totals: 25,603,510 | 188,322

28-Day Cases

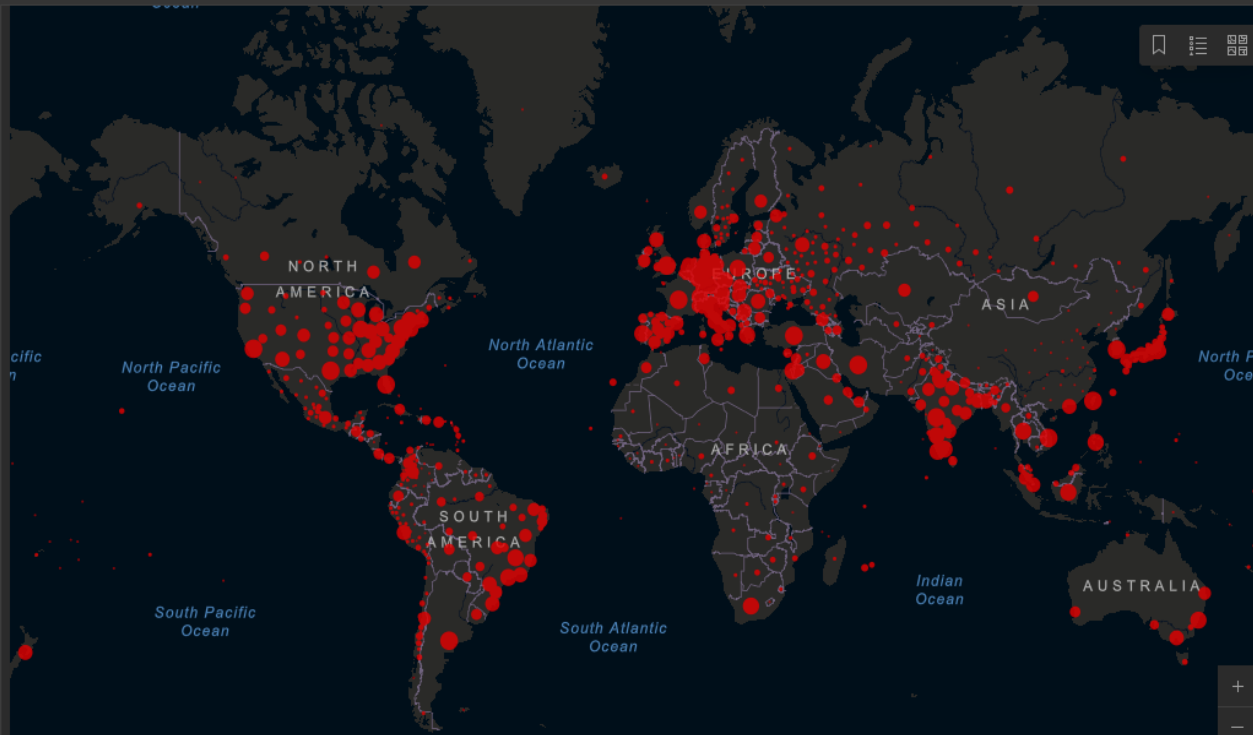
418,671

28-Day Deaths

2,804

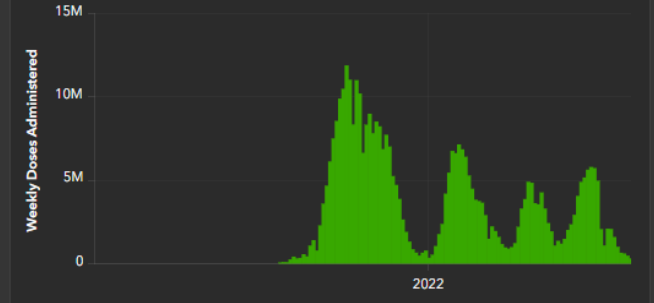
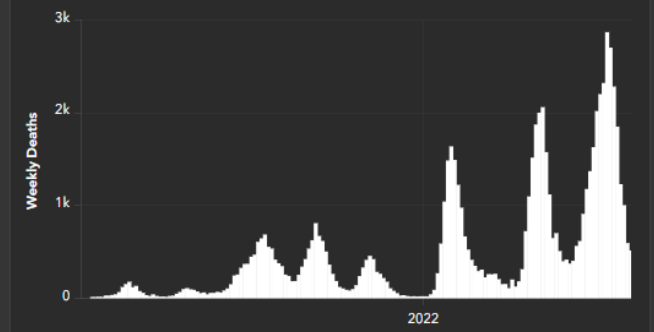
28-Day Vaccine Doses Administered

1,526,274



Esri, TomTom, FAO, NOAA, USGS

Powered by Esri



[Weekly](#)

[28-Day](#)

[Admin0](#)

[Admin1](#)

[Admin2](#)

[28-Day](#)

[Totals](#)

[Incidence](#)

[Case-Fatality Ratio](#)

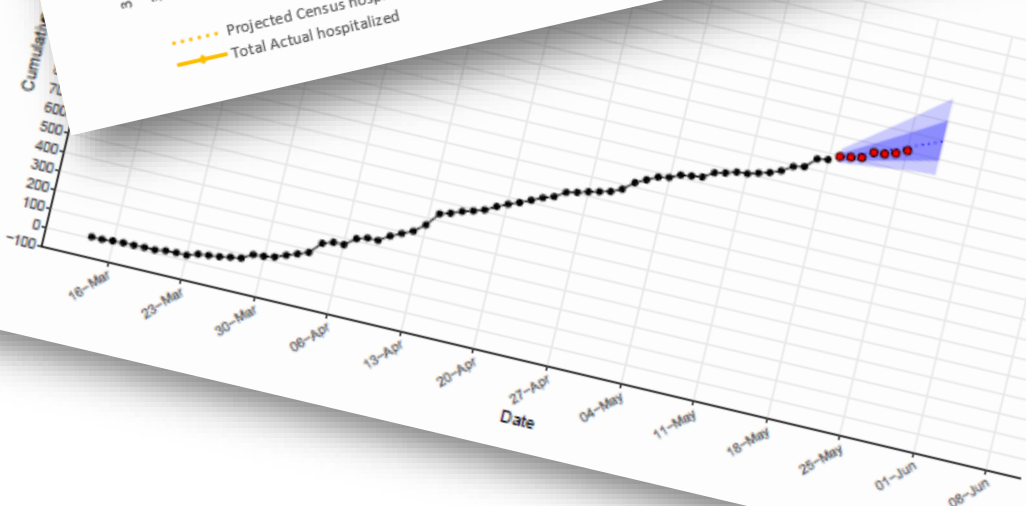
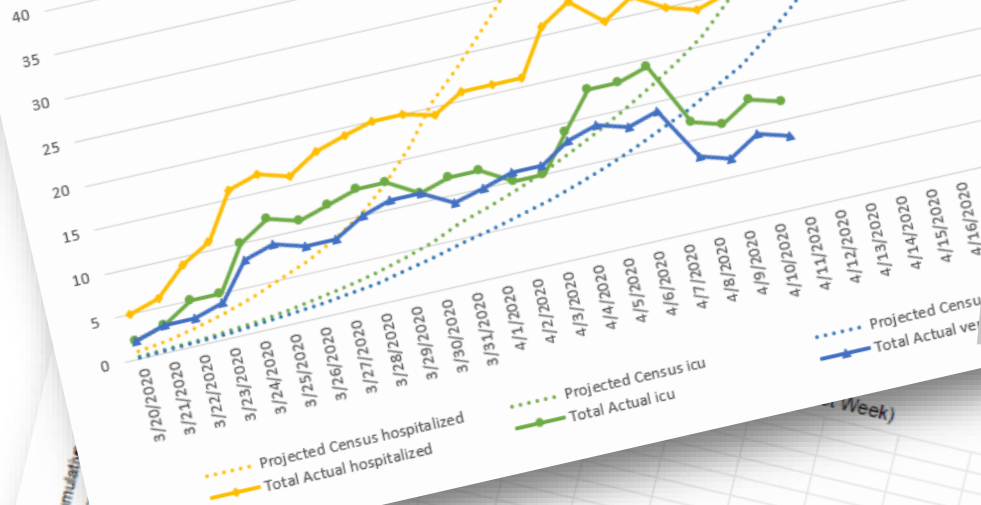
[Global Vaccinations](#)

[US Vaccinations](#)

[Terms of Use](#)

30 Day View - Washoe County Projected Census by Bed Type

500,000 pop., 35% Social Distancing, First Hospitalization 3/20/20



If your site isn't loading correctly, click here

COVID-19 (Coronavirus)

For More Information Please Visit: [Nevada Health Response](#)

SNPHL data were last updated 03/23/2020 5:00 pm. NSPHL data were last updated 03/23/2020 5:00 pm. Private Lab data were last updated on 03/23/2020 11:59 pm.

4,536 Tests Performed
4,232 People Tested

Note: a single individual may receive multiple tests

Testing Location



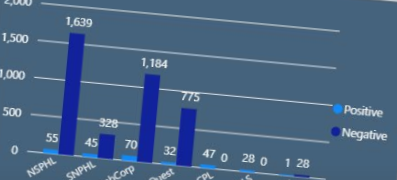
Laboratory

All

Result

Total

Patient Results



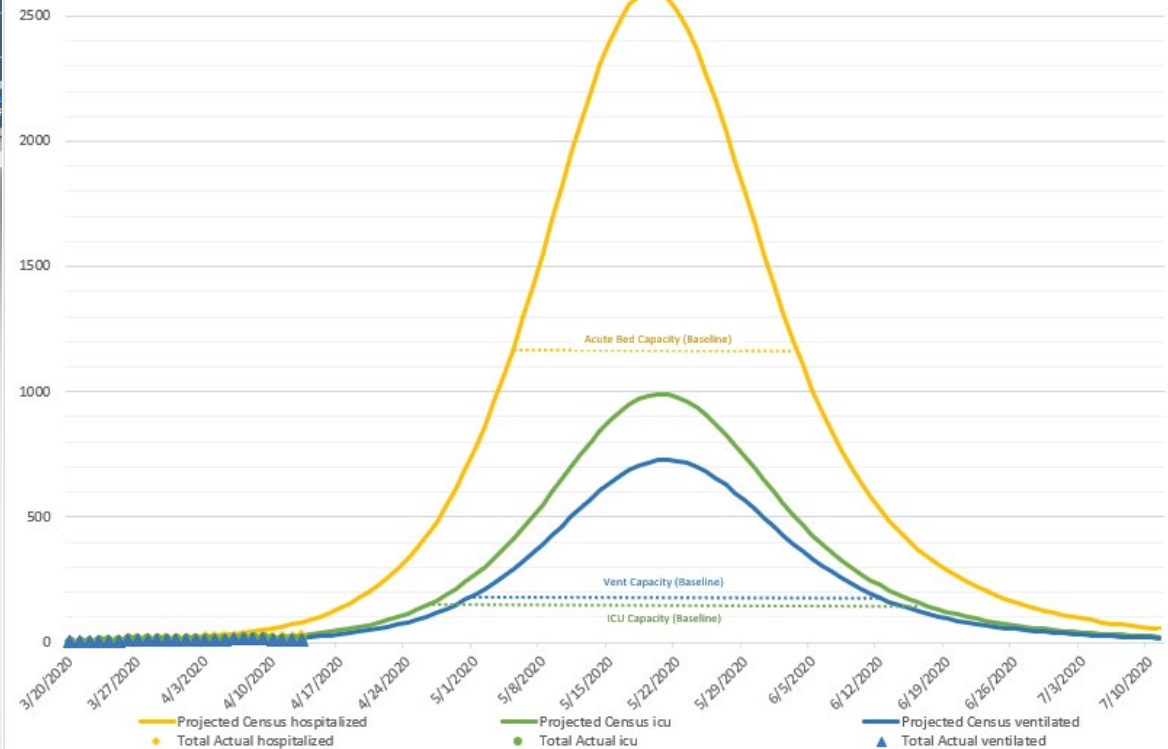
278 Positive

3,954 Deaths

4 Deaths

Washoe County Projected Census by Bed Type

500,000 pop., 35% Social Distancing, First Hospitalization 3/20/20



Emergency Preparedness Plans

- Facility, City, and County Plans
 - Alternate Care Sites
 - Divert hospital staff
 - Divert equipment and supplies
 - Detached from hospitals
-
- Lots of discussions about these plans





*“Everyone
has a plan
until they
get punched
in the face.”*

Mike Tyson

PLANS



Alternate Care Site (ACS)

- **Mission, Vision, Values**
- **Renown commits to its own Alternate Care Site**
- **Evaluated all Renown facilities and properties**
- **Army Corps of Engineers**



Decision: **Parking Structure**

Pros:

- **Direct Connection to Hospital**
- **Proximity to available utilities**
- **Flat floor slabs – Not sloped**
- **Enough square footage to handle 1,400 patients**
- **Direct access to upper parking levels**



Decision: **Parking Structure**

Cons:

- **It's a Parking Garage!!!!**
- **Converting open parking structure to a contained patient care space**
- **Loss of much needed parking spaces**
- **Environmental conditioning, utilities, etc.**



Mobilization

- **Pre-planning**
- **Collaboration amongst contractors**
- **Tight timeline with immense pressure**
- **Round the clock work**
- **Worker safety**

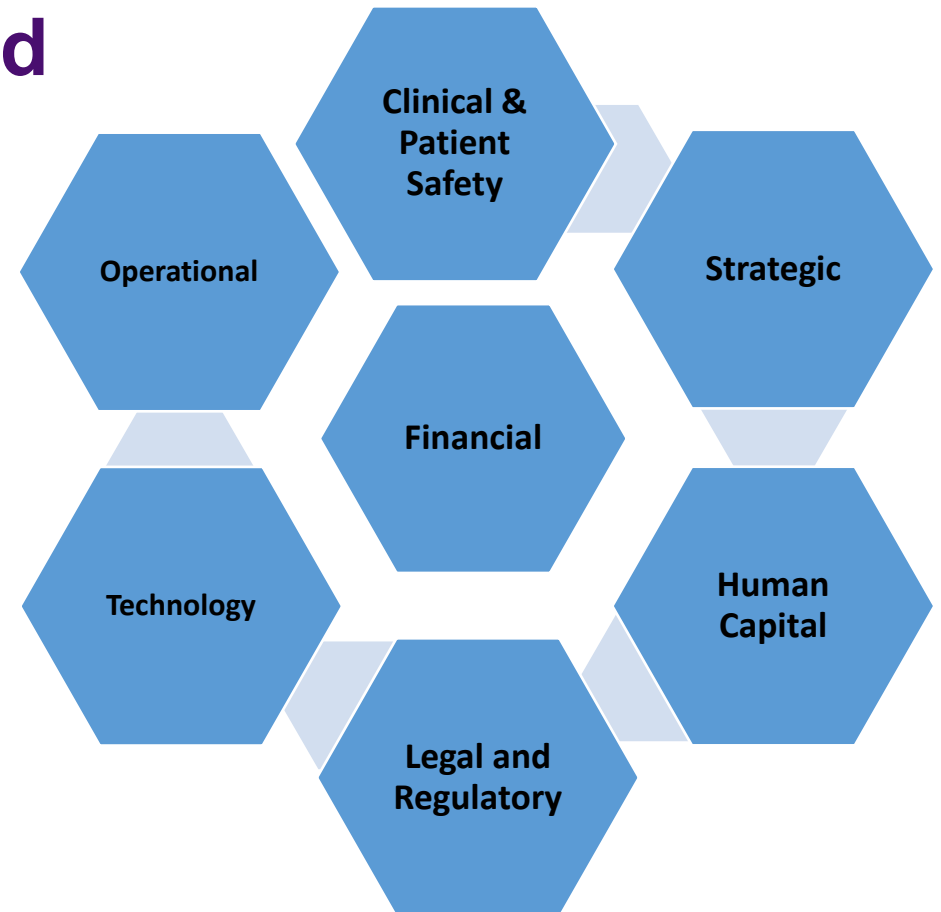
1. Kickoff Meeting
(1 Day)

2. Pre-Planning
(4 Days)

3. Construction
(10 Days)

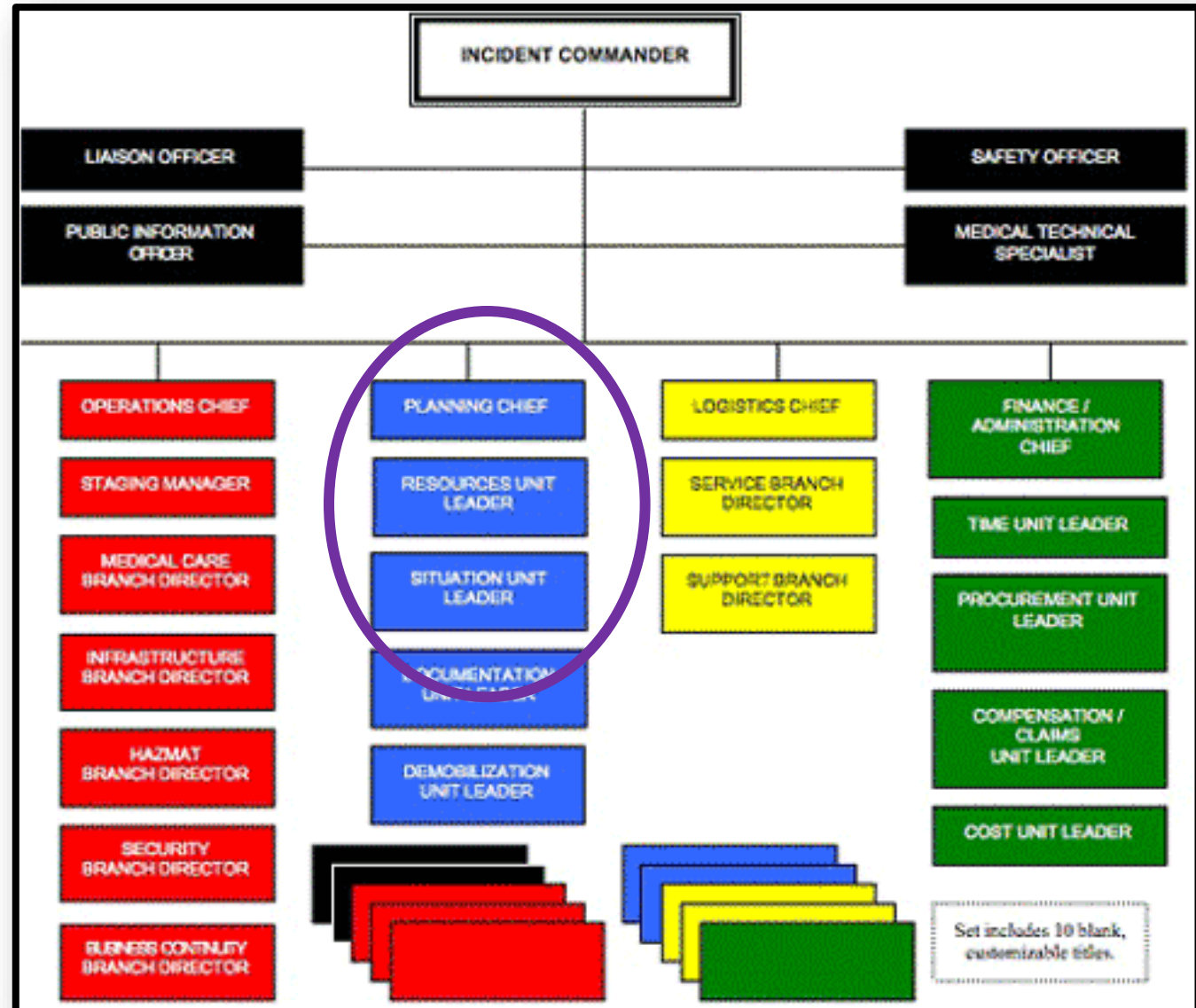
Mindful Improvisation

- **Formalized HICS**
- **All requests routed and approved**
- **Risk management staff to be embedded in HICS structure**



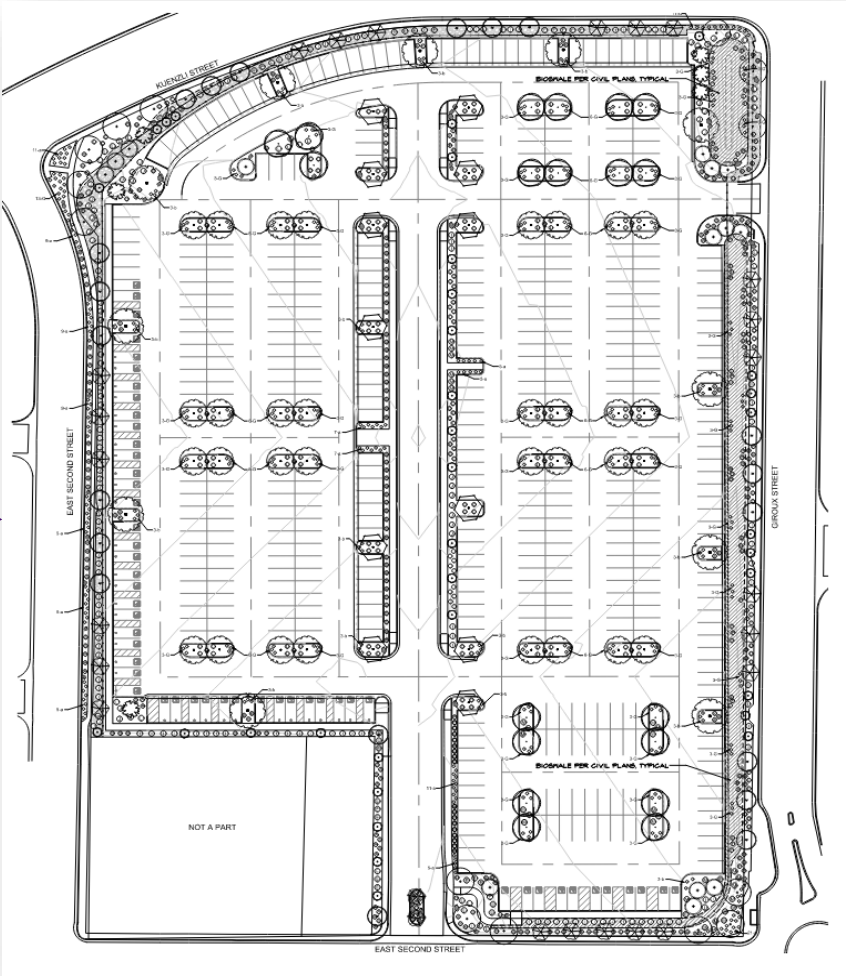
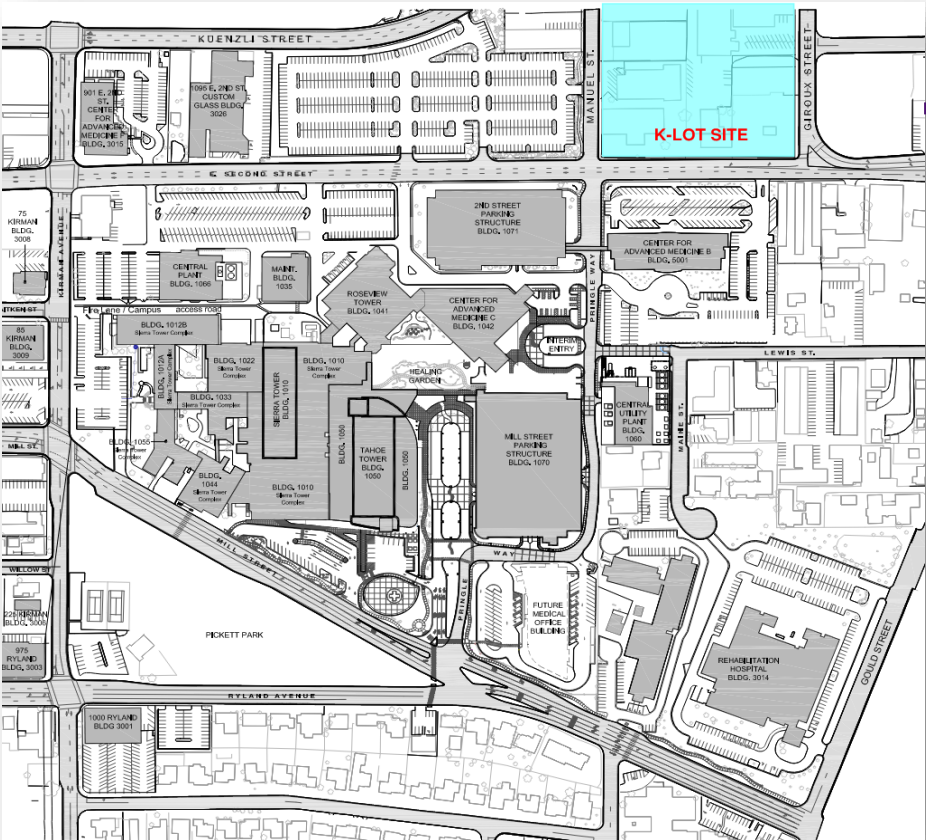
HICS

- Leaders trained with FEMA training
- Dedicated roles
- Risk management in key roles



Response: Space, Location & Feasibility

- 'K' Lot - Surface Parking Added



Ductwork Fabrication

- **Ductwork fabrication begins almost immediately**
 - Other options could not be procured in time
 - 80,000 lbs. of sheet steel
- **Entire space to be negative pressure**



Propane for Heat

- Natural gas not available this side of campus
- Propane tanks lined the exterior
- Major safety risk



Walled In

- **2X4 frame with Fire Treated Plastic**
- **Translucent Plastic for natural light**
- **Not pretty but quick and cheap**



Electrical, Low-Voltage and Wi-fi



Flooring

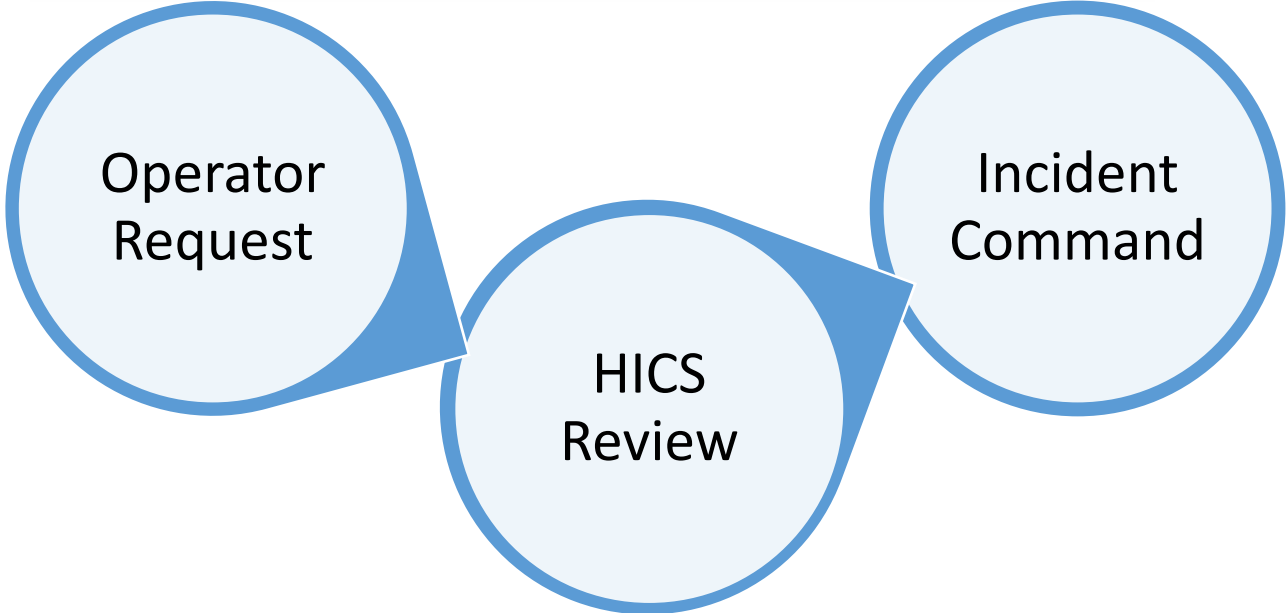


Medical Equipment and Supplies

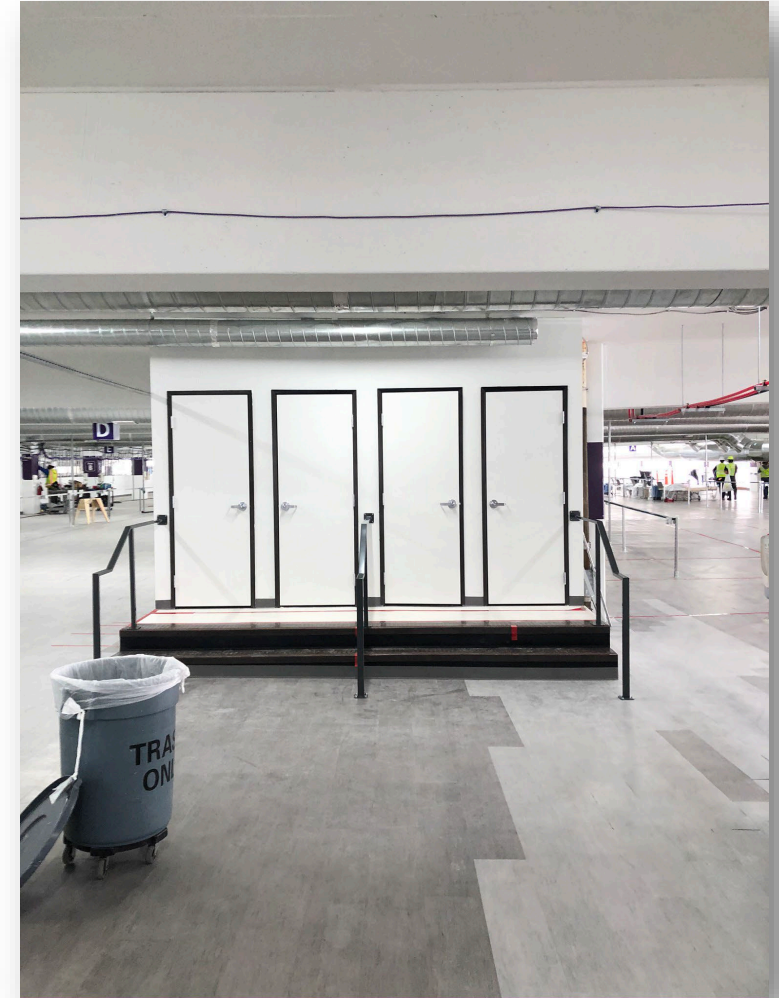
- 60 Computers on Wheels
- 48 Med Supply Carts
- 55 - O2 Cylinders
- 100 - IV Pumps



Financial



Prefabricated Bathrooms



Plumbing – Waste & Vent



- **Outhouses set up inside**
- **Exhaust ducts hooked up to each unit**
- **Connected to main exhaust direct to the outside**
- **Location of outhouses such that they could be pumped out when needed**

Staff Break Room



- **Designed and constructed concurrently with patient spaces**
- **Comfortable space for frontline healthcare workers was paramount. Included:**
 - Separate bathrooms
 - Mechanical cooling/heating
 - Carpeted floors
 - Natural lighting

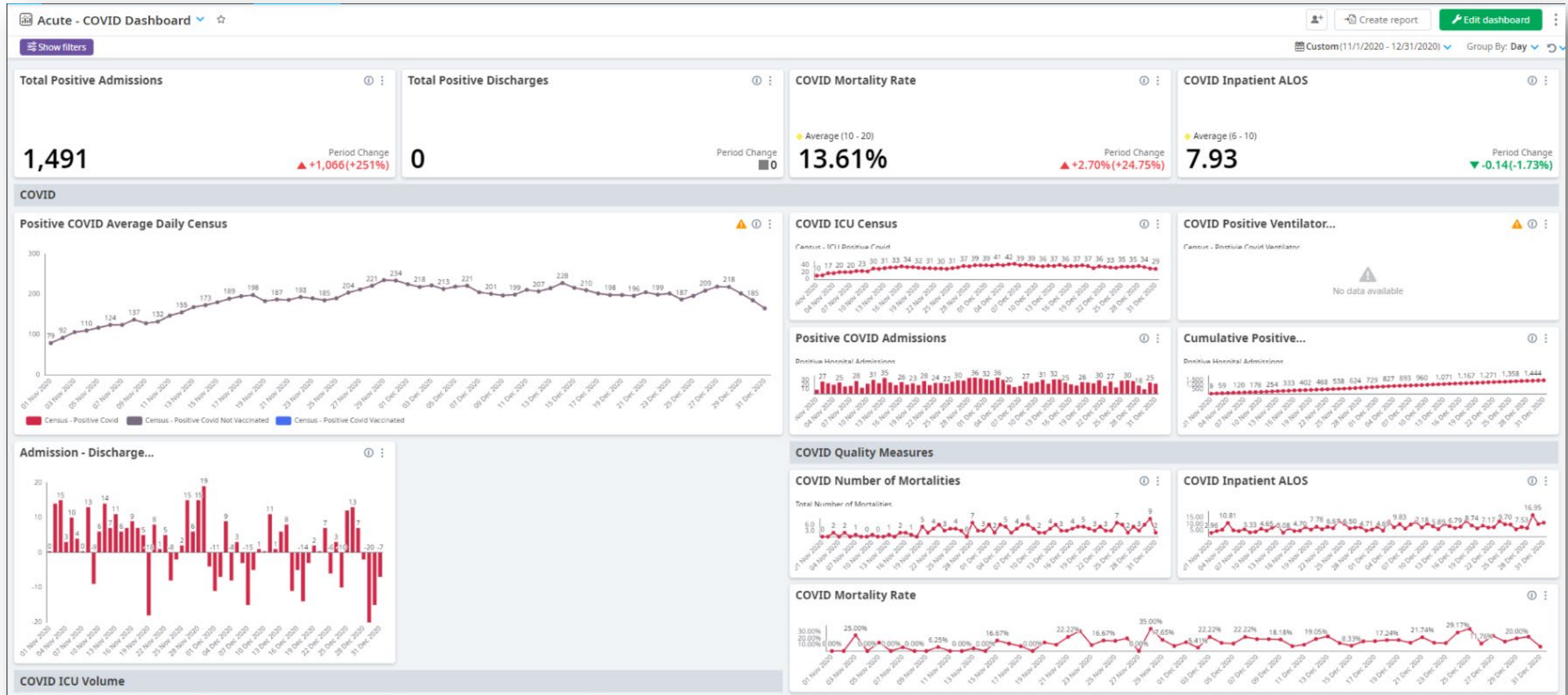
Finishing Touches Before Opening



- **Certificate of occupancy received on April 15, 2020**
- **10 Days after construction began**



Daily COVID Dashboard



**Human
Capital**

Staff with clinical
experience asked to fill
gaps.

**Staff safety and well
being**

vs

Patient care



Staff Wellness

- **Resilience committee**
- **Open, transparent communication from leadership**
- **Weekly employee forums**
- **More than 700 employees moved to remote work model**
- **Wellness days off**



**Human
Capital**



Patients Treated in the ACS



Patients Treated in the ACS

Patients
Treated in the
ACS




Strategic

- Reputational Risk
- Unwanted media attention

U.S. INTERNATIONAL CANADA ESPAÑOL 中文

The New York Times

No, a doctor's selfie does not show a 'fake hospital' in Nevada.

 Share full article



Dr. Jacob Keeperman took a photo of himself in the Renown Medical Center's alternative care site in Reno, Nev., on opening day in November, before the center's first patients arrived. Jacob Keeperman/Renown Regional Medical Center, via Associated Press

It took 10 days for a Reno hospital to turn a parking garage into a wing for Covid patients. Now it has 700 beds



By [Madeline Holcombe](#), [Sara Sidner](#) and [Julia Jones](#), CNN

🕒 3 minute read · Updated 4:53 AM EST, Fri December 11, 2020



- What will you do when CNN shows up on your doorstep?



Via Cisco Webex

Reno, NV

4:34 PM PT



SUNDAY 7P ET
 CNN DEBATE NIGHT IN GEORGIA
 REV. WARNOCK SEN. LOEFFLER

BREAKING NEWS

U.S. REPORTS RECORD 100,000+ CORONAVIRUS HOSPITALIZATIONS

Dr. Jacob Keeperman | Medical Director, Renown Transfer & Operations Center

LIVE



7:34 PM ET

ERIN BURNETT



BREAKING NEWS

HOSPITALS IN CRISIS MODE AS U.S. COVID DEATHS TOP 283,000

CBS EVENING NEWS WITH NORAH O'DONNELL



The Unanticipated Risk

Operational











Mariko Rajamand, OB-GYN, Assistant, RN

Drive-Thru in Action

217
volunteers

9,240
volunteer hours

1,262
vaccinations
distributed on
busiest day

81,000
total vaccine
doses
administered

A HERCULEAN EFFORT TO SPREAD HOPE

When COVID-19 vaccines became available in December 2020, Renown Health answered the call – with the help of the Washoe County Health District – and provided vaccinations to both our care teams and our community members.

These vaccines were, and continue to be, a signal of hope for the future and a path to ending the pandemic.

Thanks to a synchronized effort between employees and volunteers, Renown Health administered more than 81,000 vaccine doses over seven months.

“From our nurses, pharmacists, security teams, public safety experts and countless volunteer staff, each dose of the vaccine was made possible – rain, snow or shine – by dedicated healthcare champions committed to the health and safety of Nevadans,” said Melodie Osborn, RN, Chief Nursing and Quality Officer for Health Services at Renown.

Renown set up a drive-thru clinic at our South Meadows Medical Center campus to provide both COVID-19 testing and vaccines. In addition to administering doses of the vaccine, the team of internal and external volunteers guided community members through paperwork, appointment scheduling and questions. Above all, the team radiated hope, cried tears of joy, shared smiles of relief and demonstrated one way that Renown answers the call to care for our community.

Vaccinating Children Against COVID-19



Niki, Abigail & Saray, Volunteers



Through the Storm

80,000

items donated to support
our care teams

25,292

COVID-19 tests administered
as of June 30, 2021

475

patients cared for in
Alternate Care Site





Please no smoking
on this bridge.
We are a smoke- and
vape-free campus.

Por favor no fumar
en este puente.
Somos un campus
libre de tabaco y
vapeo.

Sustained Improvements

- **Employee and provider wellness**
- **Recruitment and retention**
- **Staffing models**
- **Telemedicine**
- **Discharge lounge**
- **Renown Transfer and Operations Center (RTOC)**



FIGHT THE GOOD FIGHT.
Renown

FIGHT THE GOOD FIGHT.
FIGHT THE GOOD FIGHT.

Epic

A Day in the RTOC



50 patients rounded
on by Virtual RN's



178 Bed Requests



105 Transfer Request
Calls



~500+ Voalte
Messages



257 Transport
Requests

<https://www.youtube.com/watch?v=BuSYjIOTLjM>

Renown[®]
HEALTH

Lessons Learned

- Plan for the worst – But preparation is key
- FEMA Independent Study Courses (IS-100, 200, 700)
- Mindful Improvisation
- Risk management mindset at all levels

- It takes a lot longer to dismantle an ACS than to build one



“Plans are useless, but
planning is indispensable.”

Dwight D. Eisenhower

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[renown.org](https://www.renown.org)