

# PROPERTY EDUCATION IN THE LAND OF ENCHANTMENT

Supply Chain in a COVID-19  
Environment – The Sandia  
National Lab Resiliency Story  
David Dietz  
Antonia Litts



## FALL EDUCATION SEMINAR

OCTOBER 20-21, 2021

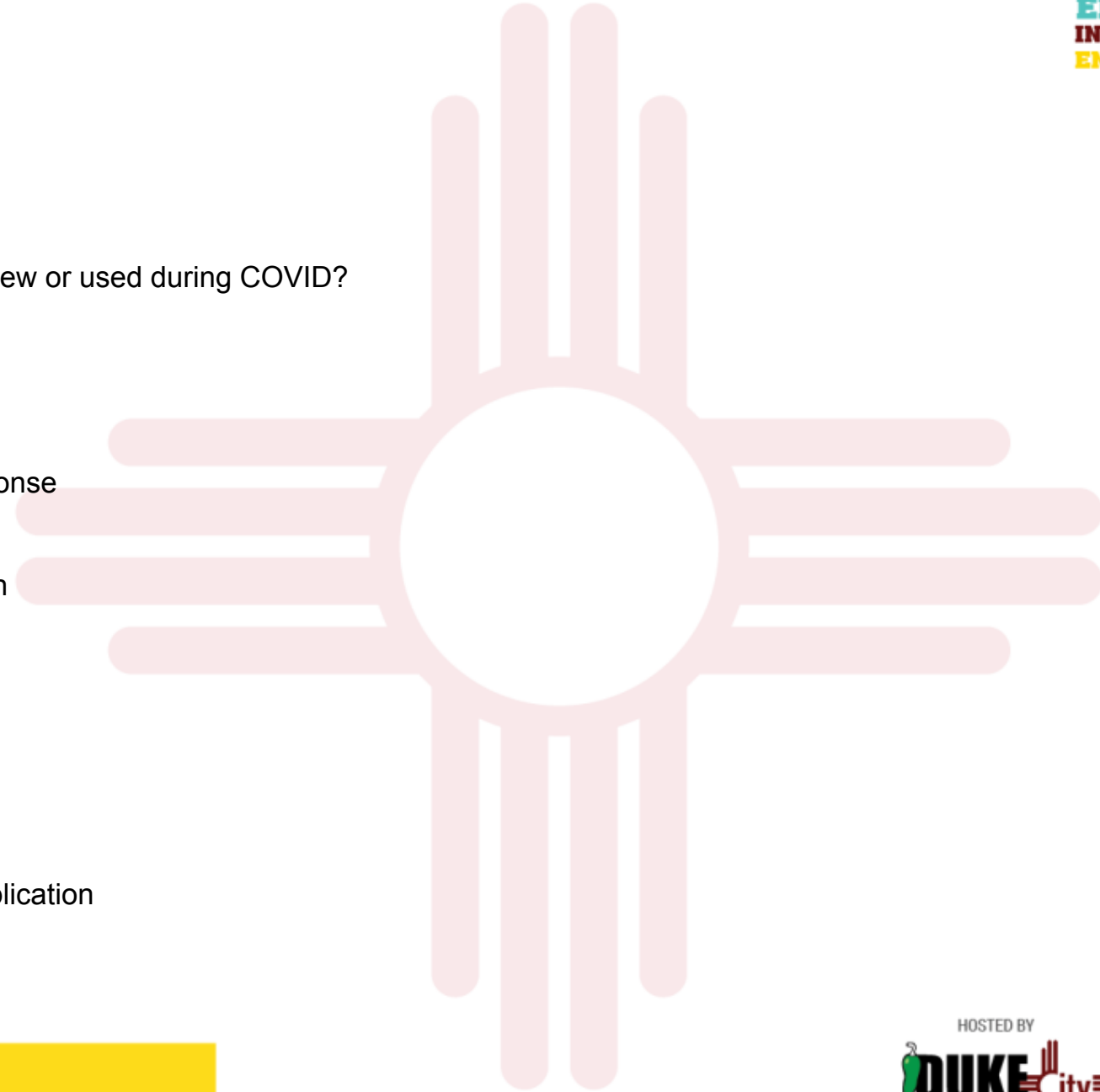
MARRIOTT ALBUQUERQUE  
ALBUQUERQUE, NEW MEXICO

HOSTED BY



# Agenda

- Overview
  - COVID- Scary
  - F150 Story during COVID- Can you find a car – new or used during COVID?
- COVID Impacts across Industry Segments
  - What do the Experts Say?
  - Mitigation Strategies
- Sandia National Labs Logistics (SNL) COVID-19 Response
  - SNL Overview
  - Logistics COVID-19 Continuity of Operations Plan
  - COVID-19 Preparedness National Support
  - PPE at Sandia National Laboratories
  - Sandia Logistics: Transportation & Receiving
  - Sandia Logistics: Shipping
  - Sandia Logistics: Corporate Storage
  - Sandia Logistics: Property Management & Reapplication
- Summary- Scary Story





A teal-tinted photograph of a Sandia Peak cable car against a mountain backdrop. The cable car is in the upper left, with the words "SANDIA PEAK" visible on its side. The background shows a rugged mountain landscape with rocky peaks and some sparse vegetation. The entire image has a uniform teal color overlay.

Can you find a Car or  
Truck in COVID?

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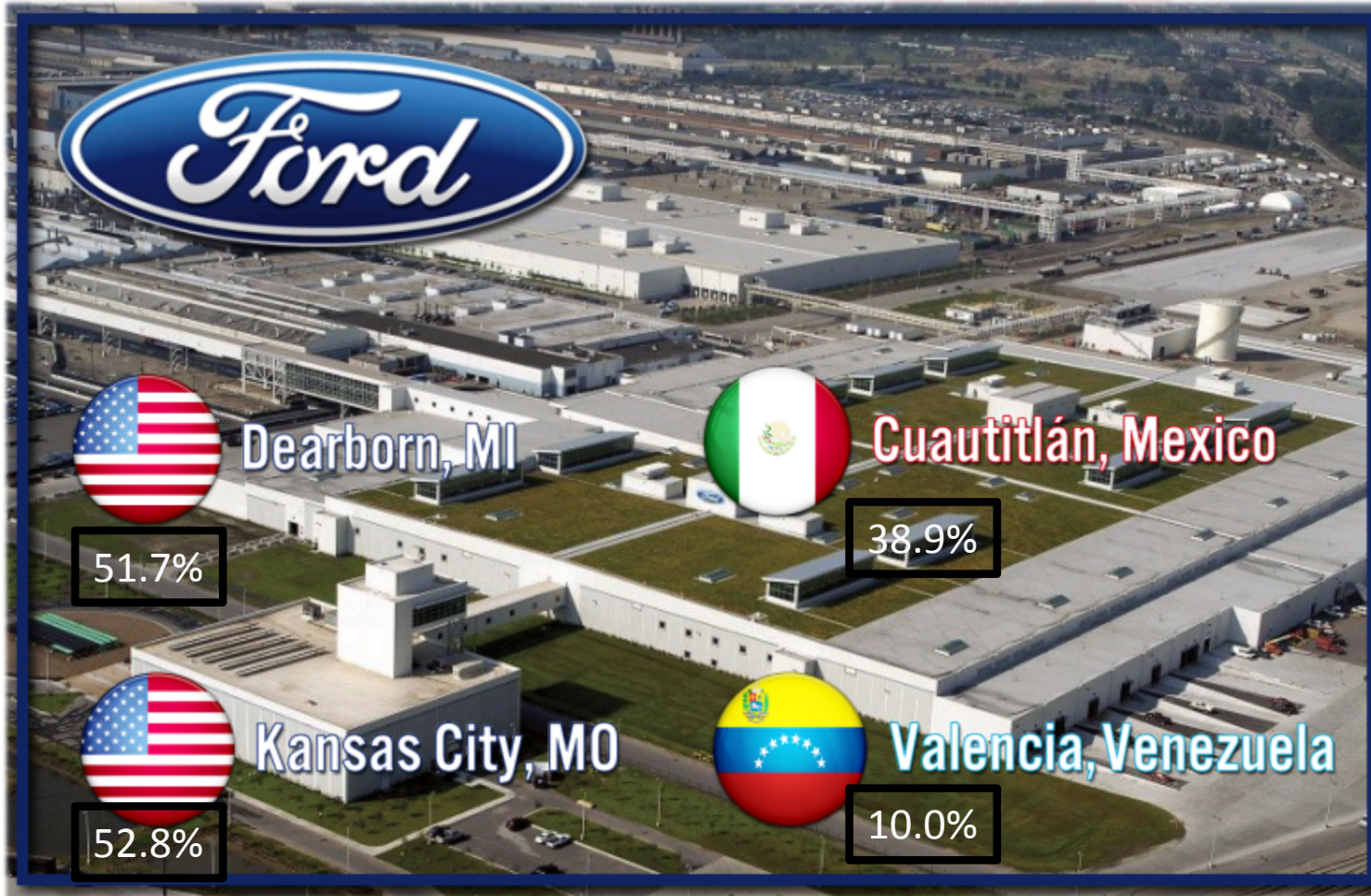
# Can you find a Car or Truck in COVID?



**2009 FORD F150  
CREW CAB**

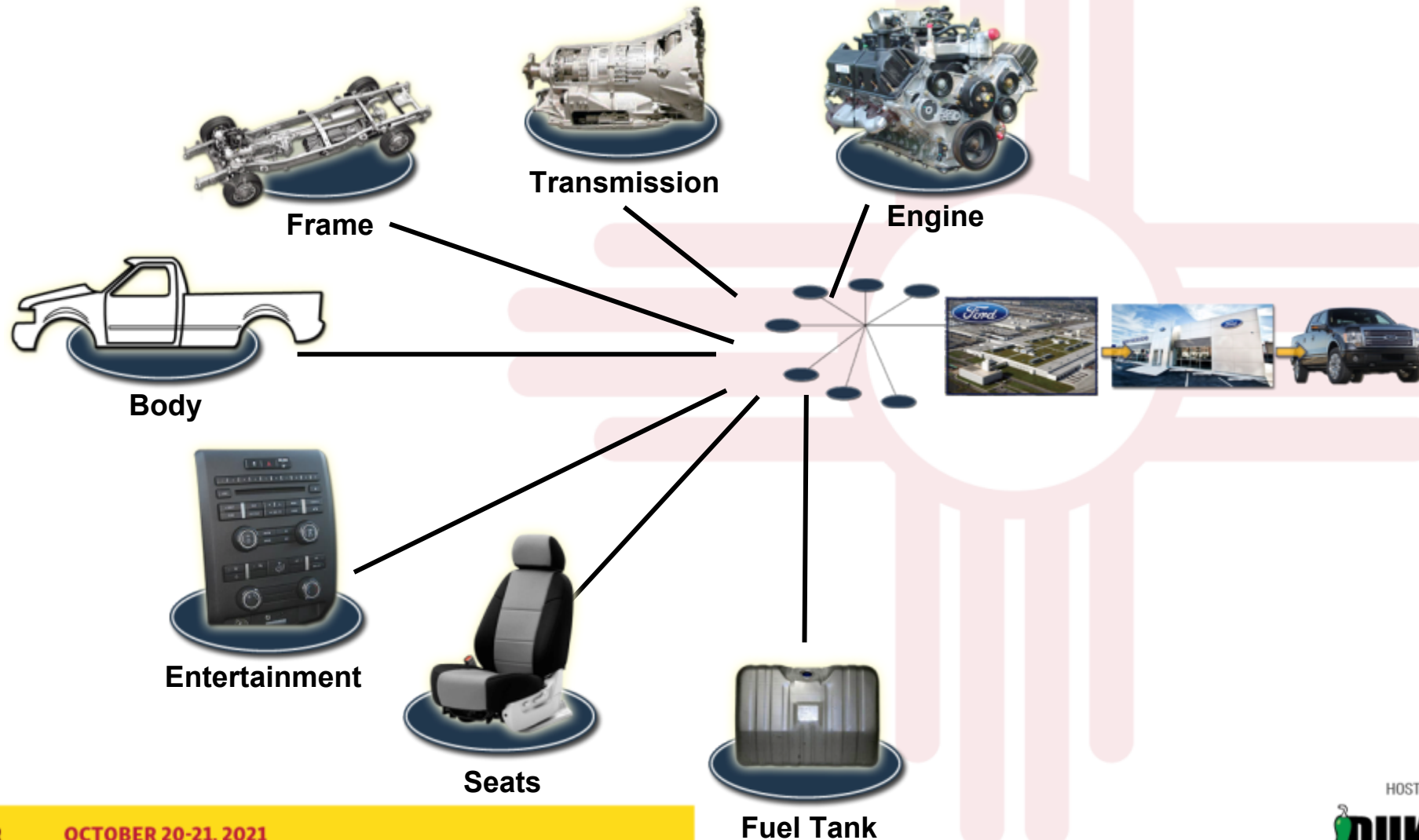


# Can you find a Car or Truck in COVID?



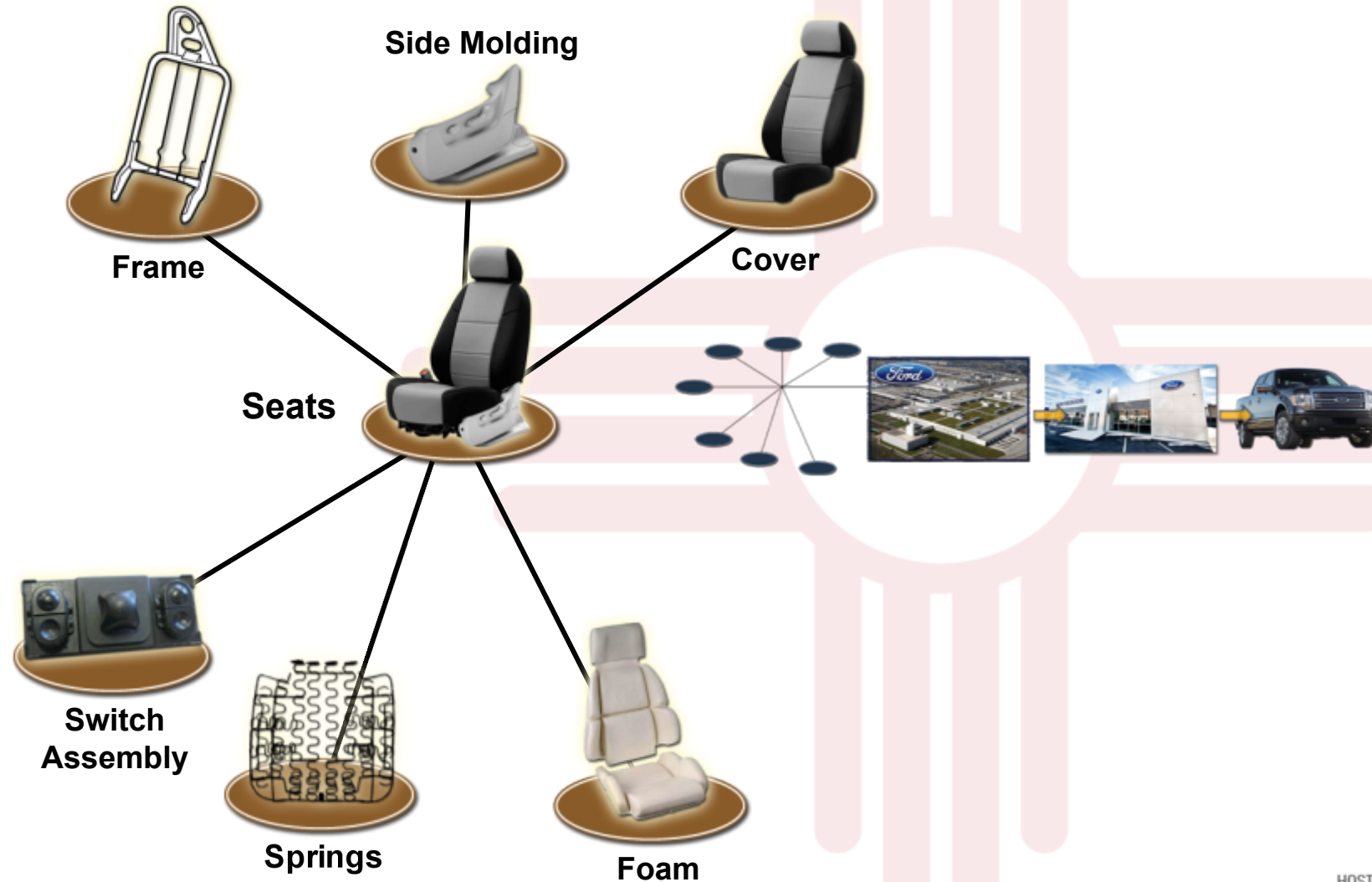
COVID  
Vaccination Rates  
Driving our supply chain

# Can you find a Car or Truck in COVID?

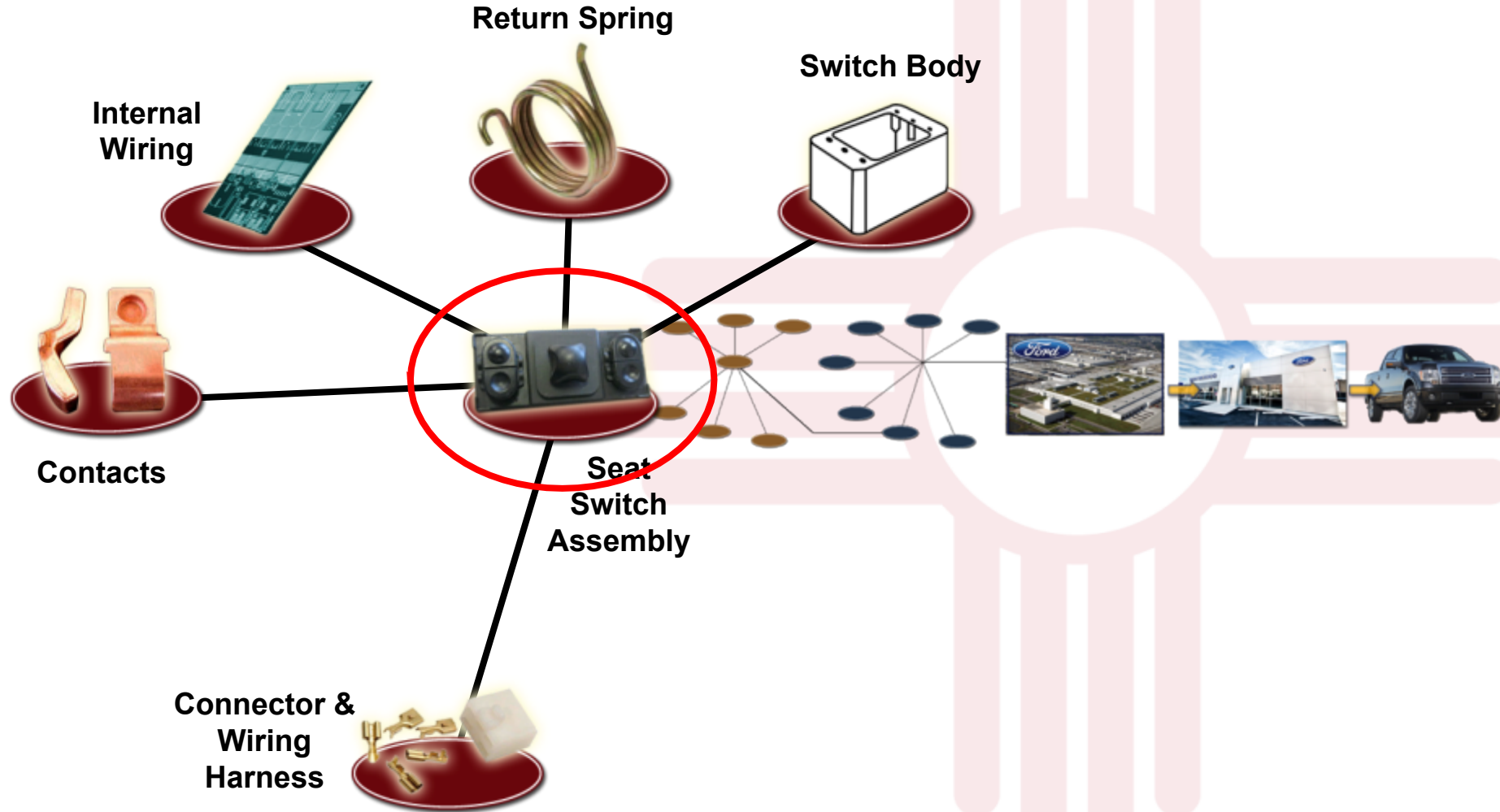




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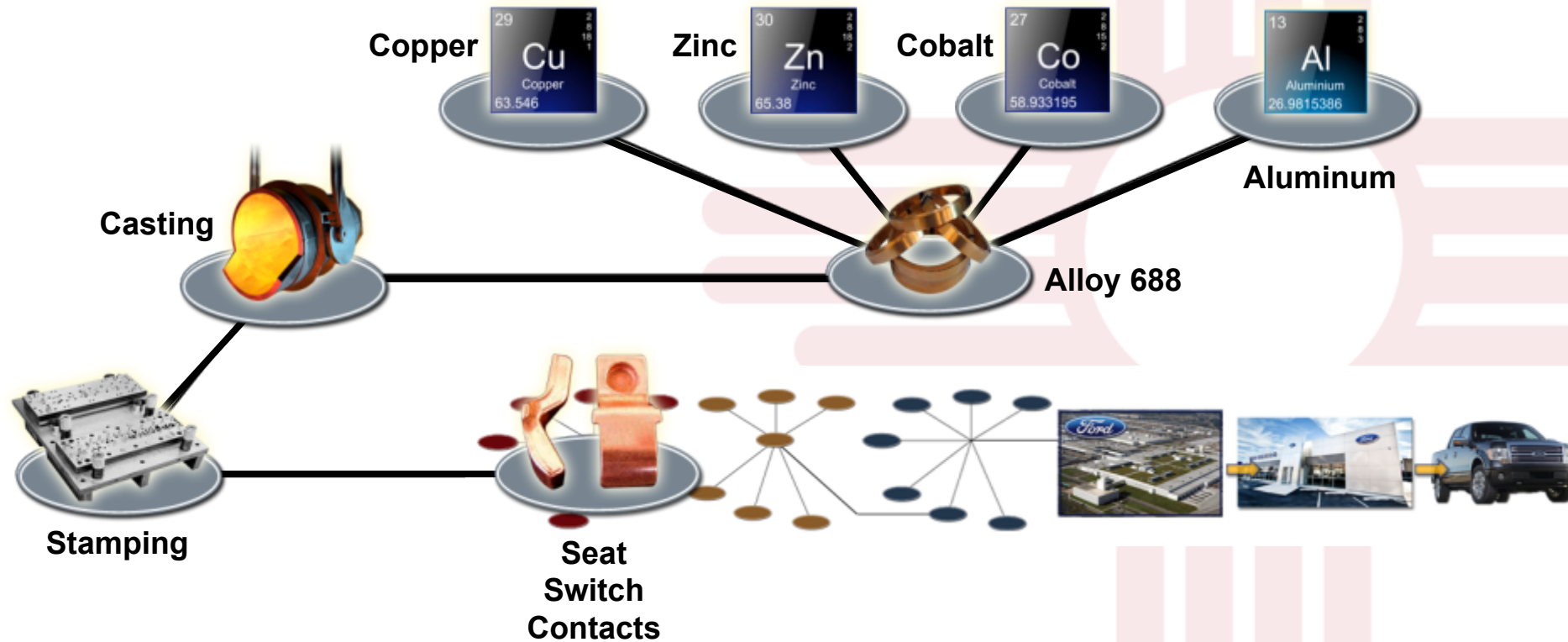


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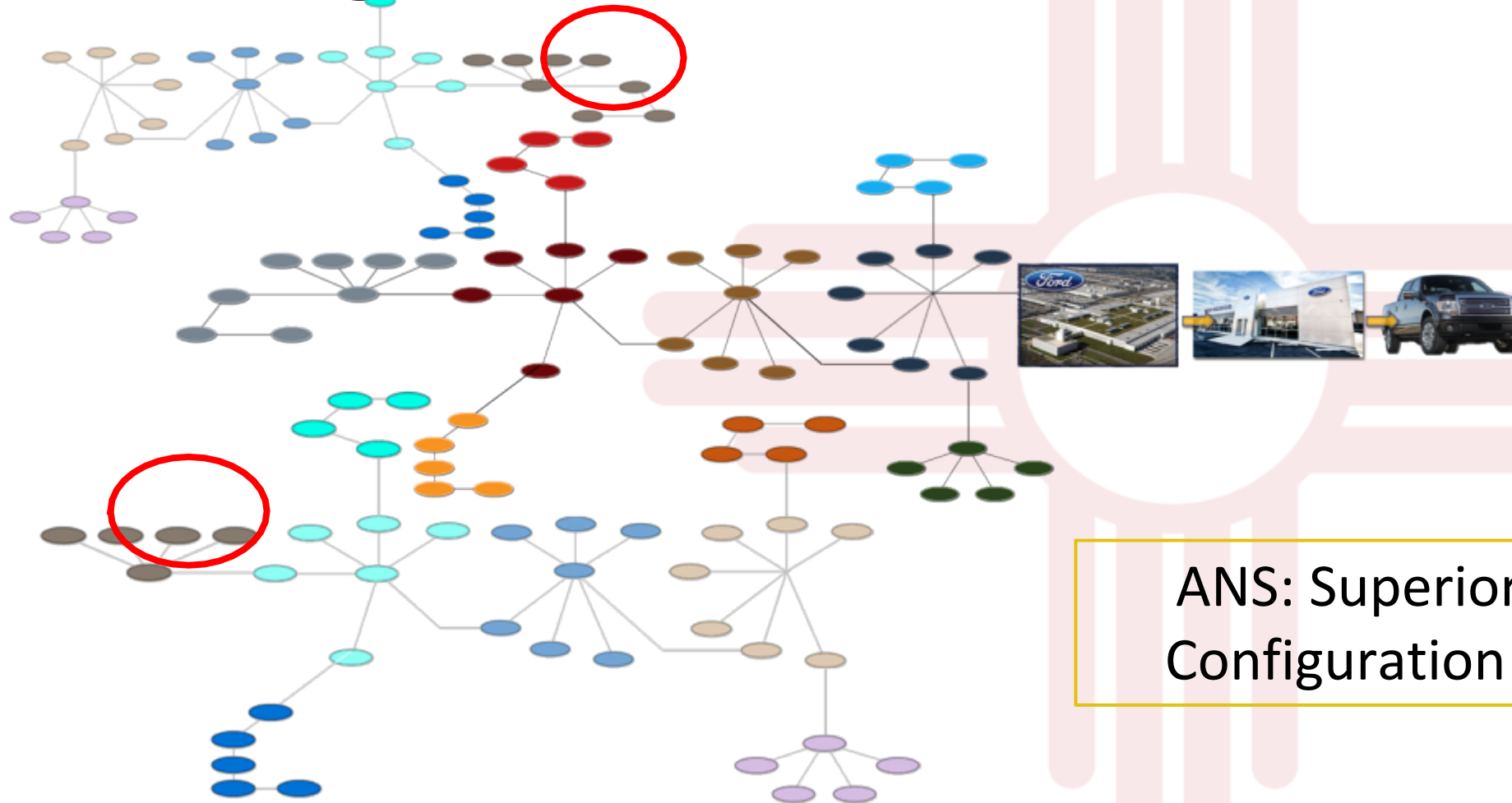




# Can you find a Car or Truck in COVID?



# How do Truck providers still keep the line moving?



ANS: Superior product  
Configuration practices



# Industry Impacts- Key Takeaways

- Specialty Component Suppliers will lag until their COVID Vaccination Rate Catches Up to the West
- Customers/OEMs must offer accurate demand signals
  - Rental Car Firms to Auto Producers
  - Auto Producers to Chip Makers
- Industries with high demand in COVID will or have seen price increases
  - New house demand high with low interest rates and lumber prices

# What do the experts say?

- The global supply chain, in its current form, is incapable of withstanding the disruptive forces of tomorrow.
- Fast-changing consumer preference, environmental and staffing disruptions, plus emerging global trade frictions are key drivers of change.
- There are four imperatives for digitizing and automating the supply chain: intelligence, architecture, better operational planning, and resilience.

**Ernst & Young LLP- “How COVID-19 impacted supply chains and what comes next”**  
Sean Harapko



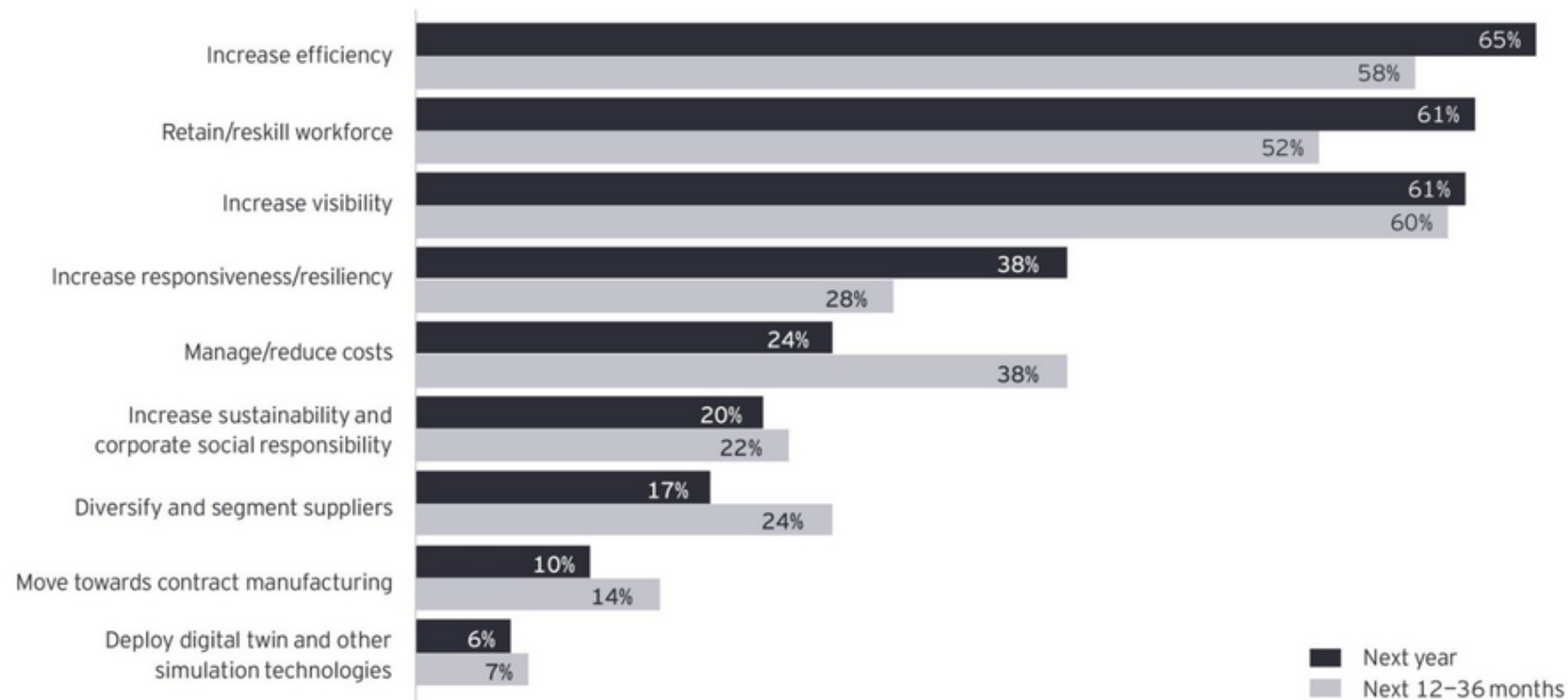
# What do the experts say?

- 47% of all companies reported the pandemic disrupted their workforce (from a survey of 200 firms in late 2020)
- While many employees were asked to work from home, others — especially in factory settings — had to adapt to new requirements for physical spacing, contact-tracing and more personal protective equipment (PPE).
- Industrial products and high-tech manufacturing companies are investing overwhelmingly in technology to reduce employee exposure to COVID-19 in more labor-intensive industries.

Ernst & Young LLP- “How COVID-19 impacted supply chains and what comes next”  
Sean Harapko

# What do the experts say?

*Increased visibility is the TOP priority over the next 12–36 months and a top 3 priority in the next year.*



**Ernst & Young LLP- “How COVID-19 impacted supply chains and what comes next”**  
Sean Harapko

# Mitigation Strategies

- Organizations must have:
  - Better Intelligence of their supply base
    - Organize to watch key components to their industry
    - Continually check on progress to meet need dates
  - Better Ops Planning
    - Establish 2<sup>nd</sup> Sourcing solutions
    - Press for better demand signals
  - Architecture
    - Flex the Supply Chain Model-
      - Cosco announced they are obtaining their own shipping containers
    - Establish New Ground rules
      - Consider Lifetime Buy Thresholds
  - Resilience
    - Sandia's work during COVID-19





# Sandia National Labs Logistics COVID-19 Response

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# Sandia National Labs (SNL) Overview

*National security is our business. We apply science to help detect, repel, defeat, or mitigate threats.*

For more than 70 years, Sandia has delivered essential science and technology to resolve the nation's most challenging security issues.

Sandia National Laboratories is Federally Funded Research and Development Center ( FFRDC), and is operated and managed by National Technology and Engineering Solutions of Sandia, LLC.

## National Security Programs:

We work with other government agencies, industry, and academic institutions to accomplish our missions in the following strategic areas:

- Nuclear Weapons: Sandia's primary mission is ensuring the U.S. nuclear arsenal is safe, secure, and reliable, and can fully support our nation's deterrence policy. Sandia is the engineering arm of the U.S. nuclear weapons enterprise. We weaponize the nuclear explosive package to create an effective and sustainable nuclear deterrent.
- National Security Programs: Provide advanced defense, deterrent and intelligence technology, and analysis to strengthen our nation's defenders.
- Energy: We secure the nation's critical infrastructures and environment against attacks, threats, and climate change by performing world-class research and development.

Global Security: Sandia's programs in Global Security range from nonproliferation and global threat reduction to homeland defense and critical asset protection.



# SNL Overview

## SUPPLY CHAIN MANAGEMENT CENTER OVERVIEW



### Procurement

**\$1.659B spend, 1.3% cost-to-spend**

- Buyer-Placed Subcontracts
- Just-in-Time (JIT) Agreements
- Corporate Agreements

**Approved Purchasing System (\$20M)**



### Logistics

**\$2.0B assets, 140K deliveries**

- Property
- Shipping & Receiving
- Material Moves & Storage (Hazardous and Non-Hazardous)

**Approved Property Management System**

**Approved Hazardous Material Packing and Transportation Program**



### Policy, Assurance, Outreach & Risk Management

**60% Small Business spend, 72K suppliers screened**

- Procurement Policies
- Quality Assurance
- Supplier Diversity
- Supply Chain Risk Management
- P-Card Program

**24 managers and 279 staff**



# Continuity of Operations Plan

- **Continuity of Operations Plan:**

- Development of Continuity of Operations Plan in the event Sandia National Labs (SNL) or Kirtland Air Force Base (KAFB) shut down during the COVID-19 Pandemic.
- Leveraged existing programmatic partnership with Albuquerque, NM Commercial Warehouse.
  - Secured space and identified skeleton crew to manage operations to include Receiving, Storage and Shipping Pick-Up.
- Analyzed Continuity of Operations Plan from all angles, identified risks and developed mitigations.

# COVID-19 Preparedness National Support

- **Initial COVID-19 Preparedness National Support:**

- In January 2020 there was a national call to provide PPE, specifically Tyvek suites to be utilized by the CDC.
- Sandia Logistics (NM) quickly responded by coordinating pick-up and distribution/shipping of PPE to the CDC.
- Sandia Logistics (NM) outfitted CDC with 5,000 Tyvek Suits and shipped them to Atlanta, Georgia.

# PPE at Sandia National Labs

- **\*Development of the SNL PPE Centralized Distribution Model:**

- Prior to the PPE Centralized Distribution Model departments at SNL were trying to individually procure PPE from vendors with little to no success.
- Procurement developed options to procure PPE through organized primary points of contact within Supply Chain Management.
- IT solutions were developed and organized efforts were made by Logistics to strategically distribute PPE accurately to meet the needs of the labs.
- **Centralized Hub PPE Storage and Distribution:**
  - Hand Sanitizer (2oz and 8oz)
  - Surgical Masks, Cloth Face Masks and KN-95 Masks
  - Gloves (Small, Medium, Large and X-Large)
  - Tyvek Suites
  - Various Supplies: face shields, travel kits and disinfectant wipes

# Sandia Logistics: Transportation & Receiving

- KAFB Segregation and Sanitation:

- **Kirtland Air Force Base (KAFB) Installation Commander Directive (ICD):**

- All incoming packages were placed on a sanitation hold through segregation.
  - The segregation of packages were held in various sheds within the Receiving yard.
  - Sanitation periods: 24-hours segregation for cardboard and wood packages & 72-hours for plastic and metal packages.
  - The purpose of this process is to mitigate potential risks associated with receiving and distributing potentially contaminated packages.
- **\*Bulk Items Sanitation on Arrival:** During YE the Receiving warehouse became inundated with segregated bulk packages and lacked space to store items.
  - Receiving partnered with our customer, KAFB and SNL's Industrial Hygiene department to enable the Receiving Department to spray sanitize bulk receivals on arrival for immediate delivery.
  - This process alleviated ES&H space concerns as we were able to sanitize the bulk items and waive to the 24-72 hour process.
  - Later in FY21 Receiving obtained approval to spray sanitize all package receivals.



# Sandia Logistics: Transportation & Receiving

- **Customer Engagements:**

- The SNL Biosciences department developed a lab-wide COVID-19 self testing process for quick internal testing and results.
  - Logistics supported this endeavor by developing a cohesive process to ensure COVID test samples from other sites were delivered prior to the weekly testing cut-off date.
  - COVID-19 Test Samples Delivered to Medical: 270 Packages
- Implemented a feature within the Logistics ticketing system which allowed for rush packages for mission critical programs.
  - COVID-19 Mission Critical Rush Packages: 82 Packages
- A Logistics Technical Professional / LSS Black Belt was on the warehouse floor daily to ensure efficient and effective flow of operations. Daily reports were given to management and the team was able to adapt to the changing environment which allowed for minimal to no impact to our customers.

# Sandia Logistics: Shipping

- **Shipping**

- Identified damage issues during the “Last Mile Service” of delivery.
- Shipping developed unique packaging to reduce damages during the “Last Mile Service” delivery.
- Developed partnerships with multiple carriers outside of predominate carriers (UPS/FedEx) for critical shipments.
- Became a viable source for PPE distribution to Sandia Satellite campuses to include Carlsbad, Tonopah, California, Kauai etc.

# Sandia Logistics: Corporate Storage

- **Corporate Storage**

- During the pandemic many partners to Sandia were closed down due to the pandemic and COVID-19 exposures. Many programs had a need to temporarily store assets that could not be shipped to other facilities.
- Corporate Storage provided storage options for assets that were unable to be moved to other locations due to facility closures.

# Sandia Logistics: Property Management & Reapplication

- **Property Tagging in a COVID-19 Environment :**

- Property Tagging: Due to many of the buildings being closed, and many individuals offsite, Property Management was unable to property tag in person.
  - The tagging specialist provided property tags to MOW through mail or pick-up.
  - The tagging specialist validated receipt of tags and placement of tags with customers on a weekly basis.



# Sandia Logistics: Property Management & Reapplication

- **Stat Sample Inventory:**

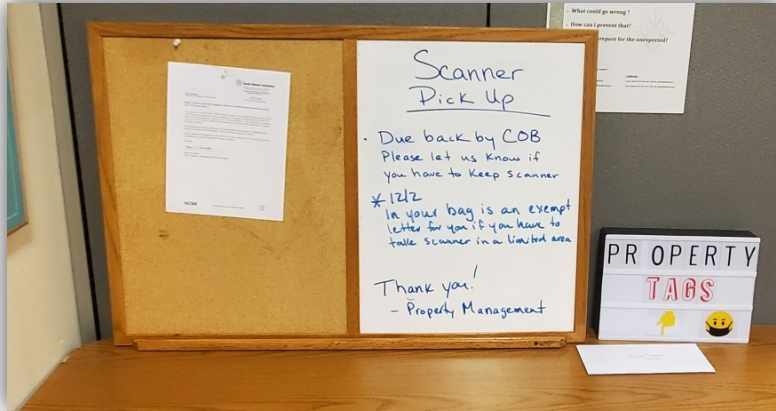
- **Implemented New Network Identification Inventory Method**

- Many desktops, laptops, iPads, iPhones and various equipment connected to the network were inventoried via network id scans.
- Real time network id scans created overnight inventory transactions.
- 131 items were located the first night with a total of 570 (26.41%) located via network id scans.
- Nine centers had all of their property inventoried via network id scans.
- Divisions had an average of 38% of their inventory scanned the first week via network id scans.
- Stat Inventory was completed with Excellent (Green) results.

- **COVID-19 Precautions**

- Contactless scanner pick-up and drop-off.
- Property Management and Reapplication team members scanned uninventoried items at multiple buildings in NM following Thanksgiving weekend. This precaution allowed us to go onsite with limited MOW.
- Organized and implemented new contactless drive-thru inventory stations in NM and CA.

# COVID-19 Safe Practices



Contactless Scanner Pick-up



Property Management at IPOC Contactless Drive-Thru



Contactless Drive-Thru at IPOC



Property Management at IPOC Contactless Drive-Thru



Contactless Inventory at the IPOC site in NM

# Sandia Logistics: Property Management & Reapplication

- **Property Inventory Website**

- Implemented a new *One Stop Shop* website for Customers
  - Allowed coordinators to quickly identify items remaining and view their organizations inventory results.
  - Training guides, tools and resources, COVID-19 safe practices, Q&A, inventory coordinator POC's, and useful links.
  - Access to contactless scanner checkout reservation calendar.



# FY21 Property Inventory Website

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## FY21 Property Inventory

**UPDATE: Inventory has been extended until January 22, 2021**

**Training date: November 9th.** Virtual Training linked below.

**Inventory dates:** November 9, 2020 through December 18, 2020

**Network scanning:** November 9th through November 13th

**Physical and Network scanning:** November 16th through December 18th

**NM Inventory Drive-thru Stations:**

Wednesday, November 18th 9-11 and 1-3 See flyer below for details and instructions.

**CA Inventory Drive-thru Stations:**

office), Thursday November 19th 9-11 am and Tuesday November 24th 1-3 pm

[Property Coordinator Inventory Procedures](#)

[General Questions](#)

[COVID-19 Safe Practices](#)

### Points of Contact

**General Inventory Questions:**

SNL/NM Property Management

SNL/NM Reapplication

SNL/CA Logistics

**Inventory Verification Memos:**

**Property Mgmt. Inventory Lead:**

**Property Mgmt. Manager:**

**Scanner Pick Up** (Call hotline, walkins welcome.)

Scanner reservations begin **November 13th.**



**Downloading** (drop OFF only)

**- Hours of Operations -**

**New Mexico**

**California**

**Pickup Hours**

Monday - Thursday

8:00 a.m. - 11:00 a.m.

(Fridays by request)

**Drop-Offs**

Monday - Thursday

8:00 a.m. - 3:00 p.m.

**Pickup Hours**

Monday - Thursday

8:00 a.m. - 11:00 a.m.

(Closed Fridays)

**Drop-Offs**

Monday - Friday

8:00 a.m. - 3:00 p.m.

**Useful Links:**

[+ new link or edit this list](#)

- ☒ [See List](#)
- ☐ [Property Inventory Training](#)
- ☐ [Inventory Verification Memo](#)
- ☐ [Emergency Alerts](#)
- ☐ [Sandia COVID-19 Website](#)
- ☐ [Due Diligence Check list](#)

**Tools and Resources:**

## Property Inventoried Power BI Report by Organization

Data As Of:

9/24/2021

Unofficial Report

### Property Inventoried FY2021

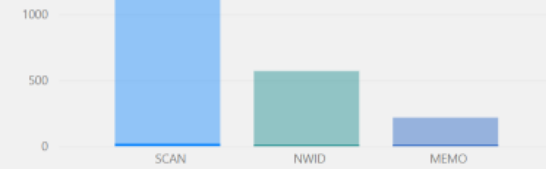
#### Inventory Progress by Class



#### Inventoried Property Count



#### Count by Inventory Source



#### Total Inventory Progress



PIT Orgn	PIT Property Number	Inventory Source	PIT Major Category	PIT Minor Category	PIT Class	PIT Cost	PIT Ownership	PIT System	Description
		MEMO	EQUIPMENT:EXPENSED	VEHICLE:MOTOR	EQUIPMENT	115,000.00	SANDIA	OPMS	2012 COZAD TRANSPORT TRAILER
		SCAN	EQUIPMENT	VEHICLE:MOTOR	EQUIPMENT	50,000.00	SANDIA	OPMS	HAZPAD SUPPORT CONEX
		SCAN	EQUIPMENT	VEHICLE:MOTOR	EQUIPMENT	60,201.22	SANDIA	OPMS	WRECKER CHALLENGER
		SCAN	EQUIPMENT:EXPENSED	LABORATORY	EQUIPMENT	11,498.94	REIMBURSABLE	OPMS	GPS RECEIVER
		SCAN	EQUIPMENT:EXPENSED	LABORATORY	EQUIPMENT	15,100.00	SANDIA	OPMS	DATA TRANSMISSION TEST SET
		SCAN	EQUIPMENT:EXPENSED	RADIO:TWO-WAY	ATTRACTIVE	3,126.98	SANDIA	OPMS	TRUNKING PORTABLE RADIO
<b>Total</b>						<b>3,305,641.40</b>			

Sandia Proprietary Information  
For Guidance, Contact [MRSQ](#)

Use CTRL+Click to select multiple data points

PIT Orgn

All

PIT Orgn	Inventoried Count
02441	2
02442	4
02444	3
02446	1
02473	1
02474	3
02479	2
02495	21
02521	2
02522	1
025441	2
02545	4
<b>Total</b>	<b>2160</b>

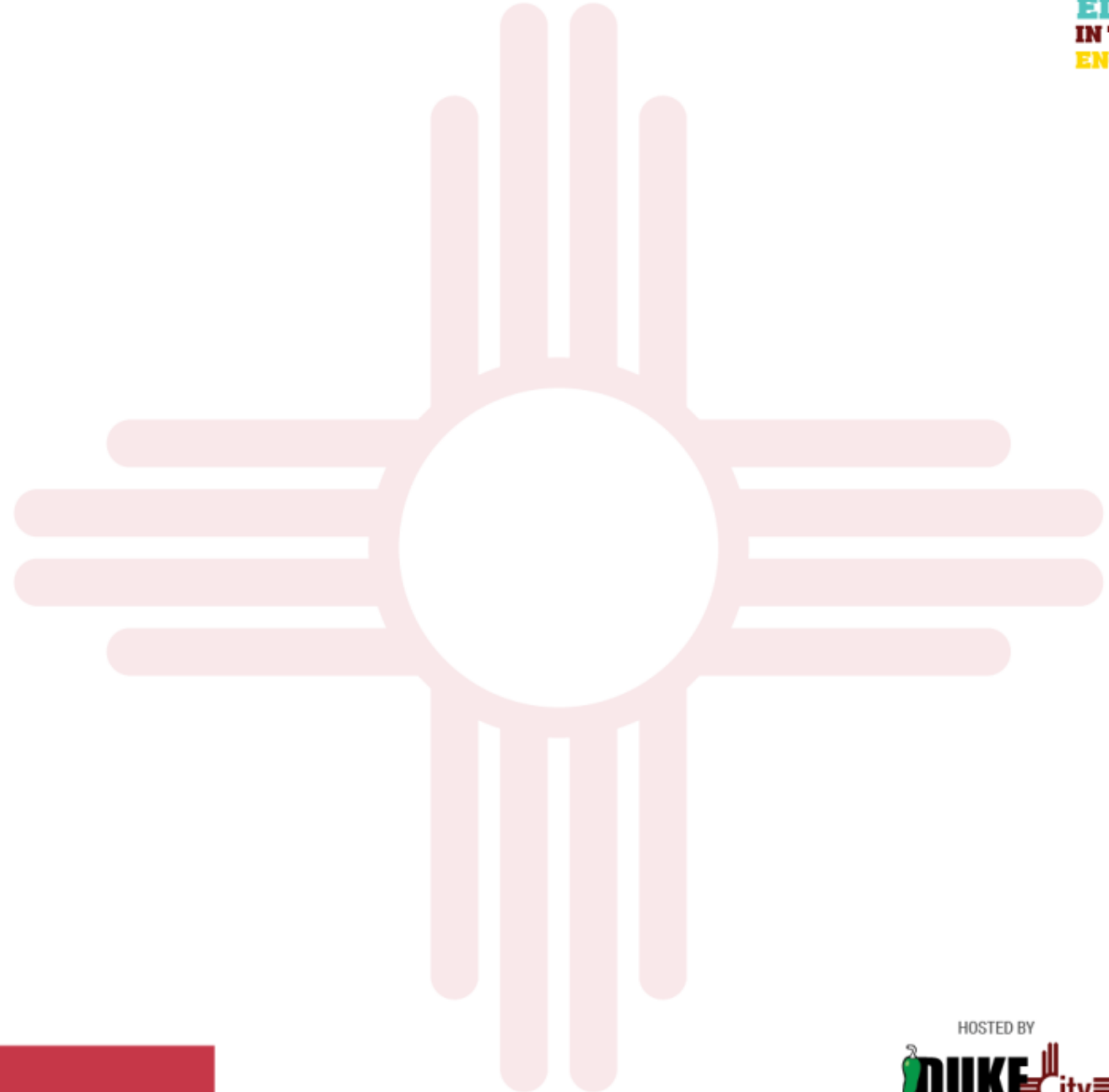
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# Closing

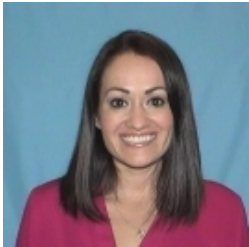
- Scary Story



# Speaker Info



- Speaker- Dave Dietz – Supply Chain Director at SNL since Oct, 2020. 30+ years of Program, Subcontracts and Supply Chain Management experience. BA from Northwestern University and MBA from the University of Minnesota. Worked in Defense, Aerospace, E-commerce and Consulting. Served 31+ years active duty/reserves retiring as a Navy Captain. PMP and Certified Supply Chain Manager.



- Key Contributor- Antonia Litts. Manager of Logistics Operations at SNL. 9 years of Property Management and Reapplication, Transportation, Receiving and Procurement and program management support. BS and MBA from New Mexico State. Green Belt Certified.



Questions?

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