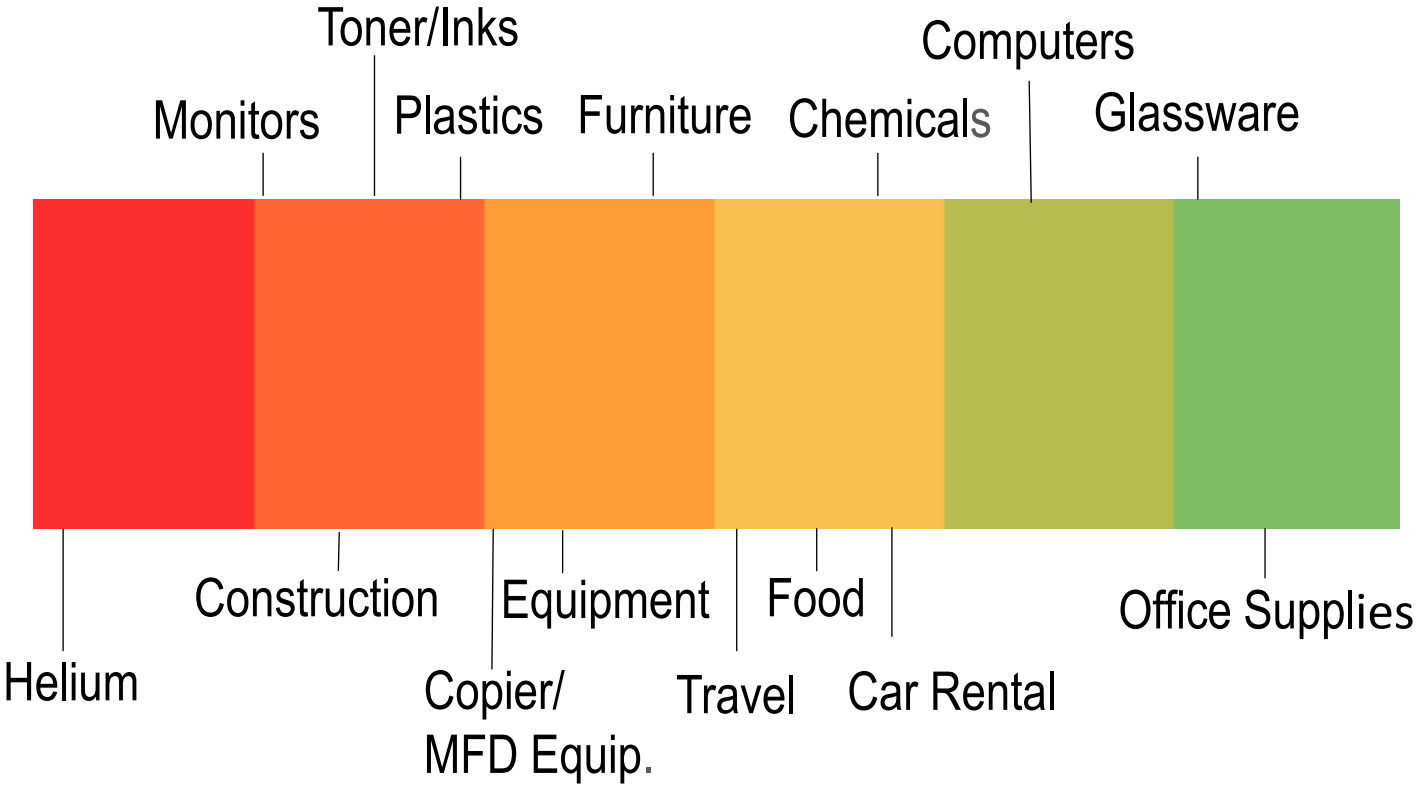
Supply Chain Insights

MARCH 2022

University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus



The Procurement Service Center (PSC) encourages all staff to determine buying needs well in advance for all products. Labor shortages, the COVID-19 pandemic, and other global crises are contributing to the delay for many items.

The image to the left is a snapshot of how significant the constraints are for certain items/categories. The remainder of this report provides more detail to the constraints of these items, along with recommendations.

Summary April 1, 2022

- Overall, the supply chain continues to be unpredictable due to ongoing and new disruptions
- Manufacturing and distribution patterns have not normalized to pre-COVID model
- New COVID outbreaks continue to disrupt raw material production and manufacturing
- Ukraine invasion causing further constraints to food products, neon (used in computer chip manufacturing), metals, and logistics.
- Computer chips, plastics, food products and construction continue to be constrained
- Gasoline and housing prices continue to impact discretionary spending

Outlook

Inflation expected to remain high into 2023

Worldwide Helium shortage will impact CU research and clinical operations into 2023

New COVID variants and Ukraine invasion will add persistent unpredictability to commodities such as food products, chips, metals and raw materials

While consumer spending is increasing, prices for housing, gasoline and food will reduce the amount of spending on non-essential goods and services

US unemployment rate at 3.6% coupled with Federal Reserve signaling additional interest rate hikes may return some stability to labor market

CU departments should continue to place orders well in advance of need date, and keep inventory for mission or operational critical items

Current Conditions By Category/Input

Category	Supply Chain	Inflation Impact	Category	Supply Chain	Inflation Impact
Monitors	🔴	🟢	Equipment	🟡	🟡
Plastics	🔴	🟡	Travel	🟡	🟢
Furniture	🟡	🟡	Food	🟡	🔴
Chemicals	🟡	🟡	CarRental	🟡	🟢
Computers	🟢	🟢	Office Supplies	🟢	🟢
Glassware	🟢	🟢	Computer Chips	🔴	🟡
Construction	🔴	🔴	Labor	🔴	🟡
Copiers/MFD's	🟡	🟢	Logistics	🔴	🟡

Ground Transportation Supply Chain Issues

SUMMARY

- Although manufacturers are catching up to demand, there are still logistical issues regarding delivery. Trucks, ports, and shipping are all experiencing significant labor constraints, which is causing products to be delayed.
- In many cases, items are taking **3-15X longer to get from point A to point B.**
- We encourage all users to utilize our **catalog suppliers** as much as possible, as most of them have warehouses in the Denver metro area.

Scientific & Research Category
SUMMARY

- Products such as **plastics, equipment, chemicals, and Safety/PPE** are all experiencing long lead times due to high demand. Pandemic-related issues, labor shortages, global crises, and transportation issues. We encourage all users to review their current inventory, and procure necessary items needed through mid-2022 as soon as possible.

- Note that the University's primary supplier for lab supplies, **Fisher Scientific**, is shipping quicker than many industry competitors, but staff is encouraged to place orders for the products listed well ahead of projected need dates.

- We encourage users to check with our **catalog suppliers** first for necessary products.

- **NEW: Helium Shortages** due to production plant issues across the globe has resulted in all helium suppliers to claim force majeure. The University is contracted with **Airgas**, who is still providing helium at a limited supply. We encourage end users to contact Duane Tucker: Duane.Tucker@cu.edu if you have gas or liquid helium needs for 2022.

Scientific & Research Category

IMPACTED ITEMS

Lab Consumables

Lead Time: Unpredictable.
Recommend ordering 4-8 weeks in advance.

- Pipette tips
- Plastic plates, tubes, and bottles
- Beakers
- Bottles, PETG
- Vials

Lab Equipment

Lead Time: Unpredictable.
Recommend ordering 8+ weeks in advance.

- Biosafety Cabinets
- Centrifuges
- Microplate instrumentation
- Hoods
- Hot plates/stirrers
- Temperature Control/Chillers
- ULT Freezers
- Baths & Circulators

Chemicals

Lead Time: Unpredictable.
Recommend ordering 4-8 weeks in advance.

- Salts/Buffers
- Tris
- HEPES
- Solvents
- THF
- Dry chemicals
- Silica

Safety/PPE

Lead Time: Unpredictable.
Recommend ordering 4-8 weeks in advance.

- Hand Protection
- Sterile PPE
- Steel / Metals

Helium

Limited Supply Available.
Recommend participating in Helium Group for order needs.

- Liquid
- Gas

Information Technology (IT) Category

SUMMARY

- Lead times for **laptops** are returning to pre-COVID levels through Dell, despite the continued global shortage of semiconductor chips. Lead times for **monitors, desktops, and some accessories** such as docks and adapters have increased significantly.

- We encourage staff to order laptops well in advance. Note that the University's primary laptop supplier, **Dell**, is shipping quicker than many industry competitors. **CDW** is another resource if Dell has substantial lead times, however, if you would like to purchase a computer from CDW, you will need to get a quote from **Brett Johnson: brejohn@cdwg.com**.

- We encourage our customers to check these two catalog suppliers prior to ordering. If you continue to have issues finding items you need, you may reach out to the IT Category Manager for assistance: **Bryan Pasternak bryan.pasternak@cu.edu.**

Information Technology (IT)

IMPACTED ITEMS

Laptops

Lead Time: 1 day – 3 weeks

Monitors

Lead Time: 1-4 weeks

Desktops + Accessories

Lead Time: 5-10 weeks

Workplace Solutions Category
SUMMARY

- The delivery of **copier / MFD equipment, office supplies, MRO, furniture,** and **food** are taking longer than usual due to the ongoing impacts of COVID-19 on global manufacturing suppliers and transport. Customers should work with the University's contracted suppliers to understand realistic lead times.

- Some **copier/MFD equipment** orders are taking **up to three months to complete**. We encourage customers to work with Xerox and Konica Minolta to determine needs well in advance, and discuss device options that are more readily available.

- Not all office supplies and MRO items are impacted but ordering with additional lead time is advised. **Office supplies** are minimally impacted and are expected to stay that way. For MRO items, CU customers should take advantage of the product availability feature in the **Grainger punch-out** catalog or work directly with their Grainger account manager or Grainger Customer Care for priority critical orders (to have these specific items or orders looked at and to obtain the most current availability information at the time).

- **Temporary labor services** is also an impacted category due to a tight labor market, which is affecting many different areas where temporary staff are necessary. We encourage users to work with the University's temporary labor suppliers to insights to better understand what to expect.

- If you have questions or need assistance, you may reach out to the Workplace Solutions Category Manager for assistance: **Annie Becker annie.becker@cu.edu**. For food related issues or questions, please reach out to the Sr. Purchasing Manager, **Shondel Baum shondel.baum@cu.edu**.

Workplace Solutions

IMPACTED ITEMS

Furniture

Unpredictable. Recommend working with approved suppliers.

Temp Labor

Unpredictable. Recommend working with approved suppliers.

Food

Moderately Impacted

Office Supplies

Minimally impacted

MRO

Minimally impacted

Copiers/MFDs

Lead time: 12+ weeks

Travel Category

SUMMARY

- Access to **rental cars** is still constrained as automobile production is still enduring chip shortages. We encourage users to work with the University's car rental suppliers for insights to what CU customers can expect. For a list of those suppliers, please visit our website: **https://www.cu.edu/psc/travel/rent-a-car**.
- Airline flight pricing continues to be less than pre-COVID levels, but numerous challenges with flight schedules have caused travel delays and disruptions
- If you have questions or need assistance, you may reach out to our travel team for assistance: **PSCTravel@cu.edu**

Supply Chain Disruption Details

- **Macro-economic Consumer market challenges are impacting Lab and Healthcare markets:**
  - Russia's invasion of Ukraine has shutdown aluminum, platinum, steel, and other factories in both countries, diverted cargo shipments, increased shipping costs due to soaring energy prices, and disrupted global transactions as companies scramble to comply with new sanctions.
  - Goods delivery across the Canadian and U.S. border was disrupted by truck drivers protesting Canada's COVID-19 vaccine mandate
  - Record-low North American warehouse vacancies are leading to record-high warehouse rents
  - A recent Fitch Ratings report predicts improvement in global semiconductor chip inventory by H2 2022
  - Shipping congestion at North American east and west coast ports hit an all-time high between February 9 - 16

- **Pandemic-related manufacturing and supply chain disruptions continue to ripple, and are compounded by multiple factors**
  - China's Winter Olympics lockdown curbed global supply chain recovery, and limited Samsung and Micron chip-making operations

- **The China, India, and EU energy crises are contributing to commodities' cost increases and volatility**
  - Chinese steel, aluminum, cement, chemicals, and dye industries, are among the industrial sectors still affected by the nation's power rationing program and outages