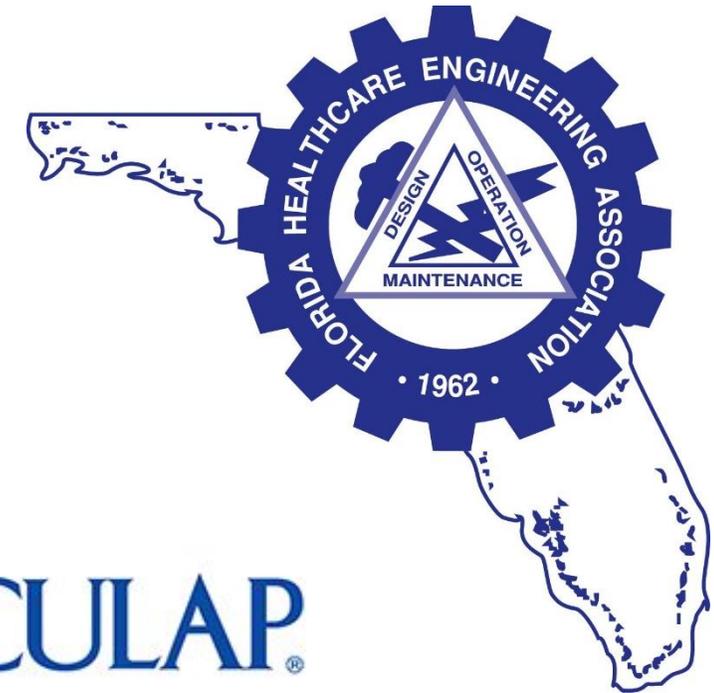


Know Your Next Move: Designing Surgical Spaces for Growth with Data-Driven Planning

FHEA Expo & Training Camp
November 10, 2025



AESCULAP®

UFHealth
UNIVERSITY OF FLORIDA HEALTH

Meet the Experts



Jennifer Greisen
Principal, Strategic Solutions

AESCULAP



Bobby Baird
Facilities Director

UFHealth
UNIVERSITY OF FLORIDA HEALTH

Jennifer Greisen

1. Disclosure of Relevant Financial Relationships

I have the following financial relationships to disclose:

- ❖ Employee of: Aesculap

2. Disclosure of Off-Label and/or investigative Uses

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Bobby Baird

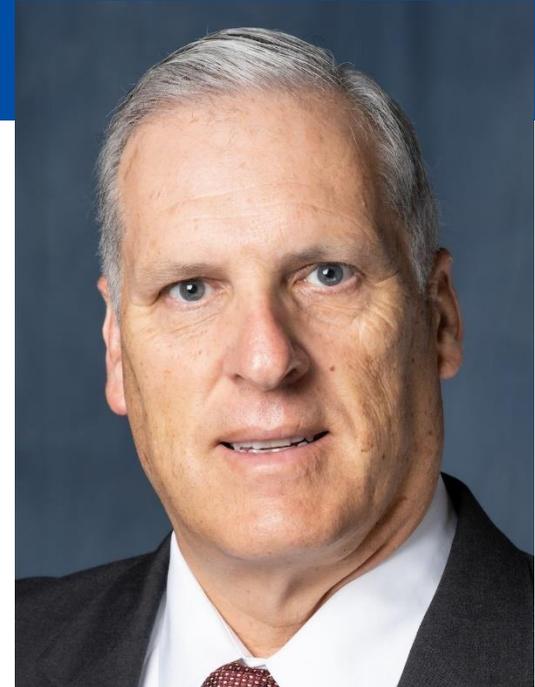
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KEY LEARNING OBJECTIVES

- 1 Understand how data can be used to diagnose inefficiencies in surgical asset management and anticipate future volume demands.
- 2 Apply strategies to integrate real-time data analytics into early facility design and planning processes.
- 3 Recognize how OR schedules and SPD workflows should influence spatial and equipment planning.
- 4 Identify scalable design considerations that allow for flexible growth, supported by centralized reprocessing and material flow optimization.

The CULTURE of CATASTROPHE

A **REACTIVE** vs. **PROACTIVE** Approach
to Decisions based on Analytics



Healthcare Tends to Operate
in a Reactive Culture

EXAMPLES:

THE CULTURE OF CATASTROPHE

REACTIVE

- Major repairs due to lack of PMs or conditional findings
- Utilizing overtime to “catch up”
- Undersized utilities to save \$\$

PROACTIVE

- Solid QMS with preventative maintenance
- More flexible, predictive schedule
- “Rough-in’s” to accommodate future growth



DATA DRIVEN DECISIONS



COMPARISON



DATA

- Information collected
- Answers a question or understand a situation
- Facts
- Needs to be interpreted



ANALYTICS

- Analysis of collected data that reveals patterns
- Analysis that provides information
- Ideally: Interprets or examines data



CURRENT CLIMATE OF DATA

- ✓ Drowning in data, but drought of analysis
- ✓ Data only shows the current state
- ✓ Data may not be:
 - Readily Available
 - Clean
 - Comprehensive
 - Understandable

DATA DRIVEN EDUCATION



**Cultural
Impact**



**Hospital
Education
&
Recognition**



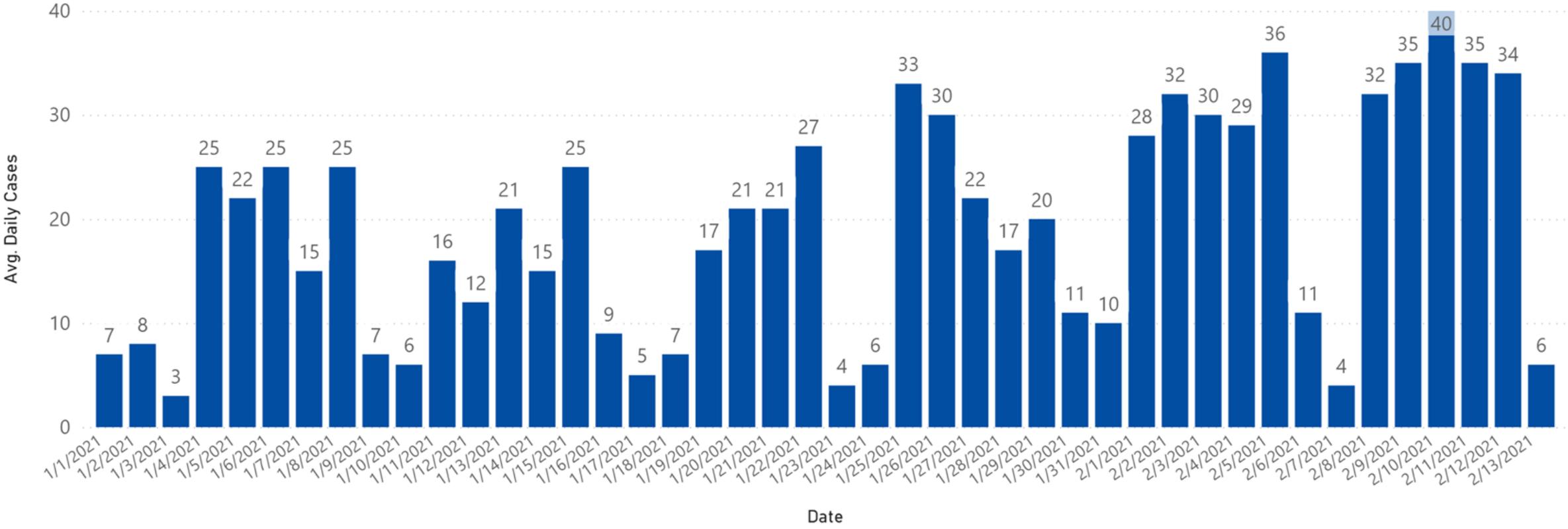
**Industry
Progress**



EXAMPLES OF TYPICAL PERIOPERATIVE DATA

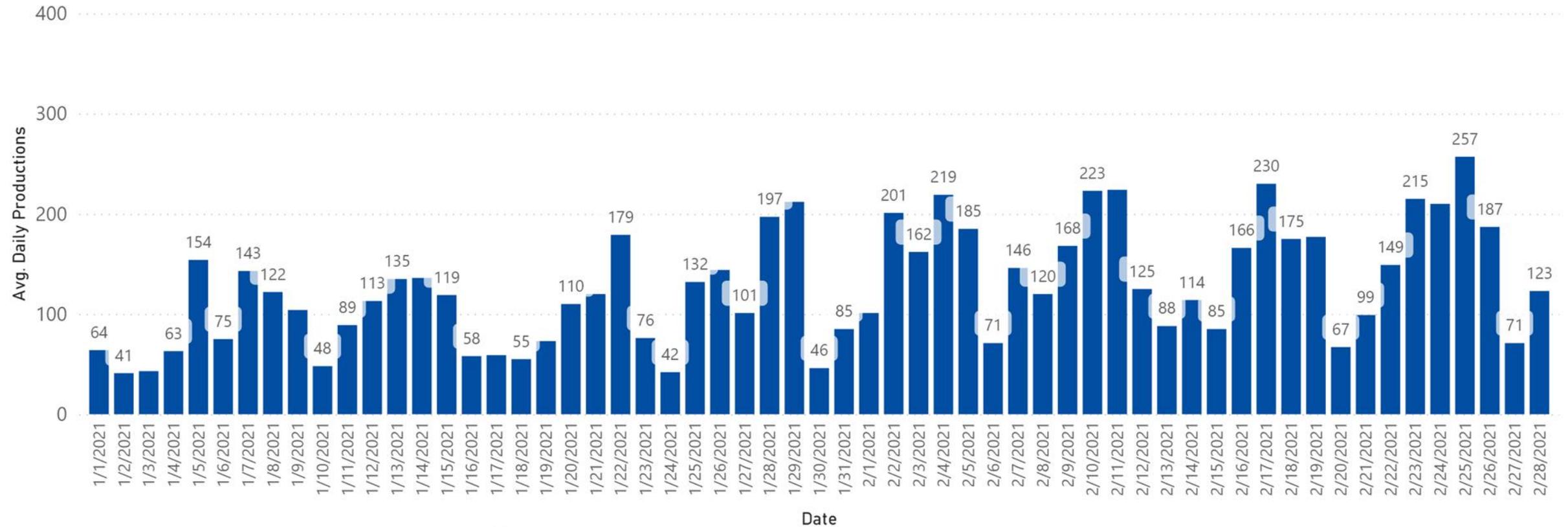
CYCLICAL NATURE OF OR SCHEDULES

Avg. Daily OR Cases by Week



SPD TRAY PRODUCTION TO SUPPORT

Avg. Daily SPD Productions by Week - Prep & Pack



MAKING IMPROVEMENTS



WHERE TO BEGIN?

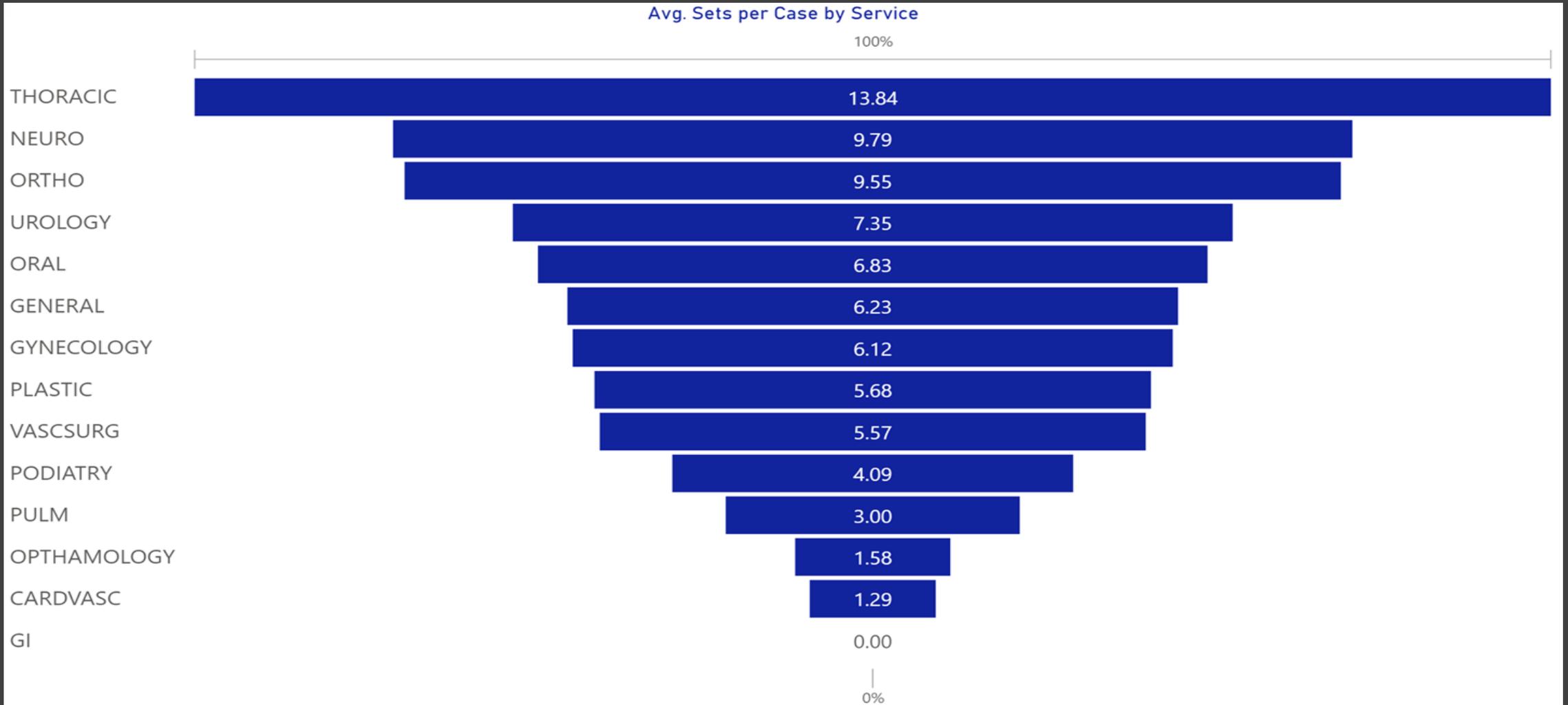
What is required for process improvements?

A DEEP DIVE INTO REAL-TIME DATA

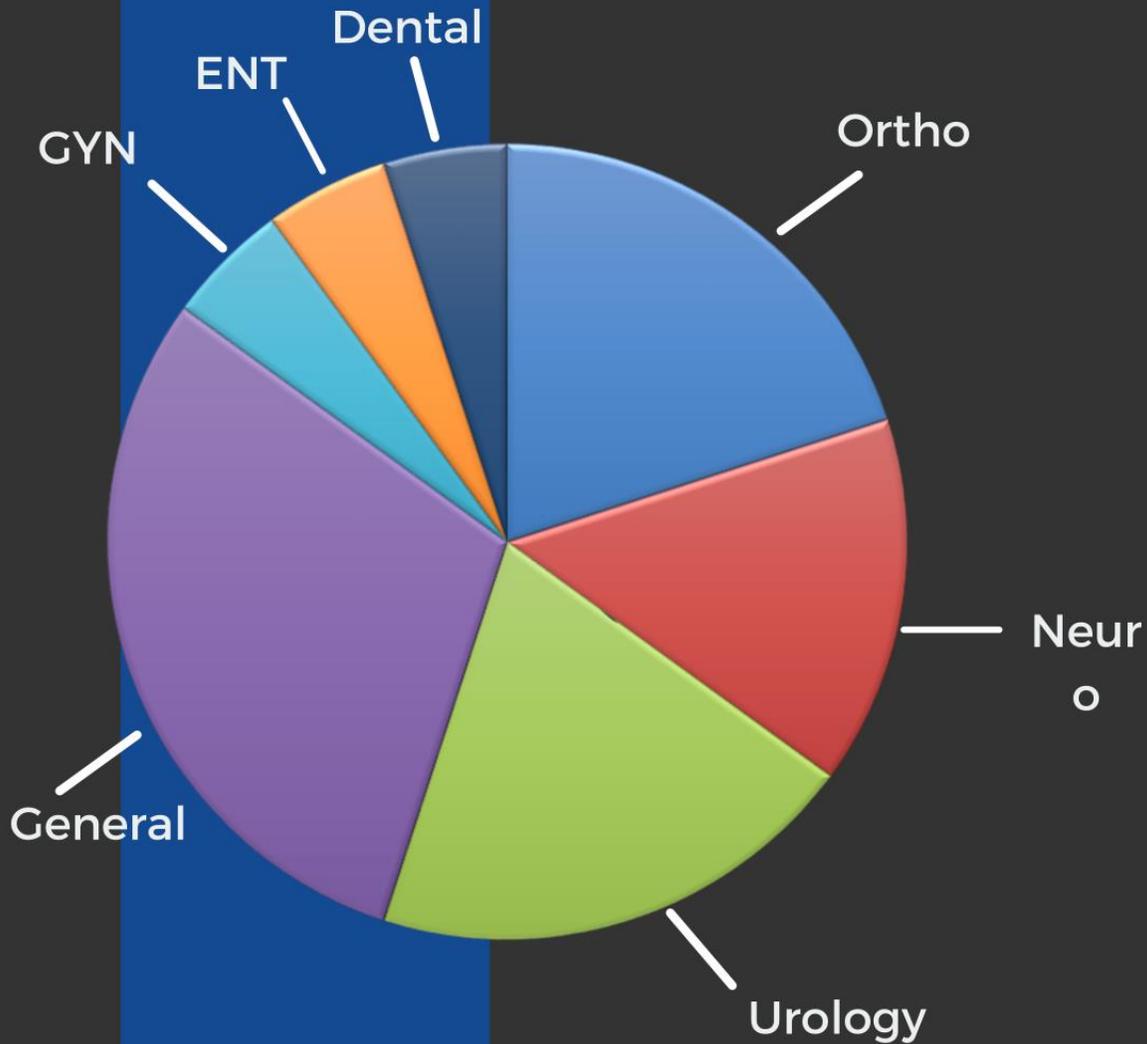
USING DATA AND ANALYTICS
TO DRIVE ACTIONABLE
OUTCOMES IN SPACE DESIGN



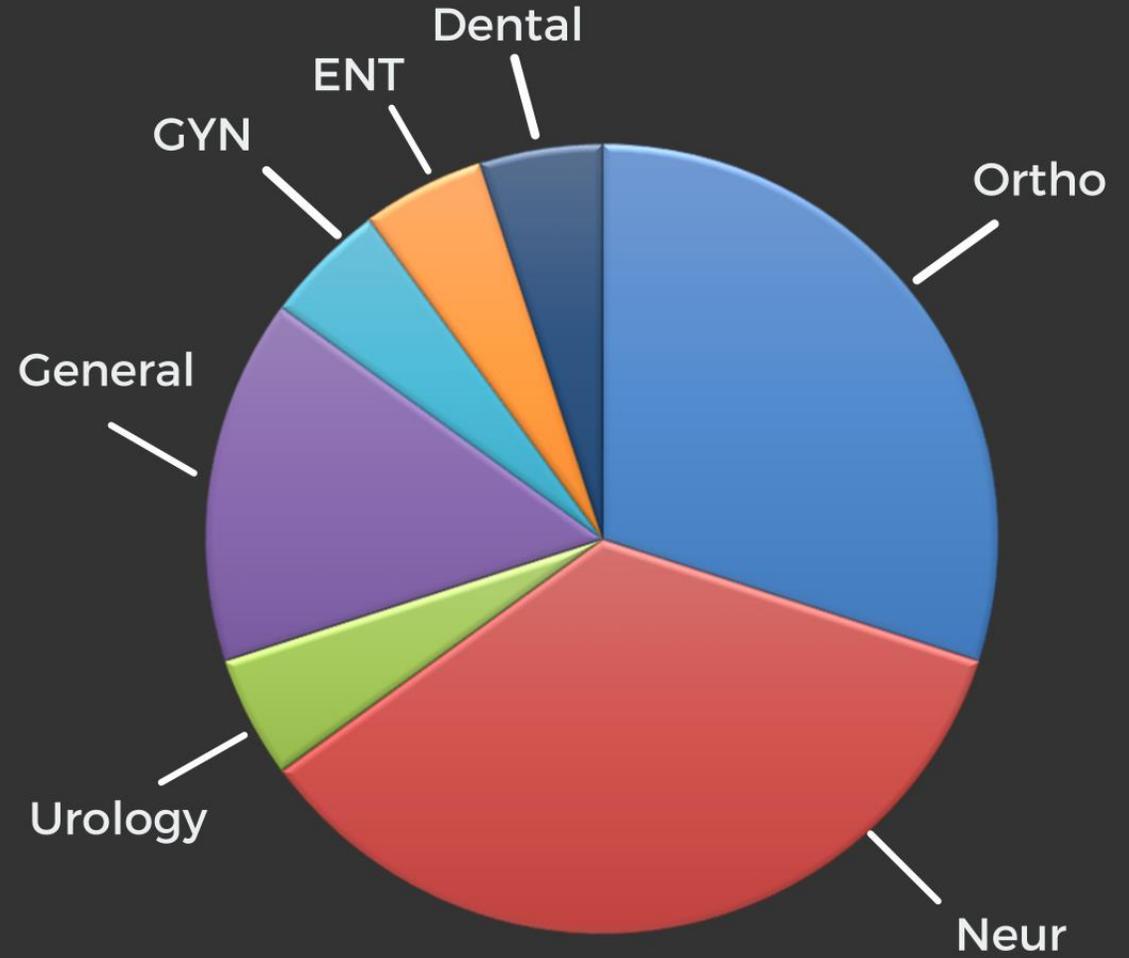
DETAILED ANALYSIS: # OF SETS PER CASE



OR CASE VOLUME



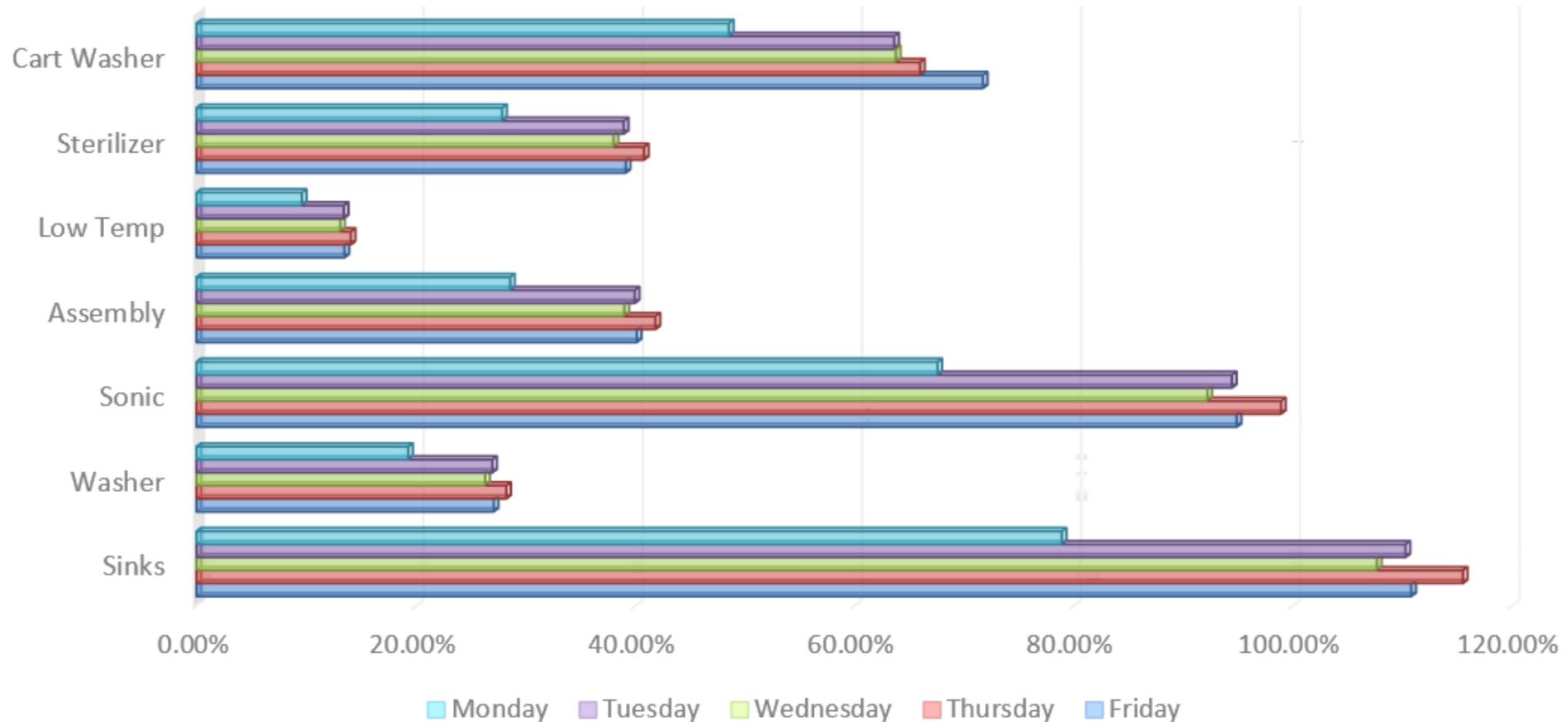
CSD TRAY VOLUME





EQUIPMENT UTILIZATION

Capital Processing Equipment Utilization



A CASE FOR CENTRALIZATION



**Increase Growth Potential by
STREAMLINING scattered
PROCESSES into
a central, scalable site**

Future Planning: Expansion & Impact on Data

Example of Data to Compare

Planned O.R. Expansions				
Timing for Adds	Site	OR's	% Increase	Comments
FY 2024	Site D	5	33%	Adds 33% additional OR Capacity
FY 2024	Site C	4	25%	Adds 25% additional OR Capacity
FY 2022	Site A	1	9%	Adds 9% additional OR Capacity
FY 2023	Site A	2	16%	Adds 16% additional OR Capacity
FY 2023	Site B	2	13%	Adds 13% additional OR Capacity
	New ASC	11		Average 4 cases additional per OR at 2.4 trays/case
	Site E	4		Average 4 cases additional per OR at 5.6 trays/case

CONSIDERATIONS:

Is it Possible to Maintain Growth % Based on Current O.R. Utilization?

* How Can the Space be “Futureproofed”?

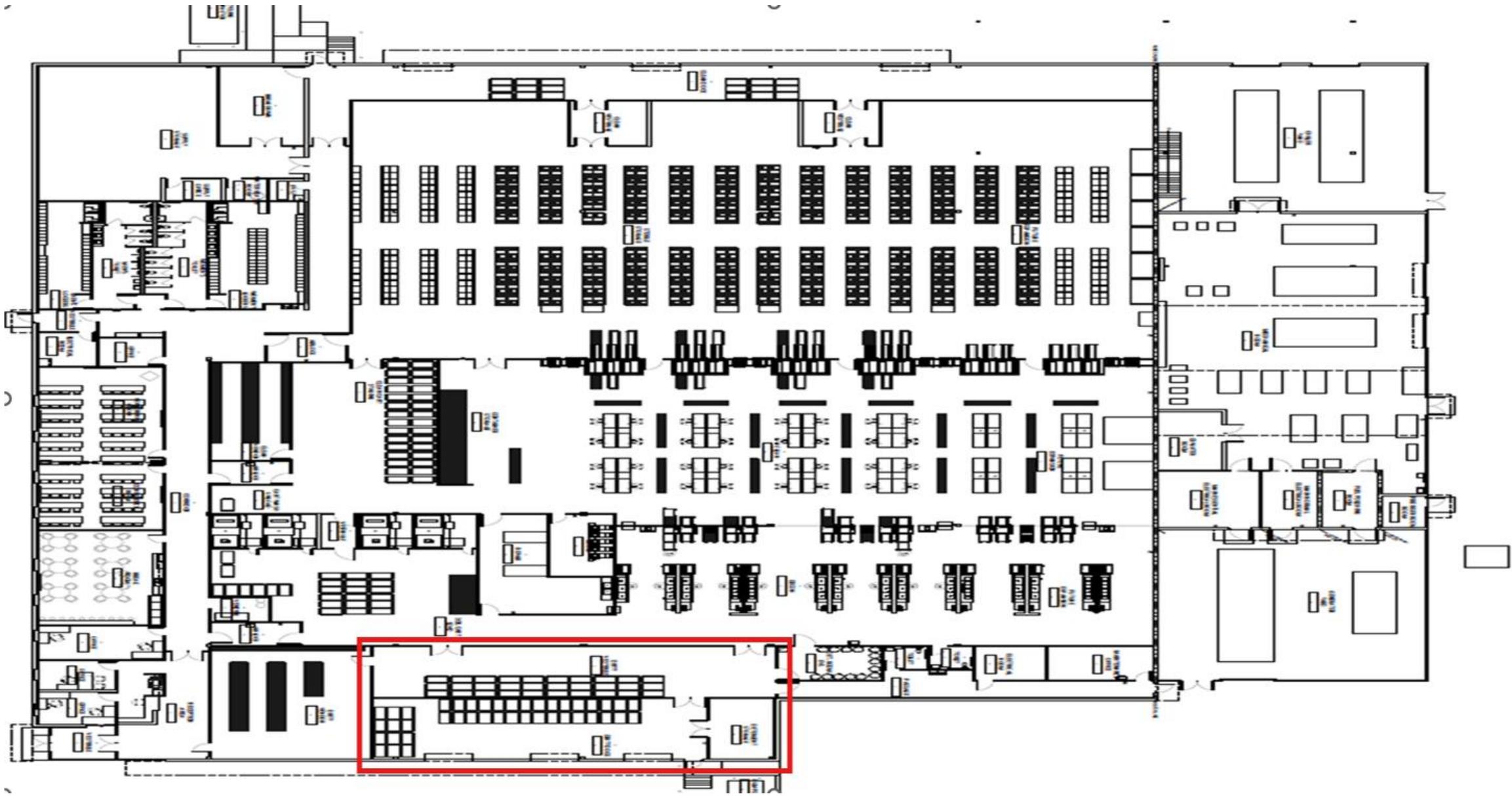
Future Planning: Looking Beyond the Horizon

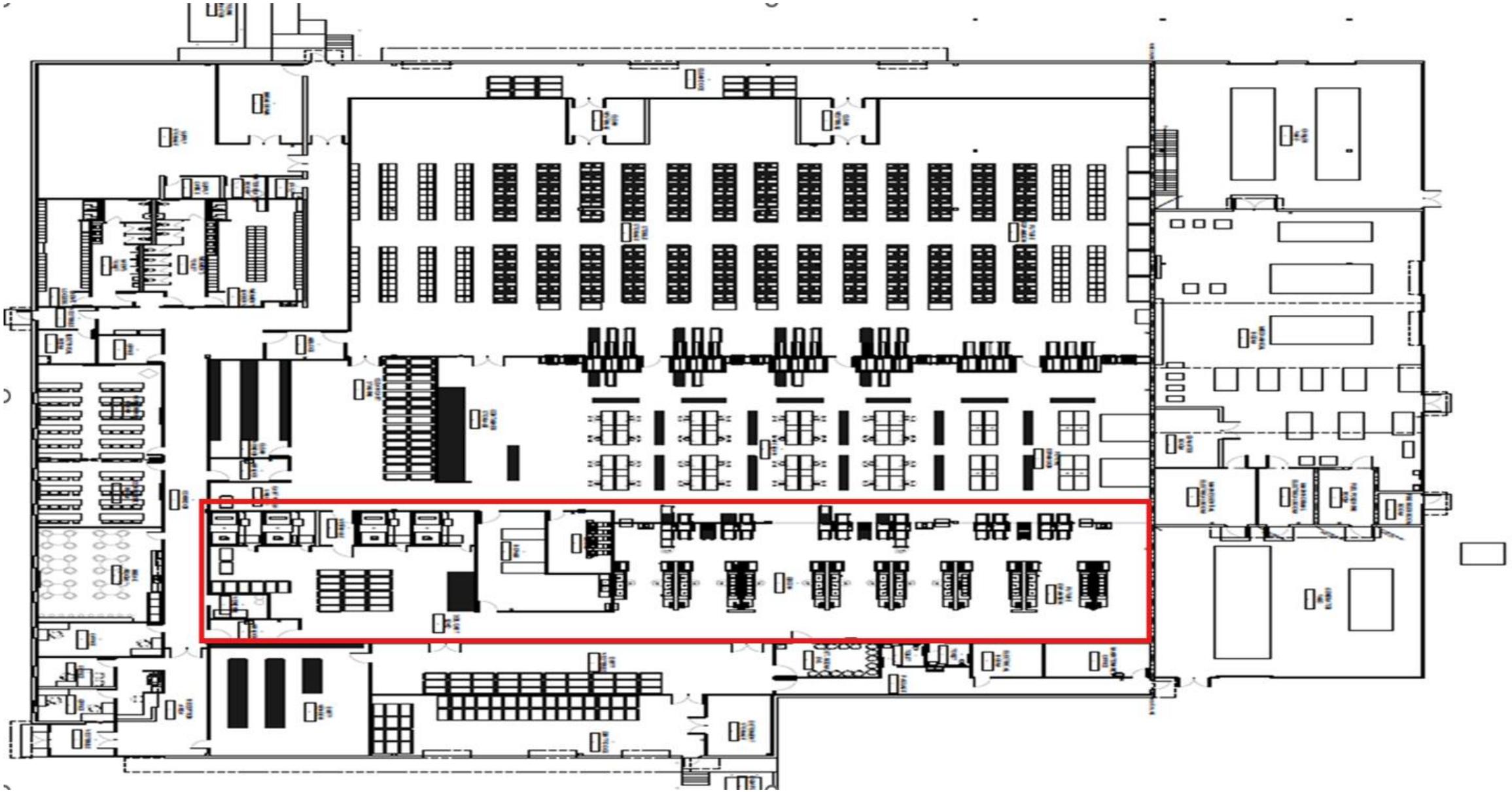
Current OR Utilization			85%	89%	92%	96%	99%										
Growth Rate	5%		FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35
Avg Tray/Case	Tray Volume																
2.2	Site A	15438										30282	31796	33386	35055	36808	38648
6.0	Site B	48891										85706	89992	94491	99216	104176	109385
4.3	Site C	46355										89890	94385	99104	104059	109262	114725
7.3	Site D	70836										139193	146153	153461	161134	169190	177650
Num. OR's	11	New ASC										34233	35945	37742	39629	41610	43691
	4	Site E Initially 4 OR's going to 9 OR's										45748	48035	50437	52959	55607	58387

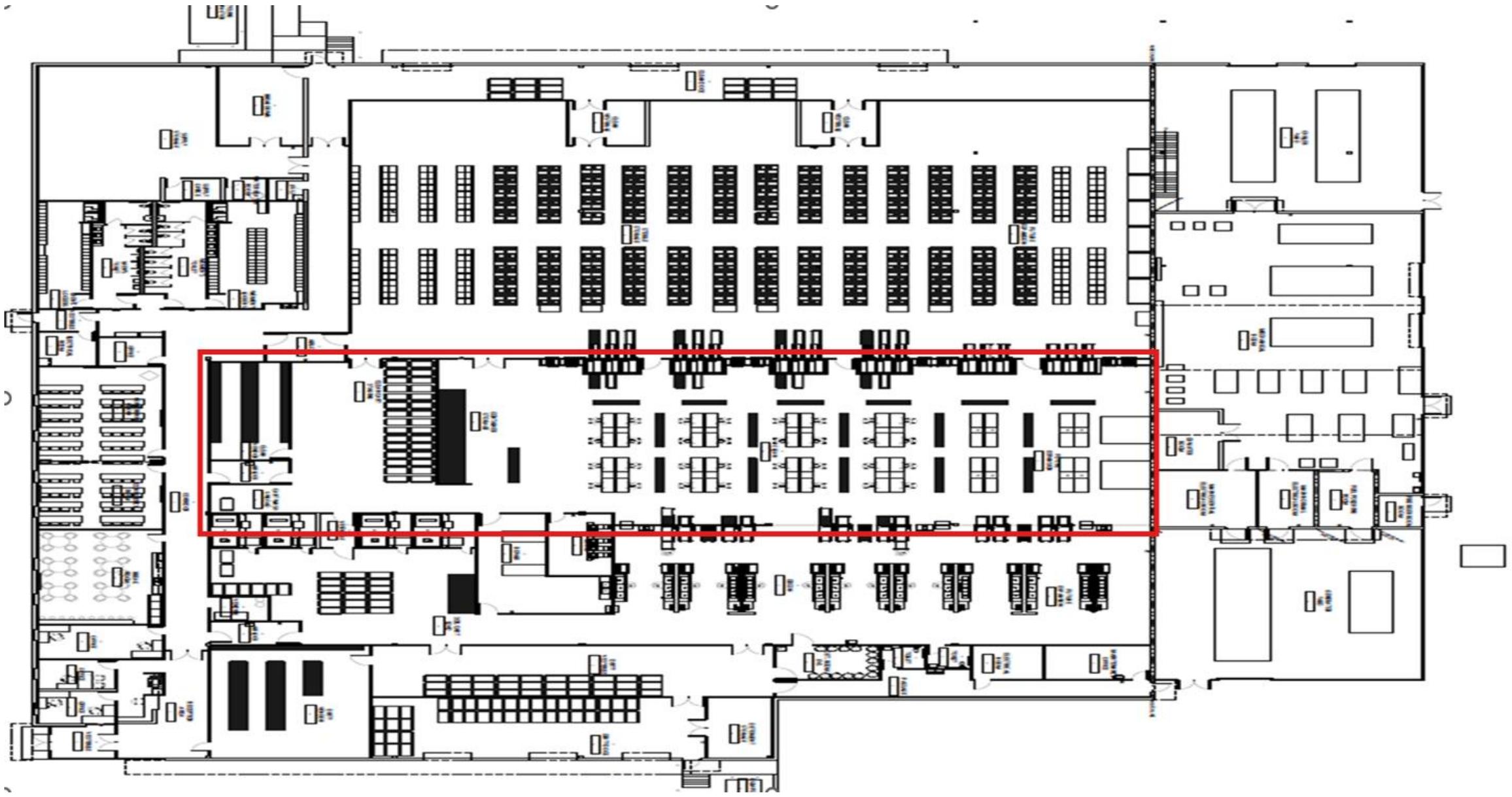
Site was Nearing 99% Capacity & New Facilities Planned for Construction

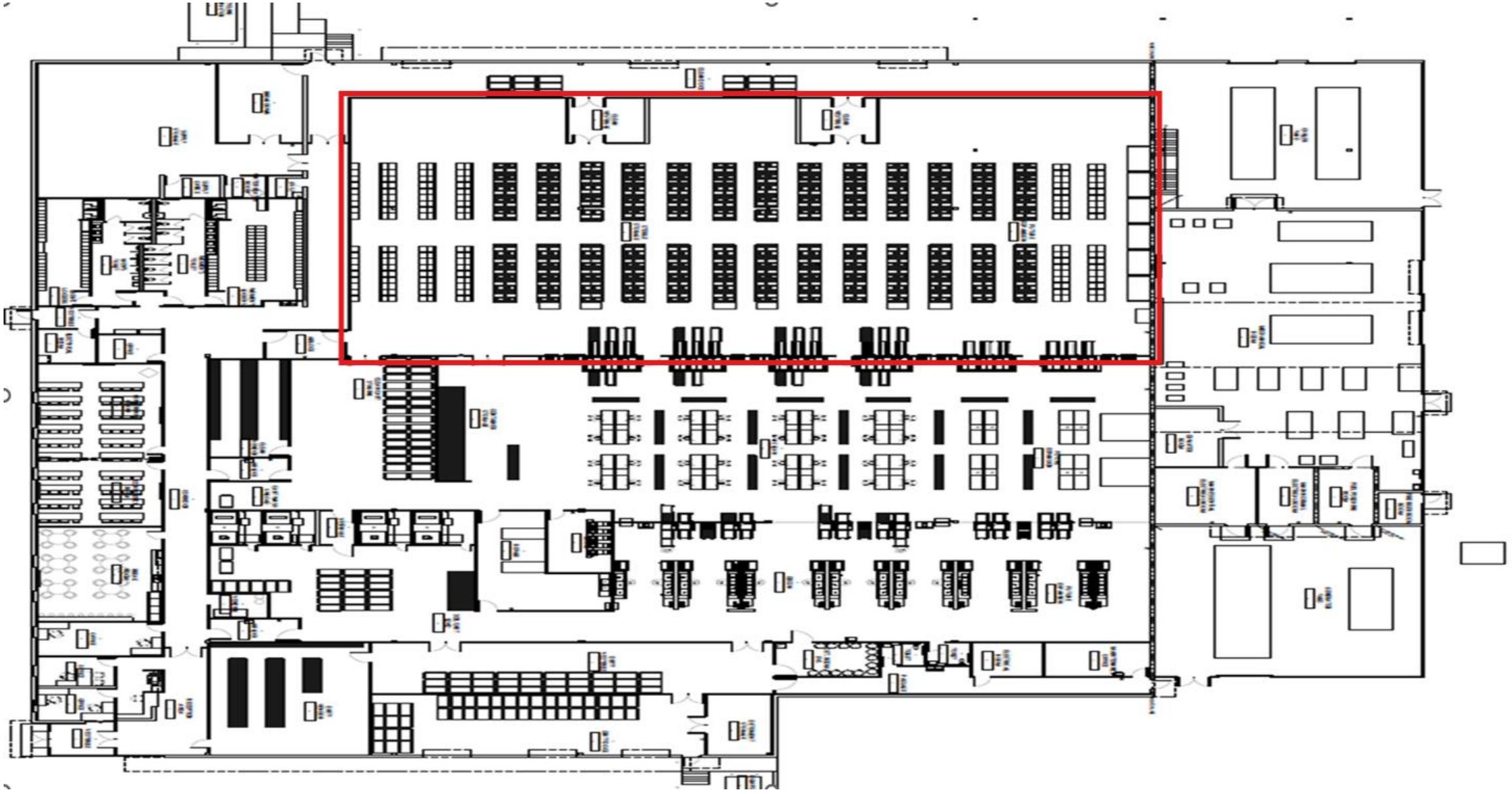
A Look Into UF Shands

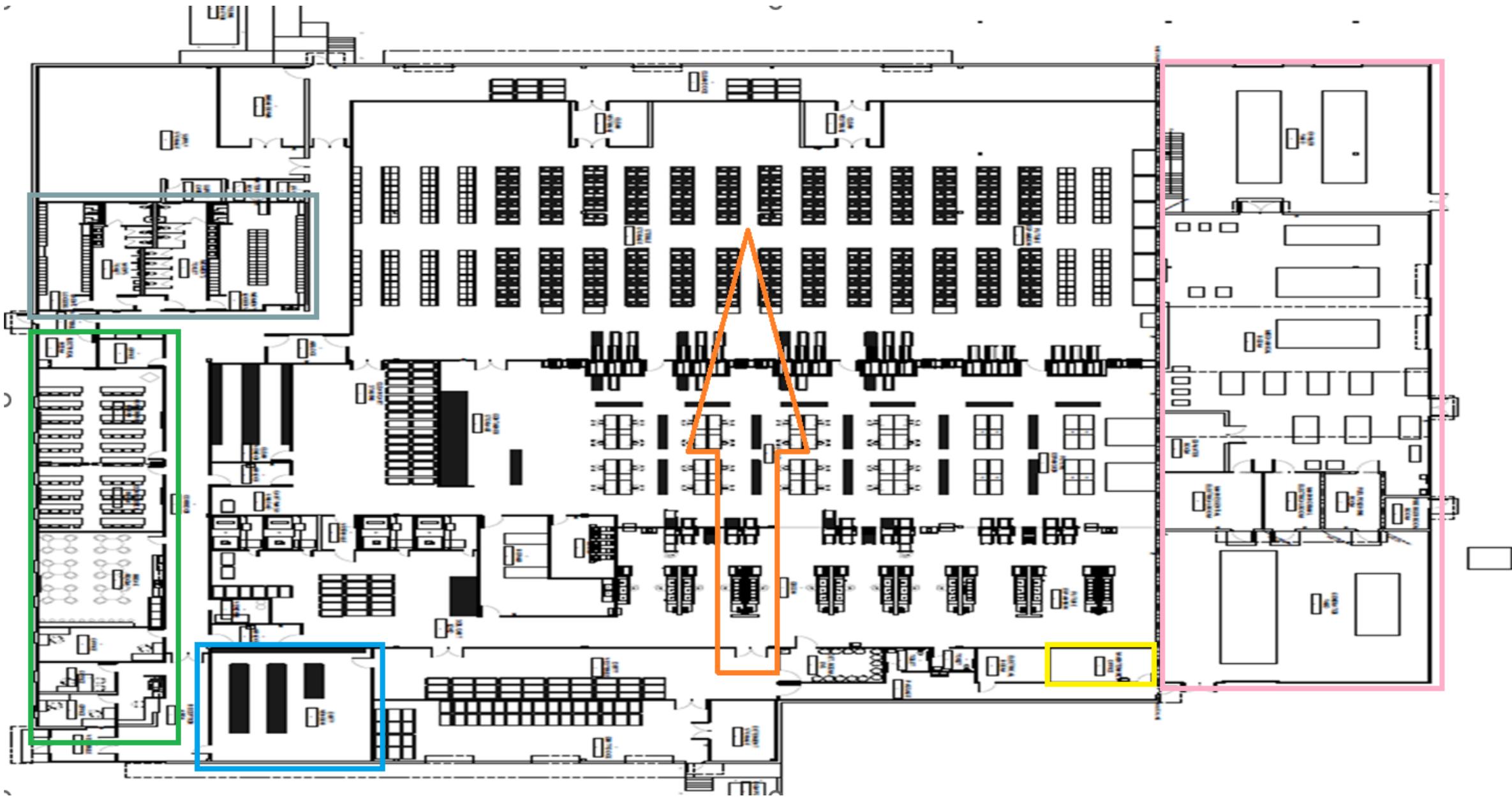
Bobby Baird

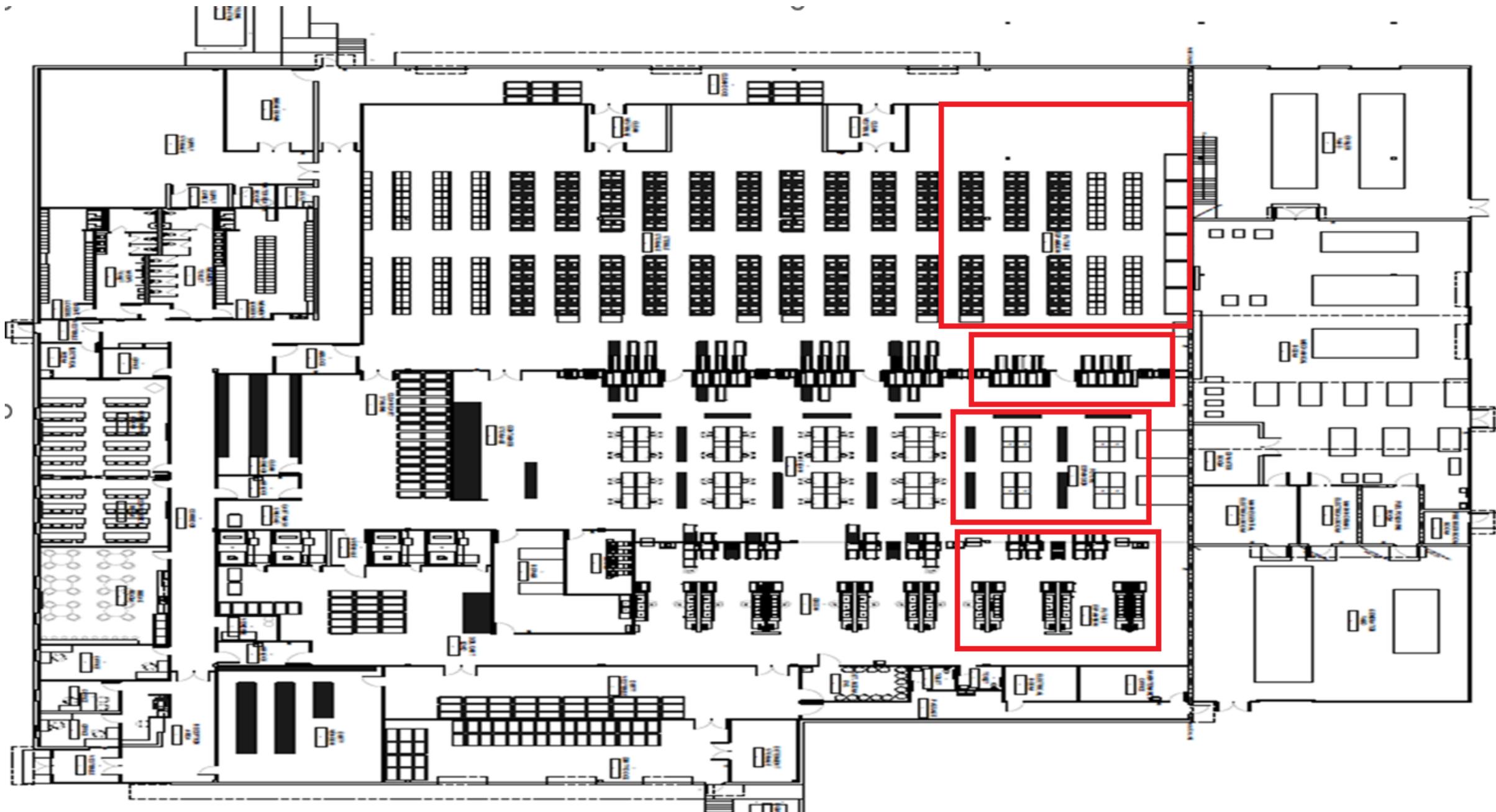














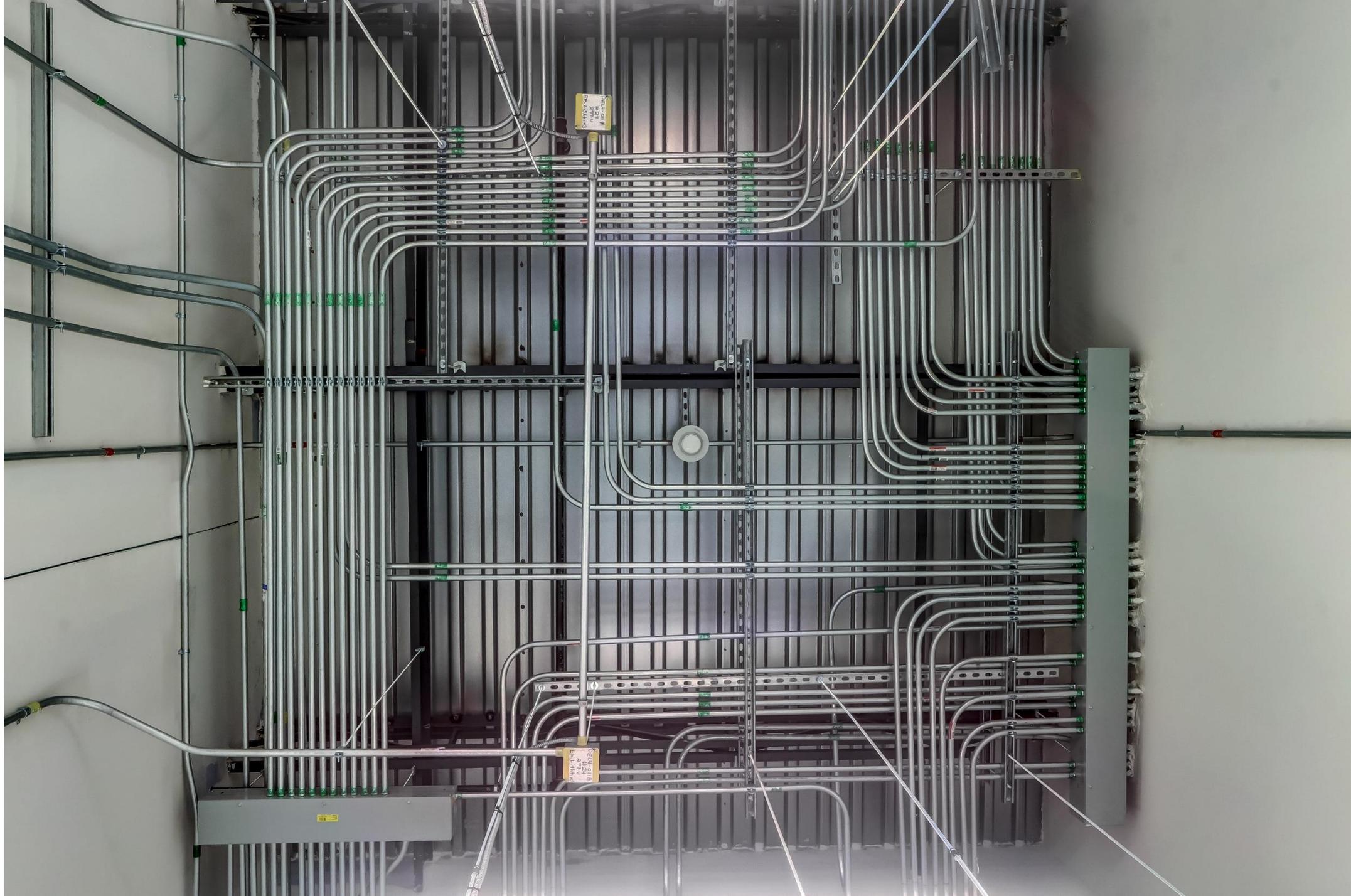
Mechanical Room Musings

- Boilers in separate enclosure
 - Condition space-drives
 - Chemistry kings
- Trough drains everywhere
- Cast iron-boiler blow down
- Dissimilar metals
- RODI corrosive
- Test ports & after-coolers.



RODI Revelations

- Size system for growth
- Ensure dedicated room is large enough
- Dual systems Orange/Blue
- Trough drains everywhere
- Chemistry test, say again, say again
- Domestic water consumption – this is a HOG- think meter size
- Now we have to get rid of process water- sewer lines – SIZE matters
- RODI corrosive
- Spare parts & filters
- Test ports & after-coolers.



Electrical Earmarks

- UPS backed up panel to power all control circuits
- Closed transition switchgear
- Fuel capacity-not a hospital
- Power to well
- IT closet for mechanical space- not in sterile areas
- Measure utility consumption
- BAS is your best friend
- Lobby your equipment manufacturer to have separate control power to ride through generator startings



1141
CLEAN
CART

AUTOMATIC
CAUTION
DOOR

FIRE
EXTINGUISHER

ECOLAB

Cooling Class

- Separate air handling unit for each level of cleanliness
- Oversize to meet future equipment and coil degradation
- Air locks at each entry
- Condition space above autoclaves – removable grate also
- Pressure independent air valves
- Diffuser locations – sterile discharge area – wet packs
- Instrument air pumps and VFD's have a max operating temp
- Manage steam with return ducts, sealed?



Just Because

- Spare parts for unicorn equipment
- Floor color unique
- Facilities needs storage
- Dual feeds for everything, Dual systems, 24/7 when repair/maintain
- Hazard preparation down is down, not priority for utility company
- How is trash getting out?
- Salt for softeners
- Steam consumption-engineers
- Water consumption - engineers

Just Because – Numero Dos

- Sitting duck- nope sitting water-construction
- RODI water for cart wash final rinse
- Auto soap dispensing lesson
- Prepipe for future sinks, washers, sterilizers
- Clean steam commissioning/qualified contractors touching
- Softener regeneration drains system, schedule regeneration
- Use sturdy doors like Acrovyn
- Listen to customer

Just Because –A Charm, Third Time

- DA Tank nightmares Low Level Cut Off, pipe wrong slope
- Did I say water treatment?
- Buccaneer- 19
- Almost nobody has done this

UPENN

MUSC- 21 months

UF Health - 6 weeks

How to Operate Efficiently

- Steam traps
- Magnahelics
- BAS and enthalpy

- Almost nobody has done this
UPENN
MUSC- 21 months
UF Health -6 weeks







HEALTHCARE PURCHASING NEWS

A Multi-Faceted, Data-Driven Approach to Sterile Processing Transformation and Optimization

Kara Nadeau | Senior Contributing Editor
March 24, 2025

Healthcare
PURCHASING NEWS™

HPN's 2025 SPD of the Year



CRITICAL TAKEAWAYS

- There are many types of and sources for data that impact the OR and SPD space.
- Understanding of data vs analysis and the importance of each.
- Proper analysis of data has tremendous value to help improve Surgical Asset Management to include, space design, equipment purchases + planning decisions.
- Proof of Successful Centralization: UF Shands has been successful at developing a scalable operation that move 70% of volume to their off-site to streamline processes, optimize assets, improve quality, while absorbing procedural growth.



Thank you Questions?

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