

# Energy Efficiency Meets Operations

Pulling off infrastructure projects in a fully-occupied building

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AEE Monthly Meeting

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# Overview

- **What is LabCentral?**
- **Recent projects**
- **Operational challenges and solutions in an occupied lab building**



- What is LabCentral?

- Recent projects

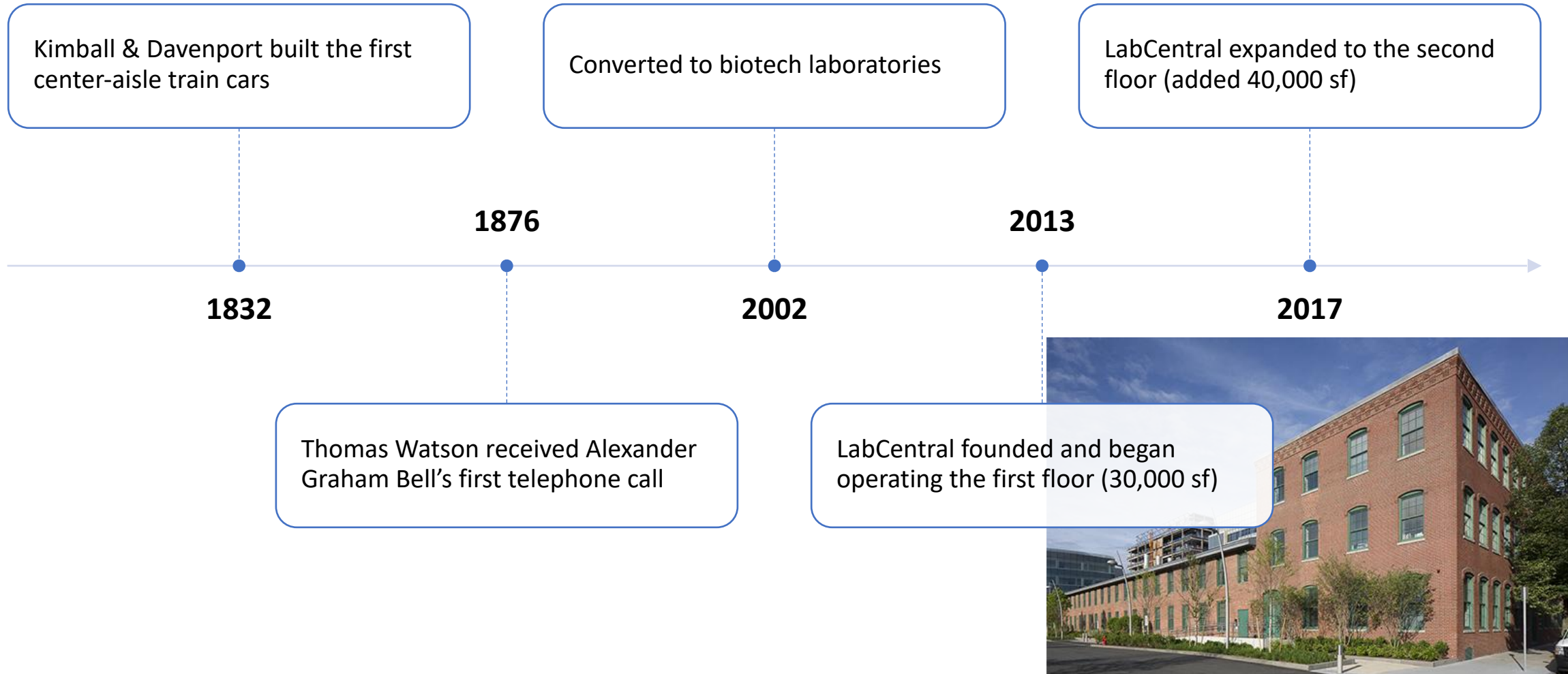
- Operational challenges and solutions in an occupied lab building

# What Is LabCentral?

# What is LabCentral?



# 700 Main Street Facts



- What is LabCentral?

- Recent projects

- Operational challenges and solutions in an occupied lab building

# Recent Projects

# Rooftop Air Handlers x2



# Fume Hood Controls & Auto-Closing Sashes



# VAV Controllers



SA Temp **55.7 °F**

3\_PrivateLab\_Sup

55.7 °F

0.0 %

68.8 %

Flow Offset	-98
Offset Stpt	-100

<b>EXHAUST FLOW CONTROL</b>	
AirFlow (CFM)	569
AirFlow Stpt	<b>571</b>
Damper % Open	68.8 %

# LED fixture retrofit



- What is LabCentral?

- Recent projects

- Operational challenges and solutions in an occupied lab building

# Operational Challenges in an Occupied Building

# Challenges & Solutions in an Occupied Lab Building

## Project Requirements / Challenges

### Rooftop Unit Replacement

- Uptime and air flow
- Crane picks
- Communications cycle (~2 weeks)

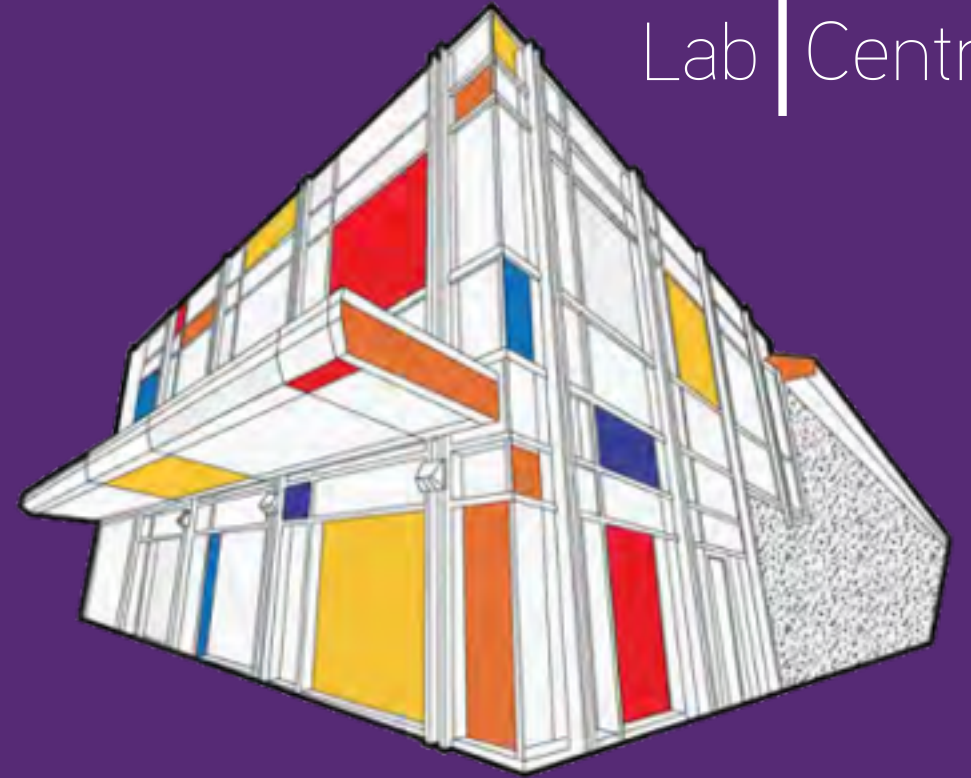
### Fume Hoods, HVAC Controls, LED Retrofit

- Work zones in labs and offices
- Staging materials
- On-hours to avoid overtime labor costs
- Communications

## Solutions

- Bare minimum number of shutdowns
- Shortest possible durations only & after-hours
- Tight schedule coordination with contractors
  
- Early start times
- Develop a master schedule
- Remain flexible
- Strike when opportunities present





Thank  
You

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