A female student with long dark hair and safety glasses is working on a large, complex industrial engine. She is wearing a dark grey hoodie with 'THE NORTH FACE' logo. The engine is a large, metallic, multi-cylinder unit with various hoses and components. A large, circular, metallic flange or cover is prominent in the foreground. The background shows a workshop setting with other equipment and a white wall.

# Campus Update

## November 21, 2023



DAVISTECH



**TYTAN SMITH**

*2023 Student  
of the Year*

Electrician  
Apprenticeship



# MISSION



We are a trusted  
learning community  
embracing technical  
education to  
promote student  
development and  
economic growth.



# WHY TECHNICAL EDUCATION

## HANDS-ON

Davis Tech's hands-on learning environment teaches students with **real-world tools and equipment**. This provides students with experience and knowledge that employers value.

## FLEXIBLE

Many of our programs are available **to start any time** and students can **create a schedule that works** around their family, work, or other needs.

## SELF-PACED

Students move at their own pace. They can **accelerate through familiar concepts and/or slow down to master their skills**.

## HIGH-TOUCH

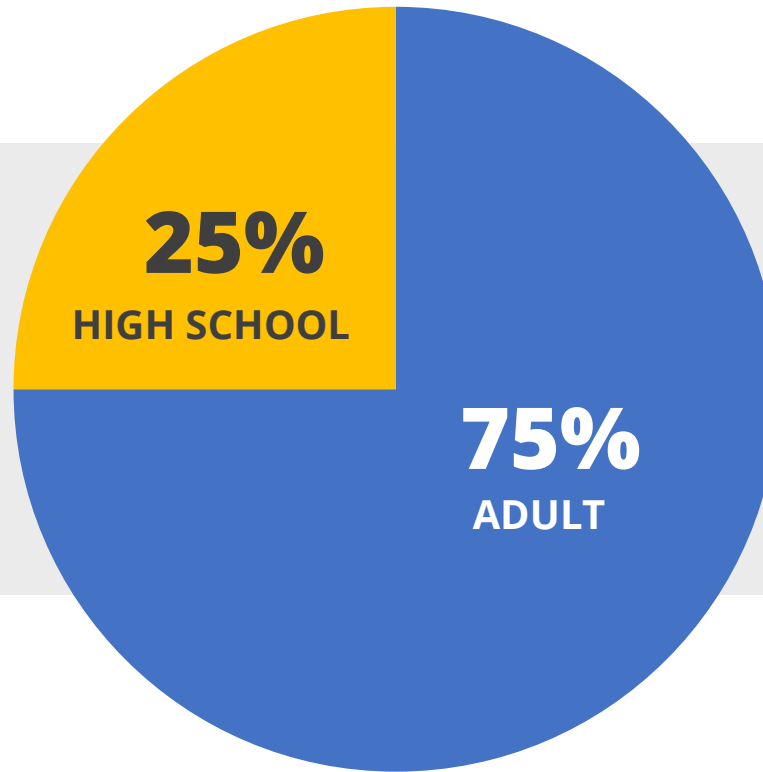
Our experienced **instructors come from industry and work with local companies** to stay current on the newest technologies. Their main focus is the **success of every student**.



# OUR STUDENTS

**6,645**

Total Students



 **6%**

Student FTE



**2 MONTHS**  
Average time for students to  
earn back their cost of training

**\$2,983**  
Average Program Cost

Cost includes tuition, books, materials, and fees.

## AVERAGE WAGE INCREASE

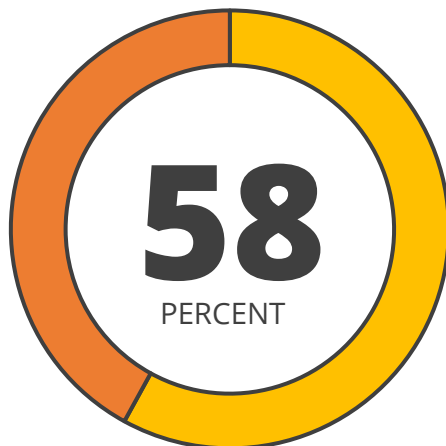
Annual increase in wages from  
before training to after graduation

	WAGE INCREASE*	% INCREASE
900+ Hour Program	\$10,850	59%
< 900 Hour Program	\$6,820	35%

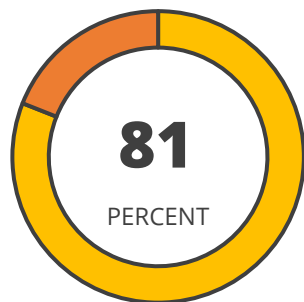
\*Source: Utah Department of Workforce Services

**FY 2023 Cumulative Student ROI** ▶ **\$8,825,882**  
(Increased wages less student-paid cost of training)



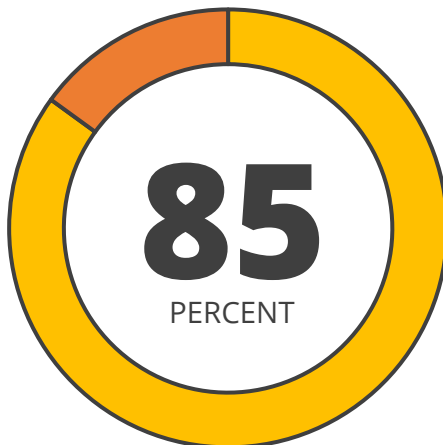


## GRADUATION



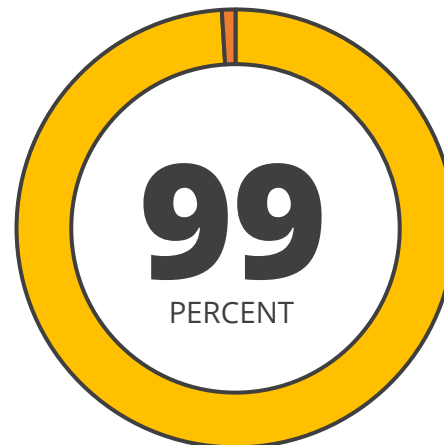
## COMPLETION

Program  
Accreditation  
Benchmark 60%



## PLACEMENT

Program  
Accreditation  
Benchmark 70%



## LICENSURE

Program  
Accreditation  
Benchmark 70%

## 35 IN-DEMAND PROGRAMS

**SCHOOL OF BUSINESS AND INFORMATION TECHNOLOGY**  
Architectural & Engineering Design  
Business Administrative Services  
Cybersecurity  
Information Technology  
Software Development  
Web and Graphic Design

**SCHOOL OF CONSTRUCTION**  
Construction Technology  
Electrician Apprenticeship  
Heating and Air Conditioning  
Plumbing Apprenticeship

**HEALTH PROFESSIONS**  
Advanced Emergency Medical Technician  
Dental Assisting  
Emergency Medical Technician  
Firefighter  
Home Health Aide  
Medical Assistant  
Medical Coding and Billing  
Nurse Assistant  
Pharmacy Technician  
Phlebotomy  
Practical Nurse  
Surgical Technology

**MANUFACTURING**  
Automation and Robotics  
CNC Machining  
Composite Materials Technology  
Welding Technology

**SERVICE PROFESSIONS**  
Cosmetology  
Culinary Arts  
Esthetician  
Hair Designer  
Master Esthetician  
Nail Technician

**TRANSPORTATION**  
Automotive Technology  
Advanced Automotive Technology  
Diesel/Heavy Duty Technology

**Red**  
indicates  
high  
impact  
program



# CHALLENGES

- **Need for additional instructional capacity**
- **Council on Occupational Education (COE) Accreditation Standards**
- **Federal Department of Education (DOE) Regulations**
- **Utah Legislative Priorities**
- **Utah System of Higher Education Goals**
  - **Increase Access to Higher Education**
  - **Increase Graduation Rates**
  - **Increase Affordability**
  - **Workforce Training Alignment with Industry needs**
- **Technical College coexisting with residential neighborhood**
- **Funding Constraints**



# Construction/ Heavy Equipment Operator



**Backhoe**



**Track hoe**



**Skid steer**



**Compactor**

**Current Hours of  
Operation**

8 am - 3 pm

**Equipment is used only  
periodically**



**Affordable Housing**



**Tiny Home Project**

# **Why CDL at the Kaysville Campus?**

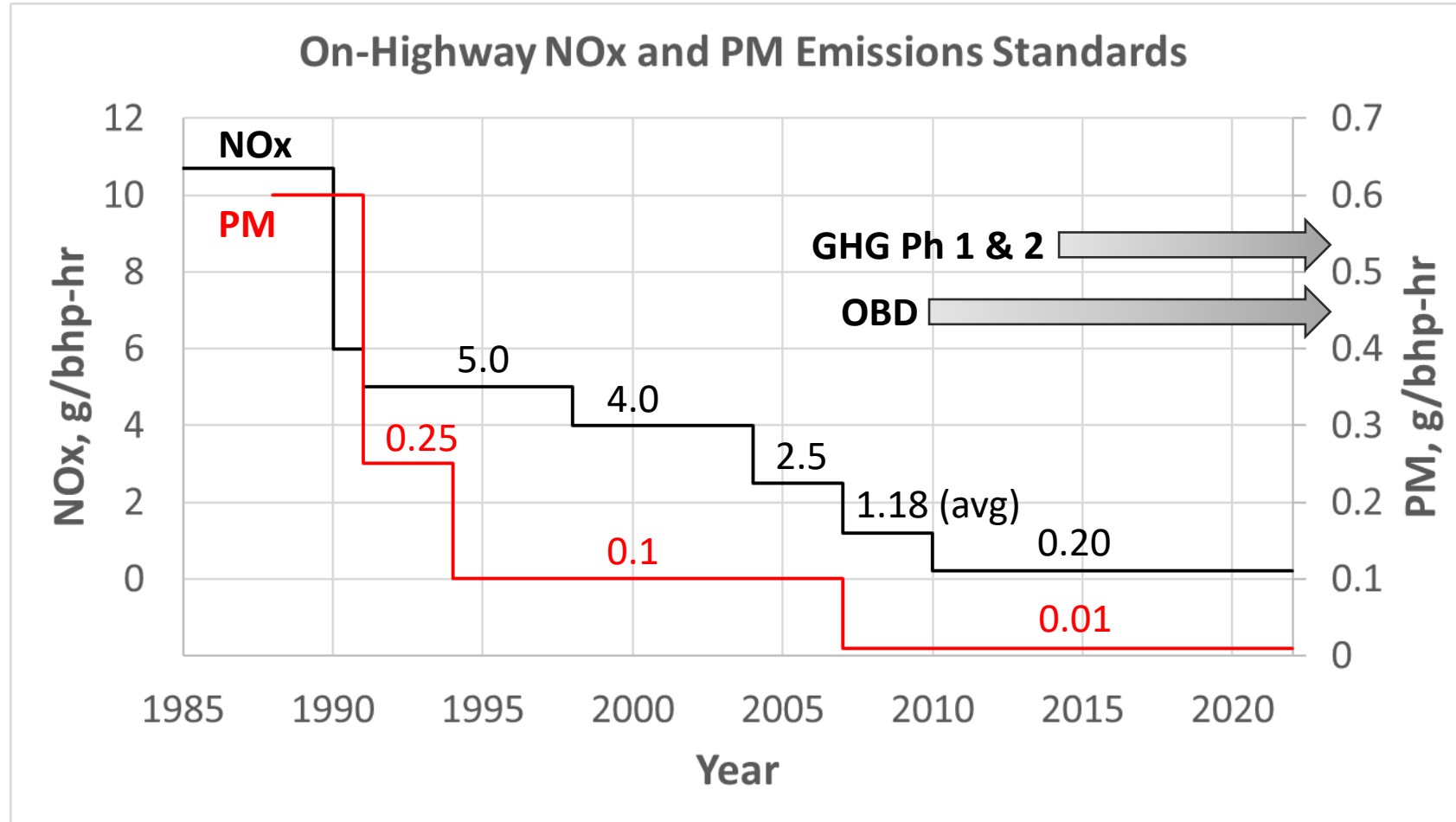
- Changes in Federal Regulations eliminated accredited training sites between SLC and Logan
- This is where Davis Tech owns the land
- Our location at Freeport in Clearfield lacks the space required by the State of Utah for CDL training
- Congruence to our Diesel Technician program
- Students have full access to campus services including counseling and financial aid

# Commercial Driver License Equipment

- **The College is purchasing 3 Semi Tractors.**
  - Not equipped with backup alarms
  - Typically, 1 tractor will be operating on campus , 2 on the road
  - On the road driving practice will be done throughout Northern Utah
  - If funds are available a 4<sup>th</sup> “back up” tractor may be purchased
  - Will not be training on doubles, belly dumps, or tankers
- **Sound levels of CDL training operations tested over 30 minutes.**

• Minimum	44.0 decibels	equivalent to a	quiet office
• Average	54.8		conversational speech
• Maximum	87.5		hair dryer/lawnmower
- **The Trucks meet the latest EPA Phase 2 Greenhouse Gas Emissions Standards and Fuel Efficiency Standards.**

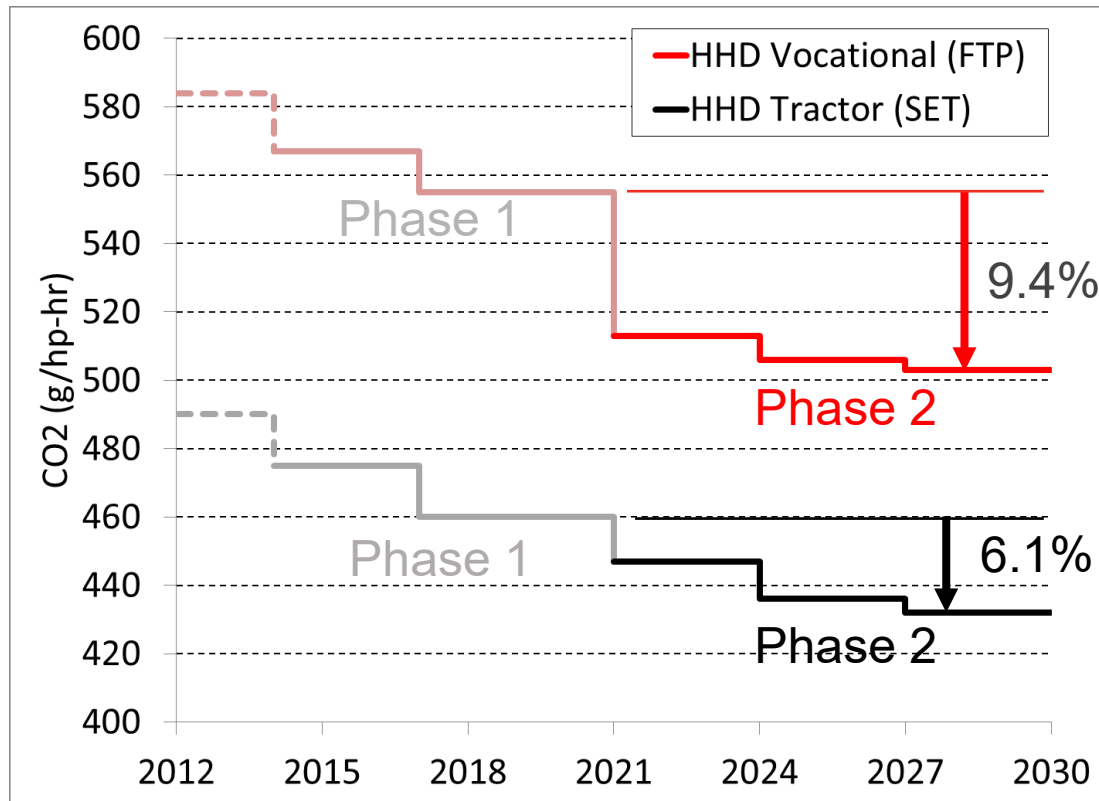
# How Far We've Come



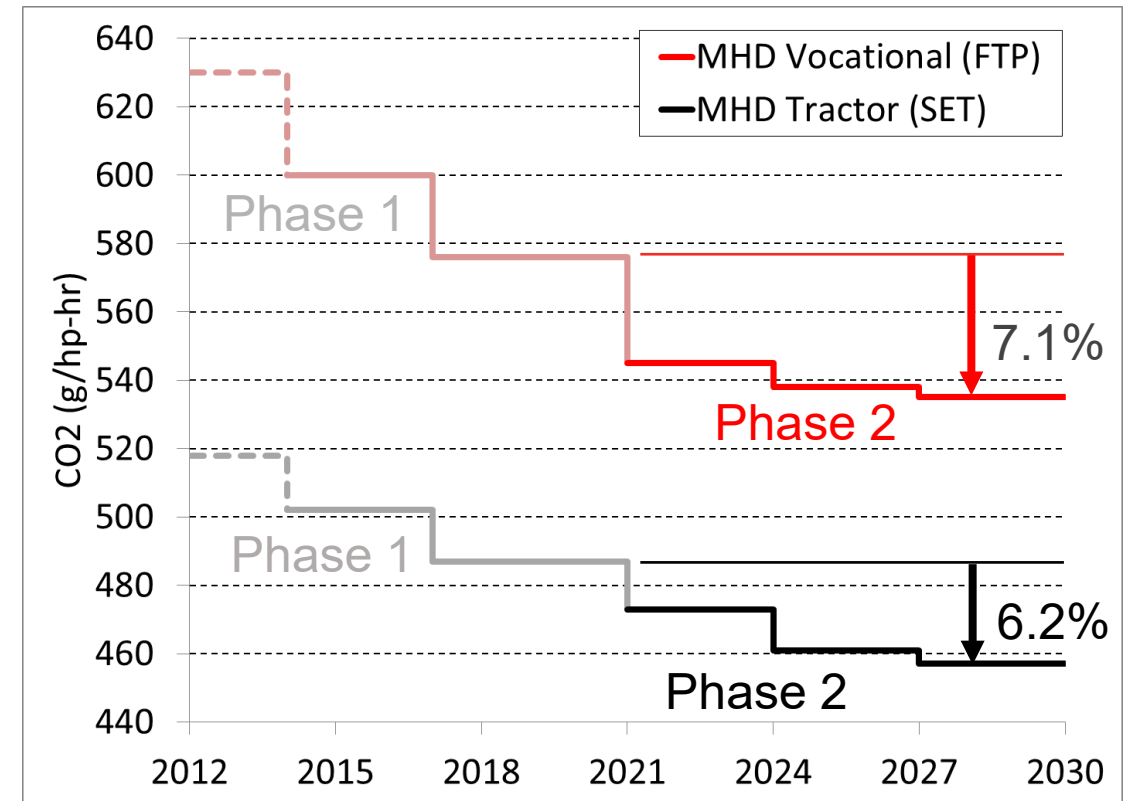
NOx = nitrogen oxides    PM = particulate matter  
g/bhp-hr = grams per brake horsepower-hour

# Phase 2 Diesel Engine Standards\*

## Heavy-Duty Standards



## Medium-Duty Standards

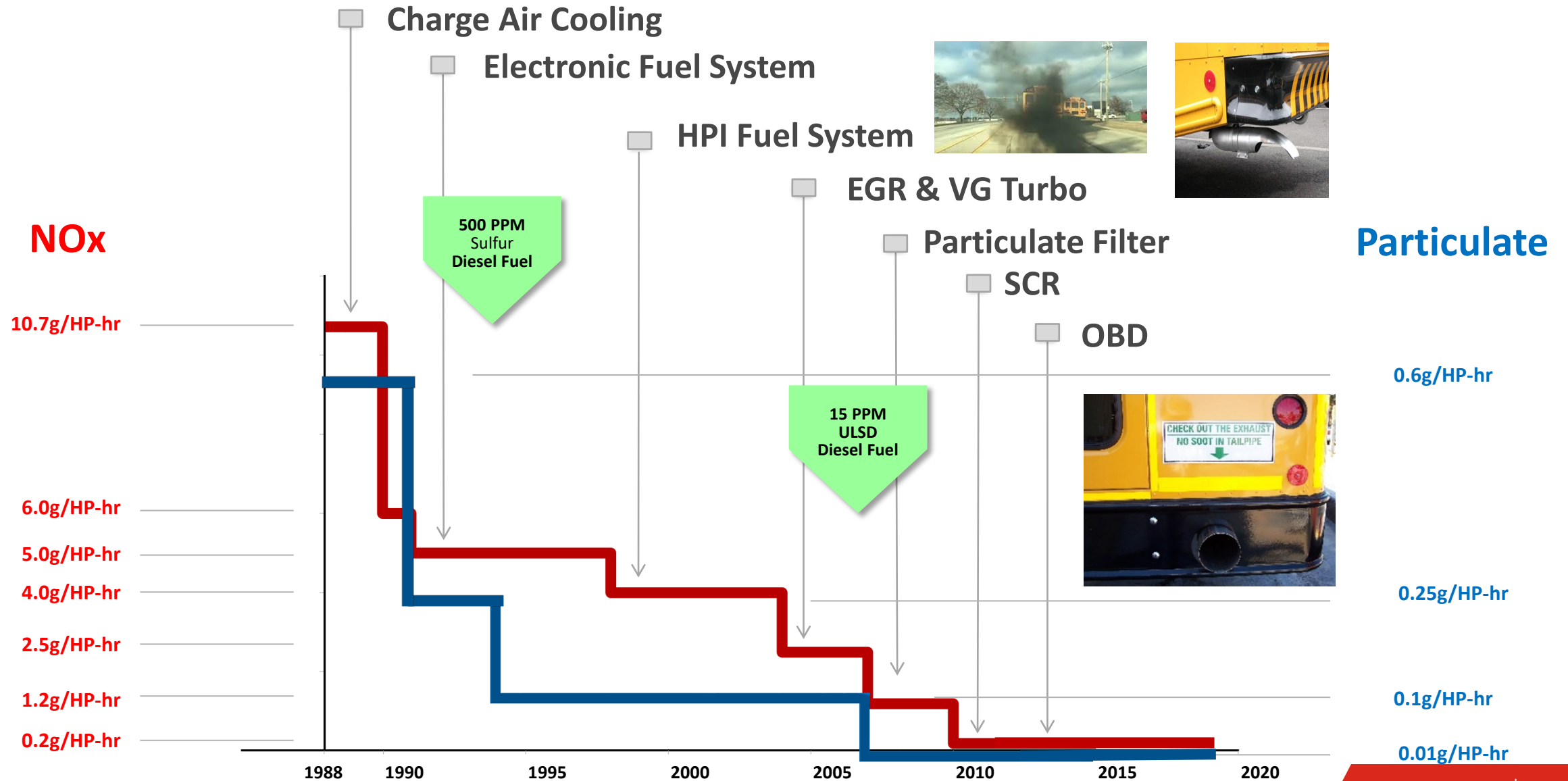


\*Gasoline (SI) engine Phase 2 standards same as Phase 1 (627 g/hp-hr)



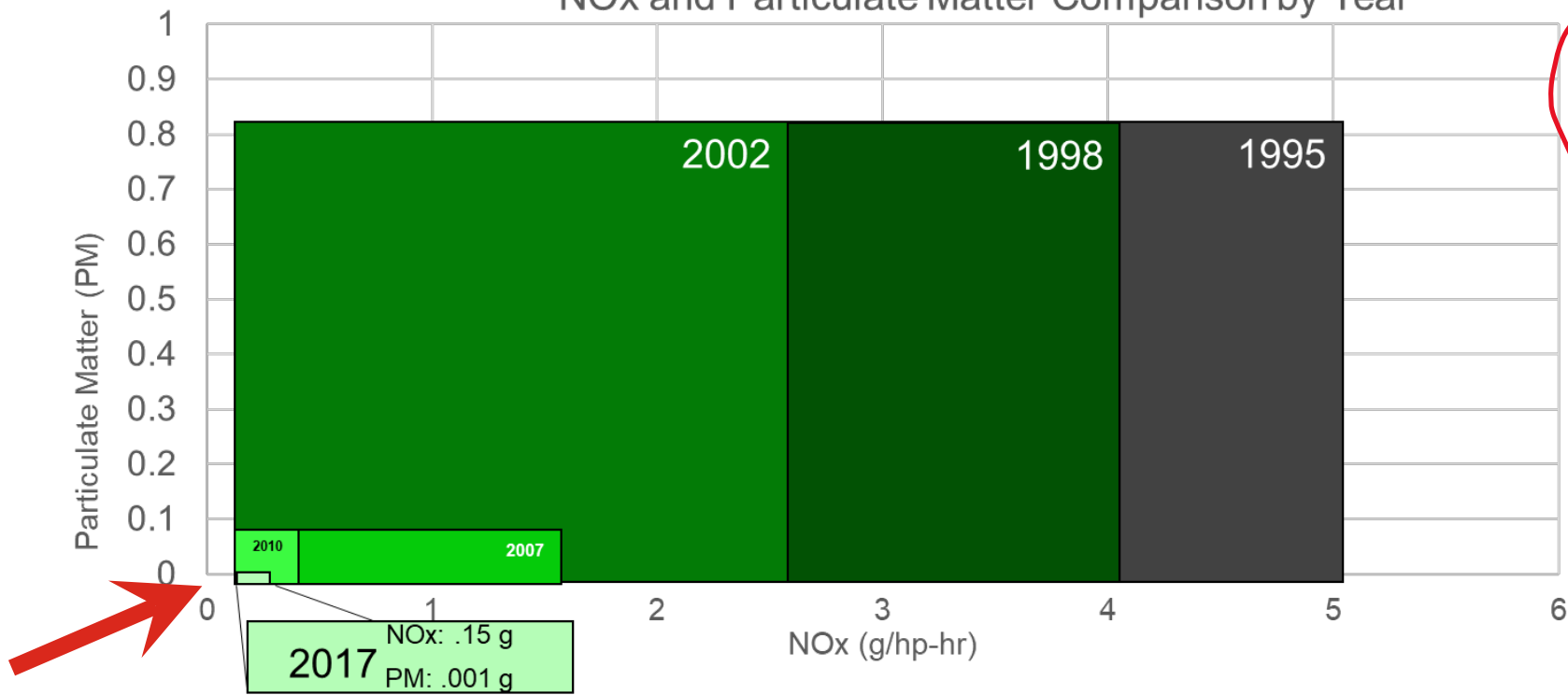
# **Cummins Aftertreatment**

# EPA Diesel Emissions Reduction History



# Emission Summary

NOx and Particulate Matter Comparison by Year



Diesel overall is 90% cleaner than engines from a decade ago in terms of PM and NOx, and almost 97% cleaner than the engines manufactured from 20+ years

EPA Model	Engine Family	Build Years	Regen Timer (Hrs.)	Aftertreatment Components	PM (Grams)	NOx (Grams)	Notes
2007	ISB / ISL CM2150	1/1/2007 – 12/31/2009	96	DPF & DOC	0.01	1.5	School Bus 7-10 hours normal ISL Transit - Started 96 HR – then 12 HR – now 20 HR (w/Calibration)
2010	ISB / ISL CM2250	1/1/2010 – 12/31/2012	24	Added SCR	0.01	0.20	
2013	ISB / ISL CM2350	1/1/2013 - 12/31/2016	24	OBD Required	0.01	0.20	
2017	B6.7 / L9 CM2350	1/1/2017 - 12/31/2020	24	Single Module	0.001	0.15	B6.7 Engine Family
2021	B6.7 / L9 CM2450	1/1/2021 - 12/31/2024	24	CO2 reduction	0.001	0.15	

# CDL Student Qualifications

- CDL Students must:
  - Have a regular driver license for a minimum of 1 year
  - Obtain a Class A CDL Learner's Permit
  - Pass a statewide background check
  - Pass a Dept of Transportation (DOT) Physical
  - Pass a Dept of Transportation (DOT) Drug Screen
  - Clean Motor Vehicle Record

**Current Hours of Operation** 8 am - 9 pm Monday- Thursday  
8 am - 2 pm Friday

# Fuel Site Examples



**Kaysville Fire Department  
175 S Main Street**



**Layton City  
Commons Park**

# Campus Growth

**1978 Main Building**

**1983, 1985,  
1987  
Addition**

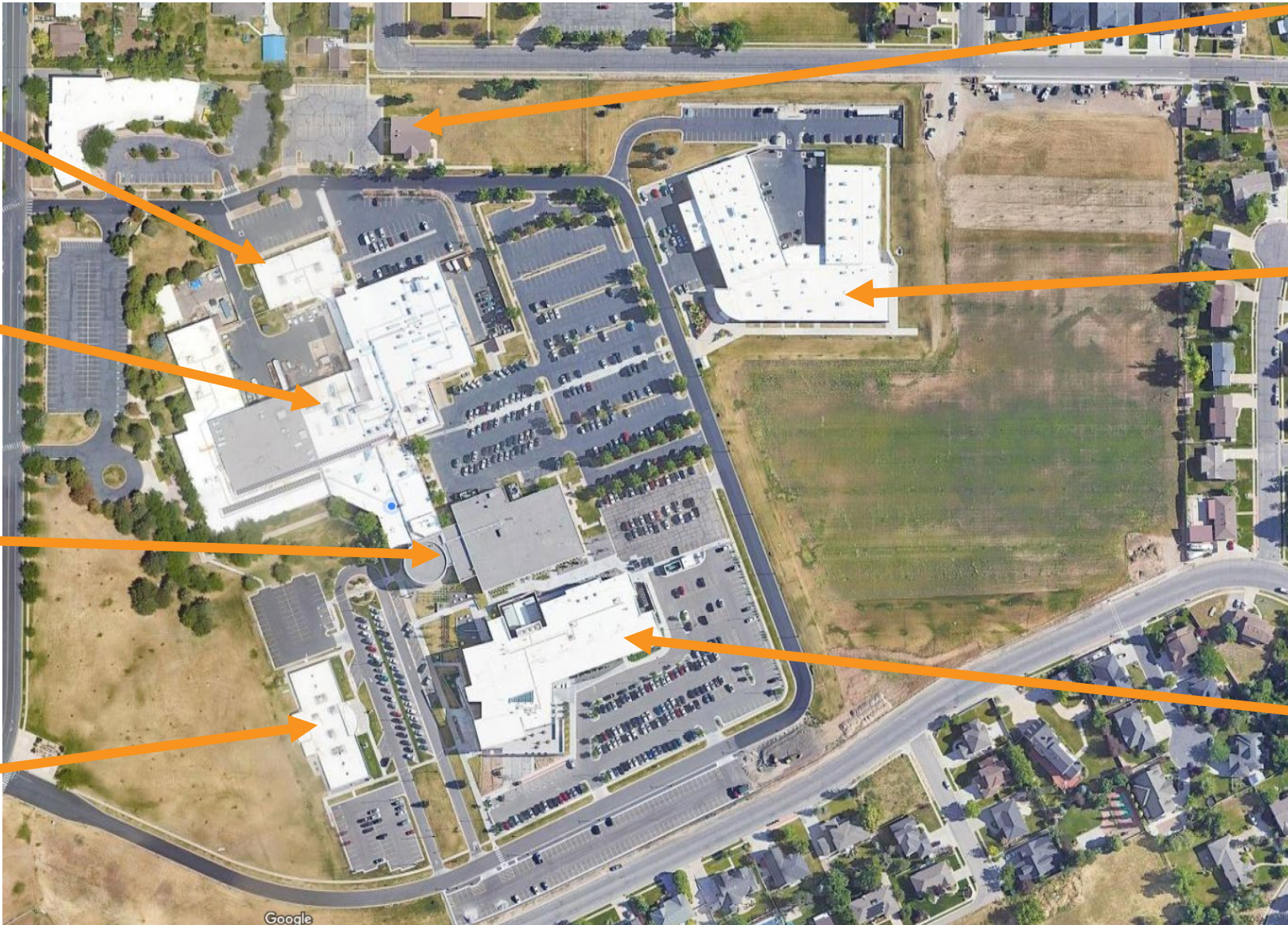
**1998  
Addition**

**2006  
Simmons  
Building**

**2021  
North  
Building**

**2009  
Barlow  
Building**

**2020  
Bouwhuis  
Building**








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# Campus Projects

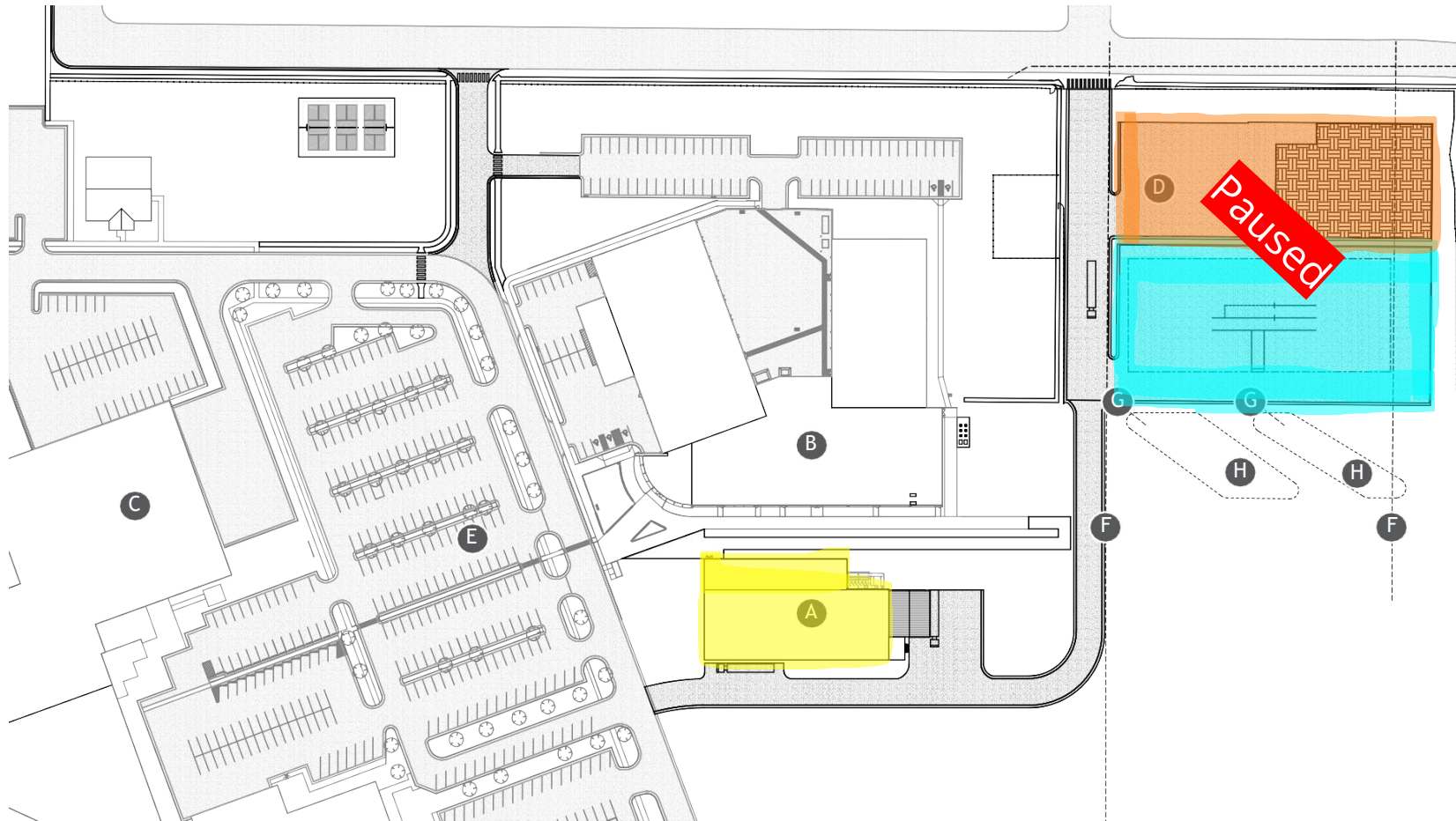


## Interior Projects

-  **Phase I** – Relocate Student Services and IT Programs 13,754 sq. ft. **Completed**
-  **Phase II & Phase III** – Relocate Multiple Programs 28,748 sq. ft. **In Process**
-  **Phase IV** – Facilities and support operations centralized 13,950 sq. ft. **In Process**

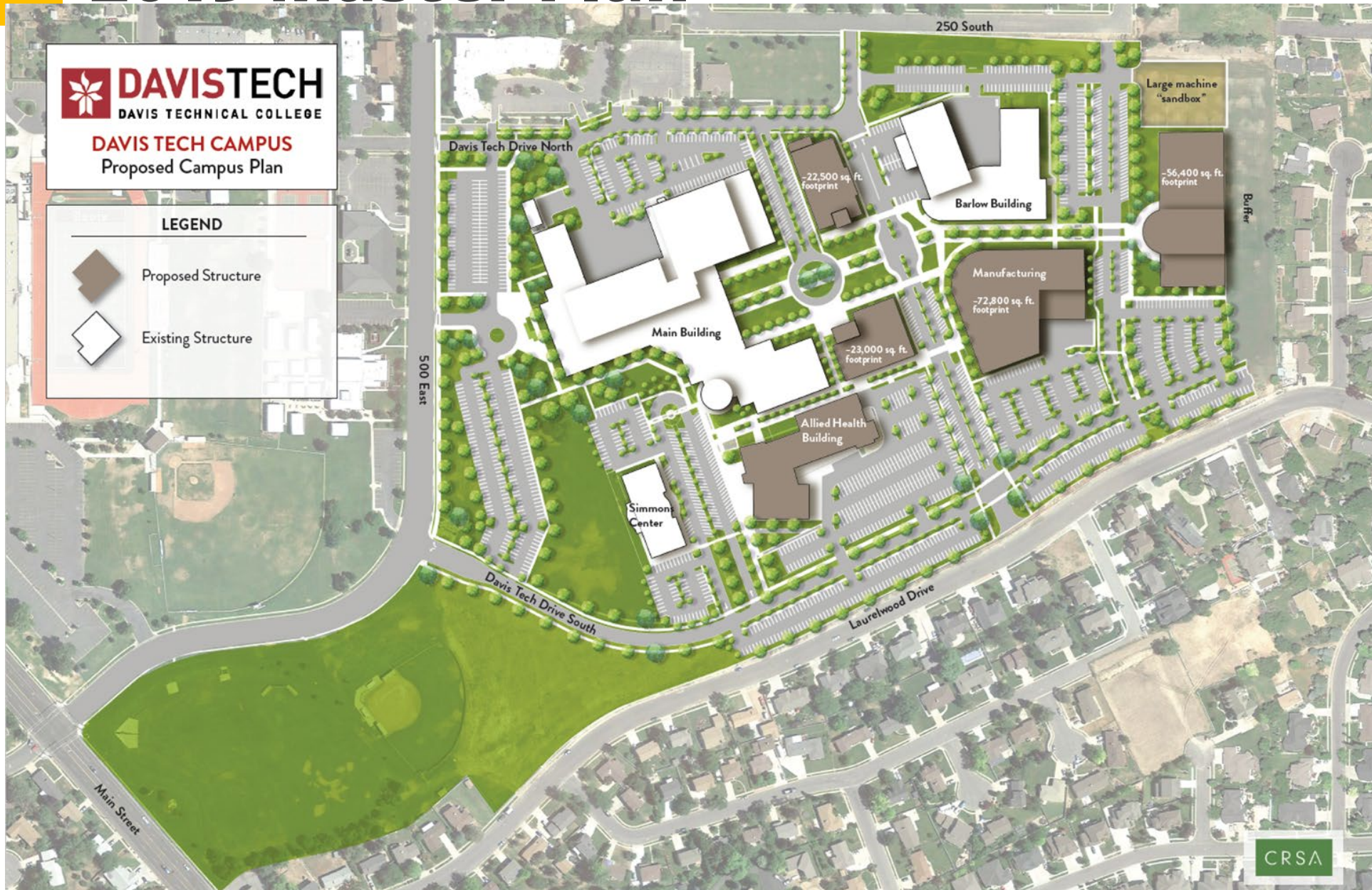
## Exterior Projects

-  **Welding Building** 16,000 sq. ft. **In Process**
-  **Construction/HEO, & CDL Programs, State Fuel Site** 2.5 acres **In Process**
-  **South Campus Improvements** 1,000 ft. **Planning**
-  **Buffer Zone Improvements** 1,150 ft. **Pre-Planning**



- A. New Welding Building
- B. Barlow Building
- C. Main Building
- D. CDL / Heavy Equipment
- E. Existing Parking
- F. Sewer Line
- G. Storm Drain Line
- H. Storm Pond

# 2019 Master Plan



# Next Steps

- We will evaluate feedback and other relevant information
- We will schedule another meeting or an open house in January
- Updates will be emailed to those who have provided contact information
- Information will be posted on our website: [www.davistech.edu](http://www.davistech.edu)

## ABOUT

About Davis Tech

Board of Trustees

Calendar

Careers at Davis Tech

Foundation

Campus Master Plan

Media

Public Surplus

Vendor Registration

A – Z Site Map

THANK YOU



**DAVISTECH**  
DAVIS TECHNICAL COLLEGE



**JAMES GAAN**  
CNC Machining  
Works at Jensen Precision Machining