#### Creative Exposure and Preparation for Tree Trimming Careers - OSTC NW & SE

November 18, 2022



Andrew Maurer - Oakland Schools andrew.maurer@oakland.k12.mi.us



#### Energy/Electrical Technologies Program Overview

#### Oakland Schools Technical Campuses Southeast - Royal Oak Northwest - Clarkston



Energy/ Electrical Program Overview

- Explore energy generation, transmission and distribution needed to power and maintain a secure and reliable electrical grid.
- Learn to wire and energizing residential and commercial projects.
- Conduct hands-on activities with both renewable and non-renewable energy sources
- Licenses/Certifications Available
  - **OSHA 10**
  - Energy Industry Fundamentals
  - Red Cross CPR and First Aid



Energy/ Electrical Program Overview

DTE C



#### Career Tree

DTE



#### PROFESSIONAL OSTC CAREERS (Bachelor's, Master's, Ph.D., Specialized Training, Experience, etc.) Project Manager Utility Supervisor • Generation/Operations Supervisor + Electrical/Energy System Designer Electrical Engineer Pipeline Engineer • Hydrologist • Health and Safety Engineer Trades Instructor (Apprenticeship, Associate's Degree, Advanced Certification, Experience, etc.) **ENTRY-LEVEL** CAREERS (with Program Completion) Apprentice Tradesman Cable Television Installer Electromechanical Technician Fire/Security System Installer Customer Service Representative Material and Equipment Estimator Power System Dispatcher Electric Meter Technician ACADEMICS **ROFESSIONAL SKILLS** EXPERIENCE - PASSION **ENERGY AND ELECTRICAL TECHNOLOGIES**

#### Tree Trimming Partners

- DTE Energy Workforce Development
- IBEW Local 17
- Oakland Schools Technical Campuses SE & NW Energy/Electrical Technologies CTE programs



Desired Outcomes of Program

- Demonstrate and utilize proper PPE and safety protocols associated with line clearance tree trim
- Introduce students to the necessary tools and equipment required for line clearance tree trim
- Increase student awareness of line clearance tree trim career opportunities
- Build upon student learning from EIF curriculum through Segment Q experience



#### Program Schedule

#### **OSTC - Southeast:**

- Monday, 4/25/2022, 7:50 to 10:20 AM: AM students
- Monday, 4/25/2022, 12:00 to 2:30 PM: PM students
- Tuesday, 4/26/2022, 7:50 to 10:20 AM: AM students
- Tuesday, 4/26/2022, 12:00 to 2:30 PM: PM students

#### **OSTC - Northwest:**

- Wednesday, 4/27/2022, 7:45 to 10:15 AM: AM students
- Wednesday, 4/27/2022, 11:20 AM to 1:50 PM: PM students
- Thursday, 4/28/2022, 7:45 to 10:15 AM: AM students
- Thursday, 4/28/2022, 11:20 AM to 1:50 PM: PM students



Program Pictures: In-Class Overview





#### Program Pictures: Leaf/Tree Identification





Program Pictures: Log Placement Challenge





#### Program Pictures: Harnesses





Program Pictures: Tree Climbing





#### Program Pictures: Ring Toss





Program Pictures: Pulleys and Leverage





#### Thank You!

#### Andrew Maurer andrew.maurer@oakland.k12.mi.us



## Utility Arborist Program at Alpena Community College

Utility Line Clearance/Tree Trimmer Training



## History of Training within the Energy Industry at ACC

- Have provided Certificate and Associates in Applied Science in Utility Technology (lineman) for nearly 50 years
- Offer a Bachelor of Science in Electrical Systems Technology
- Through a Consultation, Education and Training grant from MIOSHA, began providing safety training to utility line clearance and other tree service workers in 2018



## MIOSHA-CET Funded Tree Trimmer Boot Camp

- Discovered training, particularly safety training, is unregulated and left up to the employer
- Participants in the boot camps expressed extreme satisfaction with the standardized training and asked for MORE
- Established relationships with businesses and industry experts
- Identified a part of the Energy Industry in which there is a severe workforce shortage



#### **MiLEAP Grant**

- Awarded a Michigan Learning & Education Advancement Program grant to respond to the economic impact of the COVID-19 pandemic, and to help job seekers make the jump from education and training to employment by delivering short- and mid-term customized training solutions
- The goal of MiLEAP is to get Michigan back to work by helping job seekers find education and training programs in high-skill, high-wage careers that result in industry-recognized credentials
- Focus on short-term training and credentialing



#### Industry Engagement

- Through relationships established with the MIOSHA-CET Tree Trimmer Boot Camps, held multiple meetings and discussions with Tree Service companies to establish a plan – with the goal of assisting with filling labor shortage with trained workers
- Looped in Dustin Brighton (chain saw safety expert) and Lucas Drews (master climber and aerial rescue/EHAP expert)
- Identified Program Director, Walt Wiltse, safety supervisor in the line clearance industry with over 25 years experience



# The Utility Arborist Program is Born

#### (Summer 2022)

- One semester in length
- Summer accelerated program ran eight 32-hour weeks
- Fall and spring semesters are 15 weeks, 16 class-hours per week
- Classes held on Thursdays and Fridays only
- \$3,600 per person
- Students eligible for funding assistance through MiLEAP grant



## Curriculum/Content -Focus on Safety

- Aligned with USDOL Registered Apprentice Standards
- Nearly all hands-on training
- Content based on ANSI Standards
- Engagement with MIOSHA Consultants to dive deep into OSHA 1910.269
- Explanation of MAD, and evaluation of different distances for different voltages





## Facilities

- Coordination with robust Utility Technology program
- Poles placed and power lines run alongside two-track roadways through ACC wooded property
- Lines are not energized but give the real-world feel to work in an environment exactly like what workers will see in the field











## Curriculum/Content -Equipment Use

- Chipper operations
- Chainsaw operations
- Climbing
- Bucket truck operations





## Curriculum/Content -Proper Tree Felling

- Hazards and obstacles
- Height and lean
- Retreat path/escape route
- Notch plan
- Hinge plan
- Back cut plan
- Use of retreat path





## Curriculum/Content -Other

- PPE
- Knot tying
- Electrical Hazards
- Fire Protection
- Traffic Control
- Job briefing and job site set-up



### Credentials

- OSHA 10 General Industry
- CPR/First Aid Certification
- Pesticide Application
- CDL Training



## Industry Showcase

(all participants were aggressively offered multiple employment opportunities)

- Three graduates
- Industry representation from:
  - Nelson
  - Davey
  - Asplundh
  - Kappen
  - Thunder Bay Tree Service
  - Integrity Tree Services



#### **Success Stories**



## Opportunities

- Industry representatives indicate prior criminal history should not be a deterrent
- Program capacity exceeds current student demand
- Workshops/advanced training are being evaluated for current workforce



### **Recruitment Challenges**

- Indeed website indicates the industry does not provide training and therefore discourages workers to pursue this career
- Unknown/misunderstood industry
- Labor force/student shortages



#### How can we help you?

- Open and available staff to discuss curriculum and delivery
- Request promotion assistance
- Let's get the word out!
- Together, we can enhance the industry and create a safer, more empowered workforce



### Thank you!

Please let us know if you have questions or comments!

Dawn Stone Dean of Workforce Development <u>stonedawn@alpenacc.edu</u> 989-358-7293 Walt Wiltse UA Program Director wiltsew@alpenacc.edu 989-358-7284

