

Cuyahoga County Civil Engineering Internship



Jared Kenney

Choose **Ohio** First

Introduction

My name is Jared Kenney, a Senior in Civil Engineering at Cleveland State University. For the summer of 2022, I was a Bridge Inspection Intern with the Cuyahoga County Department of Public Works. While my days started and ended at their offices in Cleveland, my job had me traveling to different structures throughout the county every day. My internship lasted from May through August, and it was secured through the help of the CSU Fenn Co-op advisors.

Learning Objectives

- Build my resume
- Up till then, I had no real-world engineering experience, and I had just finished my junior year. I knew an opportunity like this was invaluable when it comes to my career
- Learn how to work with real engineers.
- Learning to ask questions, and getting to see how they think and solve problems.
- Learn if Civil Engineering, and more specifically a structural career, is where I wanted to go.

Responsibilities

- Spot and record deficiencies
- Take measurements
- Read aloud previous reports to guide inspection
- Take photos
- Sounding concrete



Figure 1. Memphis Road bridge closed for safety



Figure 2. ODOT Snooper helps get up close with hard to inspect areas

Course Content Application

- Shear and Moment
- Understanding where deterioration is expected to be and why
- Factor of Safety
- Redundancy plays a big role in bridge design. Those without redundancy are known as “fracture critical”



Figure 3. Wading through a culvert

Lessons Learned

More than anything, I learned the anatomy of a bridge. I was also able to learn about various bridge types and how they are made. By the end of the summer, me and the other intern were able to run through an entire inspection on our own. I saw everything from delamination, to spalling, leaching, cracking, scour, etc. I even got familiar with appraisal criteria, and rating bridges from 1-9.



Figure 4. Columbia Road Lift Bridge

FUTURE WORK

During my summer with the county, I got to see a part of engineering outside of the office. I also got a feel for what a public or government job is like. For the next step in my career, I am currently in a much different position. I am an intern at Pennoni, doing transportation engineering work. I am planning on moving to full time with them upon graduation this fall.

Acknowledgments

Erin Elosh, CSU Fenn Co-op Sr. Manager

James Hazimihalis, Chief Section Engineer