

## RECRUITMENT

## CoolCareers Program

*Faced with few applicants to fill needed design and construction technician positions, the Iowa Department of Transportation developed a novel marketing campaign to recruit new employees and designed a technical training program to prepare them for practice. The DOT campaign promoted the ‘coolness’ of transportation careers and championed the Iowa DOT as a great place to work. The CoolCareers Program curriculum involved 10 weeks of classroom training and a 3-month field training assignment before participants were appointed to permanent jobs.*

In 1998, members of the Iowa Department of Transportation’s (DOT’s) management team and the recruiting committee were meeting to discuss new approaches to attracting needed engineering technicians to support the Department’s growing list of highway construction and maintenance projects. An intriguing idea surfaced—if the Department couldn’t attract applicants with the necessary skills, why not create a recruiting program to target entry-level employees and provide the technical training that would start them on a career with the DOT. The idea was original, but the Department recognized its merit and began a yearlong effort to bring the concept to reality.

As the program began to take shape, the Department faced two challenges: Design promotional materials to catch the attention of the intended audience and develop a three-month technical curriculum to prepare participants for work in the field. As an incentive, all participants would receive full-time wages and benefits during the training.

### *Not Your Ordinary 9 to 5*

The Highway Division management team funded development of a polished promotional brochure. *Not Your Ordinary 9 to 5—CoolCareers* was designed to attract attention and generate interest. Program coordinators identified the target audience as entry-level workers, young people just thinking about career opportunities. The brochure promoted the free classroom and field training, and the benefits of working for the Department. The brochure also advised: “The study

*From the CoolCareers brochure:*

## *Not Your Ordinary 9 to 5—CoolCareers*

### Iowa Department of Transportation Engineering Technician Training Program

What does the CoolCareers employment program offer?

- FREE educational courses
- Immediate full-time employment
- Exceptional working environment
- Advancement opportunities
- Variety of career choices
- PAID on-the-job training
- A diverse workforce
- An outstanding WAGE and BENEFIT package



program and job training will be demanding...., however, the rewards for those meeting these demands make the challenges worthwhile.”

The brochure became the centerpiece of a marketing blitz to high schools, technical schools, and college freshmen classes around the state. Recruiters provided brochures for the state’s workforce development centers and CoolCareers ads appeared in newspapers statewide and on the Internet. It was promoted through word-of-mouth within the Department and to the DOT’s partners such as the state’s AGC chapter.

As promotional materials were developed and distributed, another DOT workgroup was hard at work identifying curriculum for the 10-week classroom portion of the program. The DOT contracted with the Center for Transportation Research and Education (CTRE), which is affiliated with Iowa State University. Together, they defined the technical content and identified DOT technical experts to deliver specific technical modules.

### *Candidate Selection*

Following a year of hard work to publicize the program and develop classroom and field work curriculum, CoolCareers became reality. In January 1999, candidates submitted completed application forms, cover letters, and resumes for 50 Engineering Aide I positions.

Beverly Abels, director of the DOT Office of Employee Services, admits that they were

nervous that they would not attract enough qualified applicants. “We hoped that we would get at least 200 applications,” she says.

“We even had a fallback plan so if we didn’t get enough applications in January, we’d accept a second round in March.”

They received more than 500 applications. Beverly acknowledges that “we seriously underestimated the interest, but we’d obviously hit a real niche that our normal recruiting programs missed.”

The DOT also miscalculated the applicant profile. “There were a few from school-to-work population, young people just leaving school and entering the workforce,” says Beverly Abels, “But the majority of applicants were in their late 30s and 40s, essentially the parents of our target population.”

The applicants also brought a diverse range of skills. A few had engineering degrees but weren’t working in the field. One applicant was working on a Ph.D. in materials research. Other applicants had moved around in the job market and were just settling down to start families. According to Gerry Ambroson, coordinator of the CoolCareers program, “They were individuals ready to start a career.”

The DOT team evaluated each resume for work history and educational background and identified 247 for follow-up interviews. The program attracted applicants from across the state, so teams conducted interviews in each of the six DOT Districts. Job openings included the gamut of DOT

programs from highway and bridge design to highway construction inspection, materials testing, and surveying. Each interview team included representatives from construction, bridge, right-of-way units and the materials labs, and the district office. Following interviews, offers were extended to 67 candidates, and 50 applicants accepted. Participants received full-time wages and benefits during the training.

### *In the Classroom*

The CoolCareers classroom curriculum began in June 1999, and combined classroom instruction, reading and self-study, computer laboratory work, and field demonstrations. Duane Smith, CTRE’s director of outreach and the Iowa LTAP coordinator, worked with the DOT team to develop the CoolCareers curriculum, which included math, computers, highway design, construction, materials, real estate, surveying, and computer-aided drafting and design. Participants learned about continuous quality improvement, team building, and workplace safety.

There was also an extensive orientation to the DOT, which gave participants and some employees a broader understanding of the Department. Drawing on the DOT’s technical experts introduced participants to the different career options available within the DOT, and to the DOT organization. Several DOT employees say that their involvement in developing the CoolCareers gave them a new insight into their own organization.

## Definitely a CoolCareer

I saw a newspaper ad about CoolCareers and it sounded like a good opportunity. My background was in drafting and engineering, but I was working construction because it paid better.

I thought I was pretty well prepared for the classroom portion, given my background. I was relieved that class wasn't a group of "20-somethings." Many of us were in our 30s, so we could console each other, especially with the math part. I knew I was rusty, and the course was a good brush up.

I was also surprised at how much I didn't know, especially about reporting procedures for vouchers and materials tracking—processes I use every day now. The organizers did a great job of putting together a program that really showed us the variety of work the Department does.

You learn a lot in class, but there's nothing like working in the field. I had a great field assignment with the New Hampton Resident Construction Office and I learned a lot from my coworkers.

I worked on a district right-of-way survey crew for about a year and a half, and in March 2001, I moved up to a senior engineering tech position. The state's moved much of its restoration, redesign, resurfacing, and maintenance project design function out of Ames, so I'm involved with lots of different things, including road improvement and rehabilitation projects. It's a good job.

### **Layton Zbornik**

Senior Engineering Technician  
District 2 Office  
Iowa DOT

Duane Smith's experience with the LTAP program proved especially helpful for the math and surveying aspects of the curriculum. "It was clear early on that math and surveying would be a problem for several in the class," he relayed, "but we were able to draw on many LTAP programs designed to develop just those skills. So it worked."

Some participants did struggle with the curriculum. As Gerry Ambrosion reviewed the program during the first class session, he cautioned that some homework might be necessary. "I spelled out where participants were expected to be by certain dates, and that it was their responsibility to ensure that they were current with all work."

Sheri Heri started her DOT career in the CoolCareers program. She now works in a materials testing lab. She was surprised by the technical content of the classroom. "I wasn't expecting it to be so school-like," she recalls, "but we covered material quickly, and at times, it seemed overwhelming. About half way through, I found myself wishing I'd had a good technical brush up before I started. Overall, the people who put together the classroom part did a great job, especially the math part."

After losing two participants, one to another state agency, the other to return to graduate school, 47 participants successfully completed the program.

### *Into the Field*

The CoolCareers' classroom sessions took place in Ames at the DOT's headquarters facility. Conversely, the field training assignments took advantage of road construction projects throughout the state. It was literally the time for getting down and dirty.

In August, participants began varied field assignments throughout the state. For example, in northeast Iowa, where several large projects were under way, participants could rotate through the entire technical gamut on individual projects. Other participants moved among different projects to get the on-the-job training experience that put the classroom preparation to practice. Typical field assignments included:

- Inspecting construction, grading, and culvert projects.
- Performing tests on concrete, rock, and soil.
- Operating transits, levels, and rods or chains on a survey crew.
- Obtaining and conducting soil samples.
- Performing general engineering tasks.

Participants also worked with a variety of materials including concrete, PCC, and asphalt. A popular place to be on frosty fall Iowa mornings was working close to the warm asphalt machine.

The success of the field experience involved what Beverly Abels refers to as “heavy-duty mentoring.” Sheri Heri found the field experience to be excellent. “It was tough at first because you’re an outsider,” she says, “but once you’re there you become part of the team. For example, I worked with a survey party chief who was good at testing me, but it was OK because I learned a lot.”

CoolCareers participants reported to their permanent work assignments on the Monday after Thanksgiving, 1999. The DOT needed technicians throughout the state and program staff worked hard to accommodate participants’ geographic choices for employment. According to Gerry Ambrosion, “We tried hard to accommodate everyone’s first or second selections.”

### *Looking Back and Looking Ahead*

Beverly Abels always viewed CoolCareers as a short-term solution, but she and other Department officials learned

a great deal during the process. “It was a huge project to coordinate,” she says, “but the synergy it created in the staff and the teamwork generated was very inspiring

Beverly sees one of the most interesting aspects of the program as helping the Department think about its future workforce and technical needs. The DOT also enjoyed some unanticipated benefits. For example, the state uses a centralized personnel agency. The DOT worked closely with the agency to get CoolCareers positions classified and establish pay levels to attract the kind of applicants the Department needed. There was also the process of getting participants to field assignments and then matching employees with job opportunities. One result—the state developed a new policy for reimbursing employee relocation expenses.

CoolCareers was a one-time program. As Beverly Abels points out, “The experience of developing the technical curriculum has opened channels to community colleges. We’ve now established a two-year highway technician training program that will be piloted this year and available statewide next year. (See link provided under *For more information.*) We think this is where we’ll find the next generation of highway technicians we’ll need.”

CoolCareers, according to the transportation professionals and program participants, was definitely exhausting, exhilarating, and well worth the effort.

### *CoolCareers Update*

The recent economic slowdown nationwide also affected the Iowa

DOT and resulted in a structured reduction in force that will eliminate more than 400 positions in the Department. CoolCareer graduates hold many of these positions. According to Beverly Abels, “Our goal is to retain as many employees as possible through re-training or cross training, hiring from within, and managing vacancies. The curriculum developed for the CoolCareers program makes its graduates ideal candidates to transition into different positions, in some cases, at higher pay grades. The private sector also knows the caliber of our workforce, they’ve ask permission to recruit some of our technical employees. The active cooperation between the DOT, our unions, and the private sector speaks well of our industry and the future of our Department.”

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