

Mouse Trap Winner #1

The Guardrail Reclaimer

In Colorado, creating a culture of innovation lands the Gunnison County Public Works Department (Department) in the top spot for the Build a Better Mousetrap Award sponsored by the Federal Highway Administration's Office of Innovative Program Delivery-Center for Local Aid Support. With an increase in guardrails throughout the county, the crews at the Department found themselves spending more time and money keeping guardrails clean from unwanted material and sand.

An accumulated amount of debris underneath and between the spacing of the post and decrease in guardrail height can create safety issues for the traveling public. Traditionally, cleaning efforts to remove the debris required a lot of manpower, resources and time. The Department needed a solution so they began talking to their work crews and other districts in the State for ideas. Martin Schmidt, a foreman, with the Department says, "We were focusing on areas where we sand heavily in the winter because overloaded trucks were constantly spilling material onto the roadways and guardrails."

After considering several options, the Department crafted the Guardrail Reclaimer, which consisted of a bull blade and a scraper that fits over the forks of a skid steer. With this design, the Guardrail Reclaimer can adjust the blade and scraper to work with guardrails of various heights and post space widths. Martin says, "We built the Guardrail Reclaimer out of non-inventory items and scrap metal in the shop. The guys really love it because it eliminates a lot of sweat labor." To design, build and implement this new innovative process to clean debris was fairly inexpensive, in total the Department spent \$650. The benefits and savings of this innovation consisted of less manpower, equipment and time. The County is now able to clean more guardrails, more often. It also allows for more efficient use of Department resources on other work activities.



Figure 1. Scraper. Picture provided by Gunnison County Public Works Department



Figure 2. Scraper with the Bull Blade. Gunnison County Public Works Department

The Department recognized the support of upper management really motivates the crew to come up with great ideas that can be tried for implementation. The team appreciates the culture of Gunnison County which is “the way we’ve done it, doesn’t mean it’s the only way to do it.”

Figure 3. Modified skid steer with a bull blade and a scraper.



Picture provided by Gunnison County Public Works Department

Figure 4. Modified Skid steer removing debris from underneath guardrail.



Picture provided by Gunnison County Public Works Department

Gunnison County Public Works Department Director, Marlene Crosby says she is thrilled about her team placing first for the Build a Better Mousetrap Award! She says her approach to innovation is a nothing ventured, nothing gained approach. Some things will be successful, marginally successful or not so successful.” She encourages all agencies to look past the work of the employees and provide them with the tools and encouragement to come up with solutions to improve the work they do.