What was the challenge you set out to solve?

We wanted to create an easier and safer way to hang roadway signs. Previously we would lean a ladder on the sign post or we would have to take the sign post down so that we could repair/replace the sign.

How did you develop and implement your solution?

We thought of something that we could make similar to a bucket truck. We looked at our existing chassis and saw space for a swinging cage on the backside of the truck. Keeping safety in mind, we placed the cage on the driver's side rear of the truck so that when the sign technician pulls to the opposite lane to complete his repair, he will not need to walk in traffic and directional lights are facing on-coming traffic.

What did it take to make this solution a reality?

It took us 24-28 hours to make and install the cage. We welded the cage using a band saw, cutting torch and drills. We used spring-loaded pins to create a locking mechanism for traveling and to create stability while working. The cage was placed on the existing chassis with one pipe welded to the chassis and the other slipped over the top to allow the cage to swing with a flat plate and holes for the spring-loaded pins.

What was the cost of implementation?

The cost of implementation was approximately $1,350.00, with $1,200 being in labor & $150 in materials.

What was the impact and results of your efforts?

When replacing our life-cycle signs, the sign technician can now replace up to 20+ signs per 8 hour day. This increased productivity by 75%. It has also created a safer way to install signs without having to pull posts or using a ladder. Another advantage of having the raised platform is that it has increased our ability to cut brush, such as large hanging branches, away from signs without the need to have additional equipment.