

# Paying it Forward

Ryan Dunn, an engineer and veteran of the telecommunications business, founded Excavation Alert Systems in 2012. That same year, he was introduced to Dr. Terry Woodworth, PhD, senior business analyst and chief scientist at SHINE Systems & Technologies. SHINE had been engaged by the Virginia SBDC Network to help execute their Innovation Commercialization Assistance Program (ICAP). ICAP was inaugurated in 2012, and Dunn was one of its first participants.

Dunn had invented a cost-effective solution to the most pressing problem of the oil industry and other utilities—people digging holes and hitting pipelines, those lines with millions and millions of dollars flowing through them. The utility experts told him his product was great, but they couldn't afford it unless he could design a model that cost under \$10,000 a mile.



“Ryan came to us as a very smart businessman who understood his technology. We helped him focus on identifying and pursuing prospective investors—doing his due diligence by talking to utilities companies to learn what they needed in order to be truly interested in his product. His persistent efforts to make his product meet the needs of the eventual users helped him receive successful investment in his venture,” said Woodworth.

Dunn found an ingenious way to bring down the cost of excavation damage by laying smoke triggers between two layers of tape. Once the tape is punctured, a smoke signal activates, alerting the operator to stop digging. Refining the prototype for manufacture was the final step. Dunn

## Excavation Alert Systems

Ryan Dunn

leveraged his efforts in developing a more industry-relevant prototype to obtain a \$1.5 million grant from the Virginia Tobacco Region Revitalization Commission. Excavation Alert has created three jobs and secured \$2.275 million in capital. Dunn's business is now poised to gain a foothold internationally on a steep growth curve.

In the summer of 2015, after ICAP was re-started with funding from the Commonwealth, a new client was accepted into the program who needed help with an innovation having applications related to Dunn's expertise with utilities. Woodworth approached Dunn, who was happy to “pay it forward” by acting as an ICAP subject-matter expert to help the new client.

***In addition to helping a new participant in ICAP, Dunn has created 3 jobs and secured \$2.275 million in capital. Dunn's business is now poised to gain a foothold internationally on a steep growth curve.***