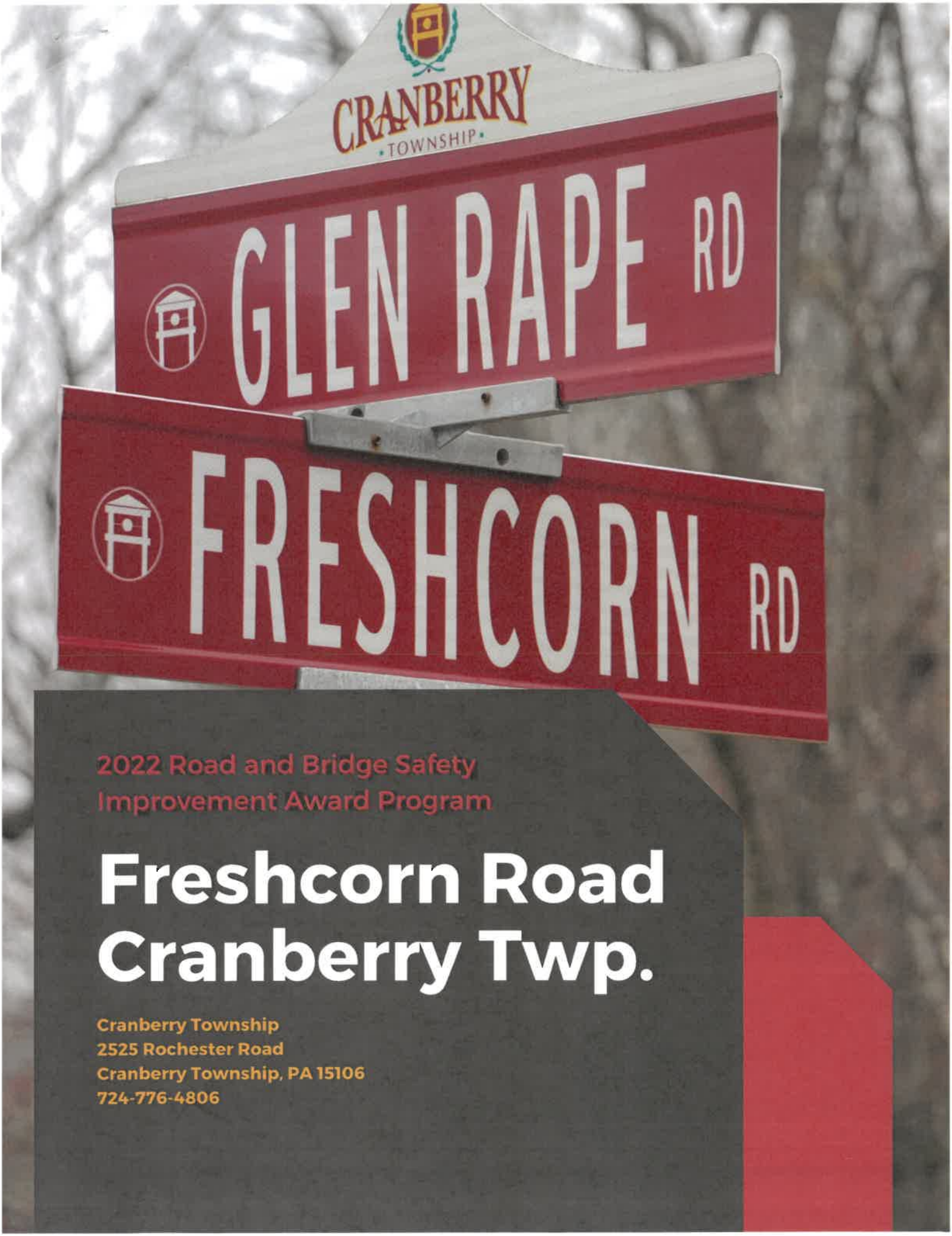


2022 Road and Bridge Safety Improvement Award Program

Freshcorn Road Cranberry Twp.

Cranberry Township
2525 Rochester Road
Cranberry Township, PA 15106
724-776-4806

Overview

On time" and "on budget" is the goal of any municipal government project.
For Cranberry Township's planned improvements to Freshcorn Road, those touchstones weren't good enough.

Instead, using innovative methods and in-house manpower, the project was completed "ahead of time" and "under budget. Upgrades on the 2,800-foot stretch of road were completed a year ahead of schedule and nearly $250,000 under the original budget.

The project addressed safety issues along the section of Freshcorn Road between Kingston Avenue and the Jackson Township line by widening the roadway and improving the line of site, among other improvements. The stretch of road is a main artery for those traveling to the nearby Cranberry Highlands Golf Course.

The Township's Department of Public Works Streets Division crew performed grading of the embankment to improve the line-of-sight at the intersection of Glen Rape and Freshcorn Roads, along with widening and realigning sections of the road to bring it up to current standards for roadway width, horizontal and vertical curves, and for safety.

A reclamation process was used to rehabilitate the pavement by recycling the existing asphalt pavement at a significant cost savings. The roadway was then repaved using funds from the liquid fuels repaving project.

All work on this project was completed by in-house crews to save cost, with the exception of contracted services for design and paving.

HRG Inc. was selected to design the project and did so after investigating via survey and determining right-of-way, line and grade design, and utility issues. The $13,550 contract came in addition to a $51,285 agreement for full depth reclamation to Midland Asphalt Materials Inc., and an $85,062 contract with Youngblood Paving. HRG began the design phase in fall 2020, with work beginning in June 2021.

The total project cost, with an original engineering estimate anticipated to be roughly $450,000, totaled just $200,234 thanks to innovative practices and agreements with contracted companies.

The project is another example of the Township's commitment to infrastructure improvements that meet the needs of residents and businesses of the community. That includes working with representatives from PennDOT District 10, the Southwestern Pennsylvania Commission, and the Pennsylvania Turnpike, as well as neighboring communities, on projects that impact the greater good of the community.

Safety

Freshcorn Road was originally created and opened when Cranberry Township was a small, rural farming community.

As the Township has grown, traffic has also increased and put a strain on such roadways. Additionally, as the Township has generated and implemented new standards, the need to identify and replace outdated roadways has become a focus.

Freshcorn Road featured narrow lanes, and the surrounding topography created issues with sight distance. Those issues were contributing factors to three of the four crashes that took place along the road over a 5-year span. In those instances, vehicles left the roadway, and on two occasions needed to be removed via tow truck from the surrounding hillside and ravine.
With now over 1,000 vehicles traveling the road each day, it was identified as a project in need of repair and reconfiguration.

Crews removed an embankment, which improved sight distances at the intersection of Glen Rape and Freshcorn Roads. They also widened the road and lowered the vertical curve to further improve visibility.

More than 900 feet of new guiderail was installed, and a widened shoulder was added to improve safety for those walking or biking in the area.

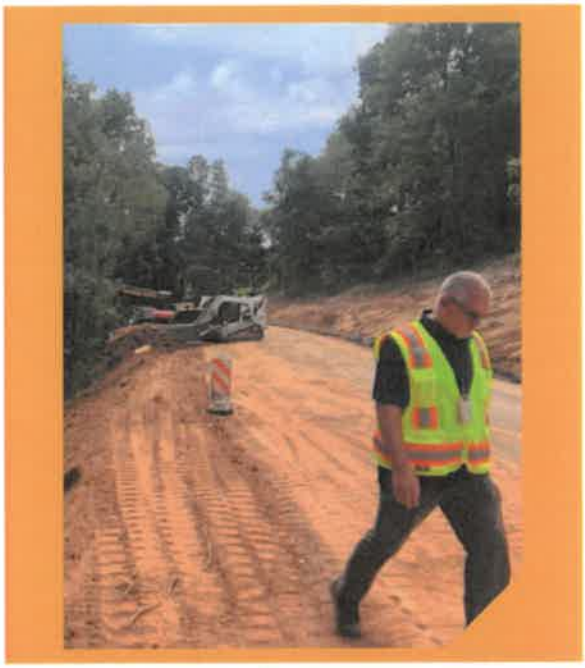
Resource Innovation

Though the Township budgeted $450,000 for the project as part of the Capital Projects identification process, managers within the Public Works Department saw an opportunity to take better advantage of existing resources.

Grading and embankment removal work, as well as drainage improvements, were completed by Public Works crews, who also returned at the end of the project to do final grading, install new signage, and seed the area. Grounds and traffic crews assisted when additional manpower was needed. Members of those crews shared their pride in having the opportunity to contribute to such an important project while also improving their community.

While those efforts resulted in a significant cost savings, the project benefitted greatly from the full depth reclamation (FDR) process. It allowed for 1,200 tons of millings to serve as the base material for the new roadway in leu of limestone.

This helped reduce the amount of materials and required manpower for the project and eliminated expensive hauling costs to remove and dispose of those millings as planned. Cranberry Township has successfully utilized the FDR process on several other Township road upgrade projects in the past and will continue to use in the future do to the cost benefit and stability of the finished product.



This process ultimately shortened the length of the project timeline and allowed work to be completed in one construction season. This minimized the impact to residents and motorists as just one 3-day closure was needed.

With the cost savings from the bulk of the project, the Township was able to amend an existing paving contract and complete the final paving work – originally planned for summer 2022 – in the fall of 2021. This also eliminated the need to re-bid that work, saving both time and money.

Project Benefits

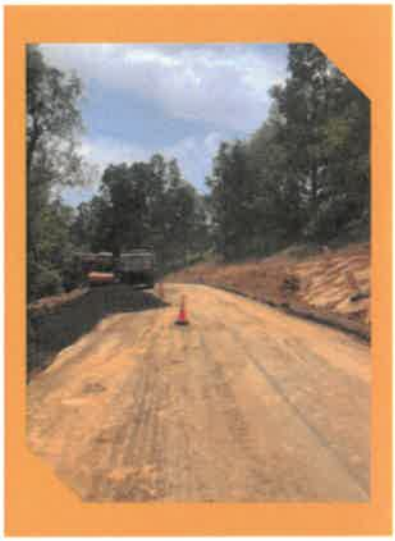
Safety was and remains the most important improvement of the Freshcorn Road project.

As a direct link between Cranberry and Jackson Townships and running parallel to the heavily traveled Route 19, the road in recent times has served as a secondary route for many residents. Creating a reliable roadway with clear lines of site and ample lane widths ensures those motorists have safe travels.

Additionally, the widened roadway is easier for utility vehicles and snowplows to navigate, and allows more space for motorists to navigate around those larger trucks.

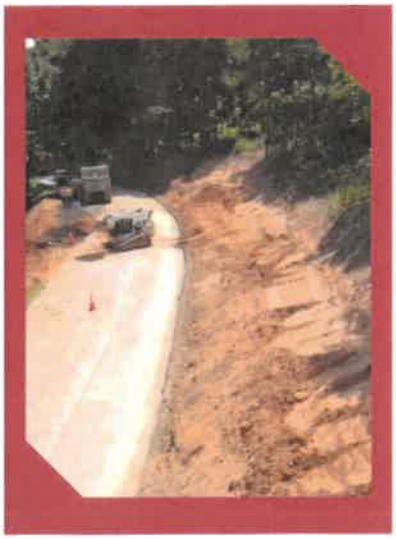
Cooperation

As with every Township project, the upgrades to Freshcorn Road could not have occurred without significant assistance from internal and external partners.
Grading easements were donated by two adjacent property owners at no cost to the Township, which not only saved money but sped up a sometimes-lengthy process.



The project was planned around the Seneca Valley School District schedule, with work not beginning until summer break began. When school resumed in the fall, safety of busses remained a priority and all efforts were made to reduce transportation issues. Similar discussions were held with Jackson Township officials, as well as waste management companies that service the area.

The Township also coordinated with area residents to ensure they maintained access to their property and hired traffic control crews to maintain traffic.
The lone 3-day closure was communicated in advance to residents via several communications platforms, and to the surrounding region via the Township's Communications Department.



The Communications Department also provided frequent updates on the project via the Township website and social media feeds. Impacts to traffic were also communicated via the Township's text message and email alert system.

Conclusion

The Freshcorn Road restoration project was the most recent example of Cranberry Township's proactive approach to infrastructure maintenance and improvement.

Using innovative approaches to the work while also relying on entrenched relationships with the community, the project was successful in not only improving safety in the area, but doing so in the most cost-effective and efficient way possible.

More information can be found at cranberrytownship.org/freshcorn.

Flyover video of the project can be found at facebook.com/watch/?v=859957514919146.