2024 Annual Summary Report Pennsylvania Dirt, Gravel, and Low Volume Road Maintenance Program

After

June 2025

Before

<u>Cover Photos</u>: **Ridge Road, Mt. Holly Springs Borough, Cumberland County.** Ridge Road was a constant source of sediment pollution and was at times almost impassable for local residents. This mile-long road improvement project was a collaborative effort between the Cumberland Conservation District, Mt. Holly Springs Borough, and DCNR Forestry. Over 6,000 tons of fill was used to elevate the entrenched roadway, and 25 crosspipes were added to address drainage issues.



What is the DGLVR Program?

Pennsylvania's Dirt, Gravel, and Low-Volume Road Maintenance (DGLVR) Program provides education, technical assistance, and grant funding to local public-road-owning entities throughout the state. The PA State Conservation Commission administers this (\$28M annual) Program statewide, while County Conservation Districts manage the program locally and provide grant funding to public municipalities. The Program's goal is to implement Environmentally Sensitive Maintenance Practices aimed at reducing the environmental impacts of public roads while reducing long-term maintenance costs. The Penn State Center for Dirt and Gravel Road Studies (Center) provides education, outreach, and technical assistance for the Program. More information: www.dirtandgravelroads.org.

Better Roads, Cleaner Streams





Urban and Suburban Paved Low Volume Road Improvements

Lancaster County, Wrightsville Borough, Limekiln Ave: "Green Infrastructure" projects in urban areas, such as the "infiltrating alley" here, typically use buried infiltration beds to capture runoff. Rain gardens and infiltration swales are other common practices in urban areas and may be eligible for MS4 credits.

The DGLVR Program funds a wide variety of projects and practices throughout Pennsylvania. Below are just a few recently completed sample projects to highlight some of the commonly used DGLVR practices.



Stream Crossing Replacements

Elk County, Fox Twp, Gardner Hill Road: The undersized pipe here was prone to clogging and created a complete fish barrier in Cherry Run, a naturally reproducing trout stream. A much larger structure was installed and the streambed was rebuilt to provide continuity and stability through the road.



Road Drainage Improvements

Clearfield County, Montgomery Twp, Benzie Road: Road fill, new crosspipes, underdrain, and durable surface aggregate are the hallmarks of a typical DGLVR project. These practices are designed to reduce sediment pollution, while providing the municipality with a better road requiring less maintenance.



Bank Stabilizations

Warren County, Sheffield Twp, Spicer Road: Steep road banks are prone to failure, sometimes endangering the road itself. In cases such as this, where the stream is eroding the road bank, the bank can be rebuilt using logs, rock, and geosynthetic fabric to establish a stable slope.

Who Benefits from the DGLVR Program?

- <u>PA Municipalities</u>: 99% of total DGLVR grant funding has gone to local municipalities for projects on public roads. This supplemental funding makes a big impact in small townships with tight budgets.
- <u>Conservation Districts</u>: Each of Pennsylvania's 66 Conservation Districts administers the DGLVR Program within their county. In addition to funding staffing and education efforts, the DGLVR
 Program has created valuable relationships with local municipalities that reach beyond the Program itself.
- Local Businesses: Nearly all DGLVR funding stays at the local level and is spent on local materials, equipment, and labor. Many local businesses benefit from these projects including quarries, local contractors, and suppliers of materials such as fabric, stone, and pipes.
- General Public: The Program also improves access for anyone who lives, works, farms, or recreates using Pennsylvania's extensive rural road network.
- <u>PA Streams</u>: Road improvement projects in the DGLVR program must have an environmental benefit, with a focus on reducing runoff and sediment pollution to waters of the commonwealth.

Stream Crossing Replacements

In 2022, the DGLVR Program adopted a progressive design and installation standard for stream crossing replacements. These standards require larger structures and focuses on channel improvements to provide continuity and stability through the road. 2024 saw the first few projects completed under this new standard.

- Road Stability and Reduced Maintenance: Undersized culverts are prone to clogging, flooding, and road washouts. These new structures are designed to pass larger flows and eliminate most regular maintenance.
- Stream Improvements: These projects provide environmental benefits by reducing erosion and scour, establishing a stable stream through the road, and providing aquatic organism passage.
- Scope of Problem: Stream Crossing replacements are some of the most complex and costly improvements for townships. Over 140,000 public road stream crossings exist in PA. The DGLVR Program is working closely with other state entities to promote stream continuity and more sustainable crossings.

"The bridge is environmentally sound as there is now a larger opening for aquatic passage. We are a small township and would not have been able to do this project ourselves. I would like to see more money allocated to the DGLVR program as I believe every township could use this type of funding to help rebuild their infrastructure." -Hartley Township, Union County (owner of project below)



Union County, Hartley Twp, Polly Pine Road: The undersized double pipes shown here were prone to clogging and overtopping. The new structure will accommodate flood flows while providing channel stability and ensuring fish passage. The newly installed structure saw over 7 inches of rainfall from Hurricane Debbie just 3 weeks after installation, with no adverse effects.



This document was prepared jointly by the PA State Conservation Commission (SCC) and the PSU Center for Dirt and Gravel Road Studies through a contract with the SCC. Figures are based on GIS data supplied by conservation districts in January 2025. For more information, visit www.dirtandgravelroads.org.



(\$/\$ match) Although not required, the DGLVR Program averages \$0.36 in-kind for every \$1 in grant funding. "In-kind" is a match of materials, equipment, or labor from grant recipients.

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