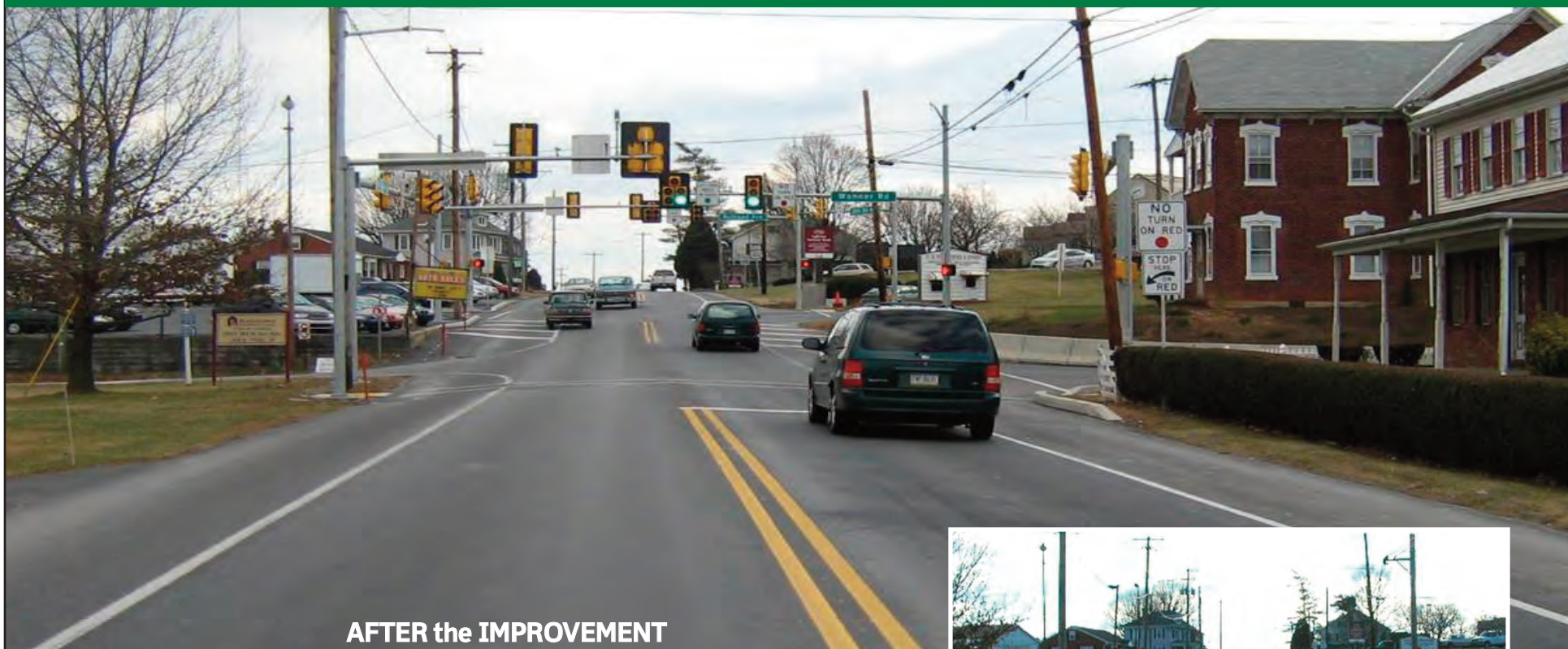


27th Annual Road/Bridge Safety Improvement Program

Earl Township Roadway and Intersection Improvements **2009** Award Winner



AFTER the IMPROVEMENT



BEFORE

PROJECT DESCRIPTION

Earl Township consulted with ELA Group, Inc., regarding potential improvements along 28th Division Highway (U.S. Route 322) that could reduce accidents (as well as accident severity) at the two closely-spaced intersections of Wanner Road and Railroad Avenue. Through close communication with ELA, township officials created an alternative that would have the potential to mitigate accident problems while remaining within the fiscal constraints of the township's budget, avoid public opposition and avoid intermittent traffic signals along U.S. Route 322. This involved signalizing the Wanner Road and Railroad Avenue intersections along with Route 322, and prohibiting both westbound and northbound left turns at the neighboring intersection at Farmersville Road. The Farmersville left turns were restricted both to reduce accidents and force left-turning vehicles to use the newly-signalized intersection at Wanner Road.

SAFETY

Reportable and non-reportable accidents were frequent at these intersections, and community members and the public requested improvements that would result in safer and less-congested areas. Neighboring property owners went so far as to create their own signs warning drivers to be aware of the unsafe conditions. Route 322 is a major arterial highway through the community, and is a major truck route through the county. However, tractor trailers, farm equipment and other heavy vehicles frequently use the side streets (Wanner and Farmersville Roads, Railroad Avenue). The intersections are also used by horse and buggies, scooters, bicycles, pedestrians and schoolchildren.

MEASUREABLE IMPROVEMENT

Signals can be expected to significantly reduce the severity of accidents. They require street-side traffic to wait for a predetermined gap in mainstream traffic prior to proceeding, limiting observed accidents of vehicles proceeding without clearance. The construction of larger-turning radii and widened, shared shoulders allow heavy traffic to safely turn without disturbing neighboring properties or encroaching into oncoming traffic lanes. Signals include painted stop bars, allowing for uninterrupted heavy vehicle turns. The signals have not been in place long enough to measure accident mitigation, but the public has been vocal about the improvements.

ALTERNATIVES CONSIDERED

One alternative was to realign Railroad Avenue to intersect Route 322 at Clearview Drive and restrict left turns at Farmersville Road while signalizing Wanner Road and Railroad Avenue. Another was to relocate a section of Wanner Road to connect to Railroad, and signalize both the Farmersville and Railroad intersections. These alternatives included significant right-of-way acquisition along with possible structure demolition and/or relocation and, thus, were deemed too costly. A solution was reached after consultation with ELA Group, where the Earl Township supervisors decided on a less-costly, but still effective, alternate that avoided numerous intermittent traffic signals.

RESOURCE UTILIZATION

State Funds were provided with the help of the Department of Community and Economic Grants (2007 Economic Growth and Development Assistance, \$50,000 with Sen. Noah Wenger's support; 2008 Community Revitalization, \$10,000 with Sen. Mike Brubaker's support, and another \$10,000 with Sen. Gordon Denlinger's support). Other funds came from the Lancaster County Planning commission (2007 transportation grant, \$201,000). Another \$39,750 came in specified funds from private sources.

TIMELINESS

This section of Route 322 was listed as a top priority in Earl Township's Comprehensive plan. The high traffic volumes, along with the side-street delays and high number of accidents, created an unsafe condition for both the township's resident and motorists passing through. In addition, Route 322, Railroad Avenue, Wanner Road and Farmersville Road are utilized by the local farming communities, including the Old Order Amish and Mennonite communities. The project, once the township decided to move forward, took less than two years to complete from inception to completion.



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DEPARTMENT OF TRANSPORTATION