



### **CHALLENGE**

WHEN INTERSTATE 70 IN PENNSYLVANIA HAD SEVERAL SAFETY AND EFFICIENCY ISSUES, PENNDOT NEEDED A COST-EFFECTIVE SOLUTION TO OVERHAUL THE AREA ROADWAYS.

## **SERVICES**

- · Bridge Engineering
- · Environmental Planning
- · Highway Engineering
- · Highway Lighting Design
- · Hydrologic and Hydraulic Modeling
- · Noise Mitigation

- Right-of-Way
- · Stormwater Management
- Streams and Waterway Mitigation
- · Subsurface Utility Engineering
- Traffic Engineering
- Transportation Management

# **AWARDS**



American Society of Highway Engineers (ASHE) Pittsburgh Section



2019 TRANSPORTATION PROJECT OF THE YEAR

Engineers' Society of Western Pennsylvania (ESWP)

PROJECT OF THE YEAR

American Society of Highway Engineers (ASHE) Northeast Region 2018 PROJECT OF THE YEAR

American Society of Highway Engineers (ASHE) Southwest Penn Section

## BENTLEYVILLE INTERCHANGE

The Bentleyville Interchange project on I-70 in Pennsylvania was previously home to unsafe and inefficient travel conditions. Narrow shoulders on the median side, sub-standard horizontal curves, inadequate acceleration and deceleration lanes, closely spaced interchanges, and insufficient vertical clearance at underpasses are just some of the issues that travelers dealt with while traveling this portion of I-70.

PennDOT District 12-0 decided it was time to improve the area. PennDOT implemented a partnership between the district, Golden Triangle Construction

(the contractor), ms consultants (the designer), and JMT, Inc. (construction inspection). This partnership would go on to provide efficient project delivery and clear lines of communication throughout the project.

The Bentleyville Interchange project included a number of innovative ideas, new technologies and cost-saving elements that led to a very successful project. The updated, safer, and more efficient transportation system, including the reconstruction of two mainline interchanges, was substantially completed in late 2018.

#### PROJECT DETAILS

The Bentleyville Interchange project is located in three municipalities: Somerset Township, Fallowfield Township, and the Borough of Bentleyville and includes:

- Median and shoulder widening
- Curve realignment
- · On- and off-ramp reconstruction
- Extension of acceleration and deceleration lanes
- Reconstruction and paving of over 9,000 feet of S.R. 0070
- Realignment and reconstruction of nearly 5,000 feet of S.R. 2040
- Addition of a center left turn lane and sidewalks to S.R. 2040

- Reconstruction of nearly 1,200 feet of S.R. 0917 and realignment and raising over S.R. 0070
- Removal of two interchange ramps
- Alterations to S.R. 2044, including a total combined reconstruction of 1,800 feet of local roads
- Replacement of the S.R. 0070 mainline bridge with a 3-span, 345-foot-long structure, carrying traffic over Pigeon Creek, S.R. 2040 and the Norfolk-Southern Railway
- Replacement of the S.R. 0917 bridge over S.R. 0070
- Removal of two bridges
- · Construction of a single lane roundabout
- Installation of traffic signals