



Eisenhower Drive Extension, Adams & York Counties

Description of the Problem

Eisenhower Drive, SR 0094, and SR 0116 travel corridors are the main thoroughfares through McSherrystown and Conewago Township. These roadways exhibit congested conditions, with level of service (LOS) rated as E and F at some non-signalized intersections, and a heavy cluster of accidents, some involving pedestrians, between 2010 and 2014 along SR 0094.

The Eisenhower Extension Project recommendations will include transportation improvements aimed to address the failing level of service (LOS), as well as improve safety within the study area.

Study Area Description

The project lies within the Piedmont Physiographic Province which consists of rolling lowlands and shallow valleys separated by rounded, isolated low hills. Outside of McSherrystown and Hanover Boroughs, the study area is mainly active farmland, but this land use is over time being replaced by residential, industrial and commercial development. The focus of the economic and community development, including retail and other commercial strip development, restaurant and residential growth along with the existing park services and industry has primarily occurred within the Boroughs of McSherrystown and Hanover. The potential for future development is extending into the surrounding municipalities.

The study area has various environmental features, including aquatic resources, agricultural land, historic resources, and parkland. The following streams and their associated wetlands and floodplains are the main aquatic resources in the project area: South Branch Conewago Creek, Plum Creek, and an Unnamed Tributary to South Branch Conewago Creek. A large portion of the study area consists of productive agricultural lands, including Agricultural Security Areas. There are several listed or eligible historic resources, including the listed Hanover Historic District throughout the project area, as well as many unevaluated potential historic resources. Local public and private parkland can be found in the western portion of the project area.

There are no hospitals or elderly care facilities located within the project area; however, several schools are located within and in the immediate vicinity of the project area. High-density residential neighborhoods are primarily located in the southern portion of the Study Area. Additional residential neighborhoods occur within the northern portion of the project area adjacent to agricultural lands. Rabbitransit, the York Adams Transportation Authority, features three main fixed bus routes that serve the Hanover area and run within or adjacent to the project area. There are no established bike routes located within or immediately adjacent to the project area; however, sidewalks are available for pedestrians within McSherrystown and Hanover Boroughs.

The following project purpose and need statement for the Eisenhower Drive Extension project was developed based upon the *Pennsylvania Department of Transportation (PennDOT) Needs Study Handbook, Publication*



319 (December 2010) and the *Federal Highway Administration Environmental Review Toolkit, NEPA and Project Development* website (<https://www.environment.fhwa.dot.gov/projdev/index.asp>).

Project Need

The proposed project was identified as a part of the Hanover Area Transportation Planning Study prepared for PennDOT in the spring of 1997. This study established a Recommended Transportation Improvements Program which included several key projects aimed to address the transportation needs in the area. The development of the region is consistent with the anticipated growth defined in the study and the overall needs have remained the same over the past 20 years.

Current conditions within the urbanized area do not meet minimum standards for safety, congestion, and non-motorized uses. The current roadway system within the two adjacent Boroughs operates at unacceptable levels of service. The roadways also have significant crash histories, including crashes involving pedestrians and crashes that resulted in a fatality, with most experiencing a crash rate higher than the statewide average crash rates for similar roadways. The need is therefore based on the multi-modal use of the region, inadequate capacity, significant growth from future development, safety concerns for turning vehicles as well as pedestrians. As a result, the following project needs have been determined:

Traffic congestion results in poor levels of service.

1. The Average Annual Daily Traffic (AADT), 16,100 vehicles per day (VPD), through the Borough of McSherrystown, is currently near capacity for a two-lane roadway. Traffic volumes are expected to grow to an ADT of 19,700 VPD projected for the year 2042 No-Build.
2. With no programmed improvements within the study area, Year 2042 No-Build analyses show that PM peak hour conditions will degrade to unacceptable levels of service at the un-signalized intersections, with vehicles on the side streets waiting on average over 8 minutes to enter or cross SR 0116 in McSherrystown.
3. The following intersections are currently operating unacceptably (LOS E or LOS F):
 - a. SR 0116 (Main Street) and 5th Street – AM and PM Peak.
 - b. SR 0116 (Main Street) and 2nd Street – AM and PM Peak.
 - c. High Street and Kindig Lane – PM Peak
4. The following intersections are projected to operate unacceptably (LOS 'E' or LOS 'F') in the 2042 No-Build Scenario:
 - a. SR 0094 (Carlisle Street) and Eisenhower Drive – PM Peak
 - b. SR 0116 (Main Street) and 5th Street – AM and PM Peak.
 - c. SR 0116 (Main Street) and 2nd Street – AM and PM Peak.
 - d. SR 0116 (Main St/3rd St) and SR 2008 (Oxford Ave/Elm Ave) – PM Peak
 - e. SR 0116 (Hanover Street) and SR 2019 (Littlestown Road)/Bender Road – PM Peak
 - f. SR 2008 (Oxford Avenue) and Kindig Lane – PM Peak.
 - g. High Street and Kindig Lane – AM and PM Peak.
 - h. High Street and Eisenhower Drive – PM Peak.



5. The roadway width of SR 0094 is reduced from a five-lane section at Eisenhower Drive to a three-lane section south of Kuhn Drive/Dart Drive. The current AADT on SR 0094 is expected to increase from 19,100 VPD to approximately 24,000 VPD north of Eisenhower Drive and increase from 15,600 VPD to 19,000 VPD at Elm Avenue, which would exceed the roadway capacity of a two-lane . Intersection capacity analyses at the SR 0094/Eisenhower Drive and SR 0094/Elm Avenue intersections indicate that multiple turning movements are projected to operate at unacceptable levels of service (LOS 'E' or LOS 'F').
6. High Street is a 2-lane, local street that provides an alternate parallel route to SR 0094, and is heavily used by both passenger vehicles and tractor trailers (5%). The Kindig Lane approach at its intersection with High Street is stop controlled and currently experiences congestion throughout a typical day, with vehicle queues extending across the existing railroad crossing throughout the PM peak period. Increases in traffic volumes will exacerbate these conditions. This queuing also affects operations at business driveways along Kindig Lane.

Poor traffic safety along SR 0116 and SR 0094.

1. Evaluation of crash data for the project study area, from 2010 to 2014, available from PennDOT's Crash Data Analysis and Retrieval Tool (CDART) database shows clusters of crashes along SR 0116 and SR 0094. Crash rates (crashes per millions of vehicle-miles traveled) for most of the roadways within the project study area are above the statewide average rates for similar roadway types. There are a substantial number of rear-end and angle type crashes within the project limits. The following crash data was observed from 2010 through 2014:
 - a. 103 crashes occurred on SR 0116 in Adams County - Two (2) of these crashes resulted in fatalities. Three (3) of the crashes involved a pedestrian. Crash rates of 1.90 and 2.18 were calculated for two sections of SR 116; between 2nd Street and 5th Street and 5th Street and Oxford Avenue, respectively. These rates are above the statewide average rate of 1.77 for similar roadways.
 - b. 103 crashes occurred on SR 0116 in York County - Six (6) of the crashes involved a pedestrian, with one (1) of those pedestrian crashes resulting in a fatality. Crash rates for four segments of SR 116 in York County ranged from 3.61 to 10.06, which are well above the corresponding statewide average rate of 1.77 for similar roadways.
 - c. 183 crashes occurred on SR 0094 in York County - Ten (10) of the crashes involved a pedestrian, with two (2) of those pedestrian crashes resulting in a fatality. Crash rates of four segments between Eisenhower Drive and Elm Avenue ranged from 2.02 to 7.54, which are above the statewide average rate of 1.77 for similar roadways.
2. SR 0116 and SR 0094 currently have very narrow outside shoulders, no medians and unrestricted on-street parking, which impedes access for emergency vehicles and limits the available space for moving disabled vehicles out of the travel lanes. The current outside shoulder widths vary from approximately 1 to 6 feet. The current roadway typical sections also impact bicycle usage along SR 0116 and SR 0094. The current thoroughfares are not designated bike routes, and for that reason, cyclists traveling along SR 0116 and SR 0094 will experience various roadway conditions. Cyclists traveling study area roadways must travel along shoulders as well as sidewalks for safe passage.



Limited mobility and poor roadway connectivity/linkages.

There are various existing physical features/constraints that pose challenges in establishing the east-west connectivity of the local and regional roadway network in the vicinity of the study area. These include the CSX Railroad and Conewago Creek. While the number of daily trains along the CSX corridor are limited (2-3 daily trips), the train activity results in direct impacts to traffic within the region. This over-burdens SR 0116 and results in congestion, delay and safety concerns as noted above.

Congestion causes traffic to divert to local roads, which results in congestion and delays on these roads and decreases mobility. Origin-Destination (O-D) data collected in Fall 2015 supports this phenomenon. Due to congestion/capacity constraints noted for SR 0094, existing traffic has been observed to divert to Eisenhower Drive (west), High Street, Kindig Lane and Oxford Avenue.

In addition, the industrial and commercial development along High Street, Kindig Lane, and the existing Eisenhower Drive corridors result in active truck traffic throughout the area. The primary sources for truck traffic includes the industrial developments along Kindig Lane. Truck traffic is prohibited from using some east-west local road connections between High Street and SR 0094 (e.g. Kuhn Drive, Clearview Drive). Therefore, typical truck traffic patterns for these major trip generators include SR 0116 (Main Street) in McSherrystown, as well as High Street, SR 2008 (Elm Avenue) and SR 0094 in Hanover Borough.

Project Purpose

The primary purpose of the project is to facilitate safe and efficient multi-modal travel within the project study area to meet both current and future transportation needs of the area. Anticipated transportation improvements will reduce congestion and accommodate for planned growth throughout this portion of the region, including a reduction in impacts of truck and commuter traffic within the study area. The secondary purpose of this project is to provide a functional and modern roadway that maximizes current design criteria and promotes and enhances multi-modal connections and transportation alternatives within and surrounding the study area.