
Transportation

Existing Roadway System

The Municipality's roadways are classified by their functional characteristics. The roadway classifications include principal arterials, minor arterials, collector roads and local roads. Roadway assignments are typically based on the average daily traffic (ADT) volumes the roadway conveys. The Existing Traffic Network, with indications of the number of lanes each of the primary roadways contain, is included as Figure 15. Figure 19 (in Appendix F) uses color-coding to indicate the roadway classifications of each of these roads and a listing of the classifications is included on Table 23 below.

Principal Arterials are the major streets and highways that move traffic through Murrysville. Averaging over 15,000 vehicles per day, principal arterial roadways convey the highest traffic volumes. Route 22 (William Penn Highway) and Golden Mile Highway are principal arterial roadways. Because principal arterials are designed to move traffic efficiently, they typically provide limited direct access to adjacent land uses.

Minor arterials are designed to interconnect with and to supplement the principal arterial system. Minor arterial roads handle a large portion of intra-municipal trips and generally consist of the multi-lane roads with continuity. Minor arterial roadways handle ADT volumes of 6,000-15,000 vehicles. The Municipality's minor arterials include Old William Penn Highway and Saltsburg Road. Direct access from land uses should also be minimized on minor arterials.

Collector roads distribute traffic from local neighborhoods onto the arterial roadways. Murrysville’s current collector roadways service ADT volumes of 2,000-6,000 vehicles. These roads include Sardis Road, Trafford Road and School Road north of Route 22.

Local roads provide direct access to single-family lots or to parking facilities for multiple-family dwelling units. Roadways serving less than 2,000 ADT are classified as local roadways. Local roads currently comprise the majority of Murrysville’s transportation network.

Table 23: Primary Roadway Classifications (2001)

| Roadway Classification | Murrysville Roadways |
|-------------------------------|---------------------------------|
| Principal Arterial | Route 380 (Golden Mile Highway) |
| | Route 22 (William Penn Highway) |
| Minor Arterial | Route 286 (Golden Mile Highway) |
| Collector | Saltsburg Road |
| | Sardis Road |
| | School Road North |
| | Trafford Road |
| | Old William Penn Highway |
| Local | Bulltown Road |
| | Christy Road |
| | Evans Road |
| | Hilty Road |
| | Weistertown Road |
| | Windover Road/Hills Church Road |
| | Kemerer Hollow Road |
| | Italy Road |
| School Road South | |

Source: Trans Associates, 2001

In addition to general classifications, roadways can also be assessed based on their “level of service” (LOS). The

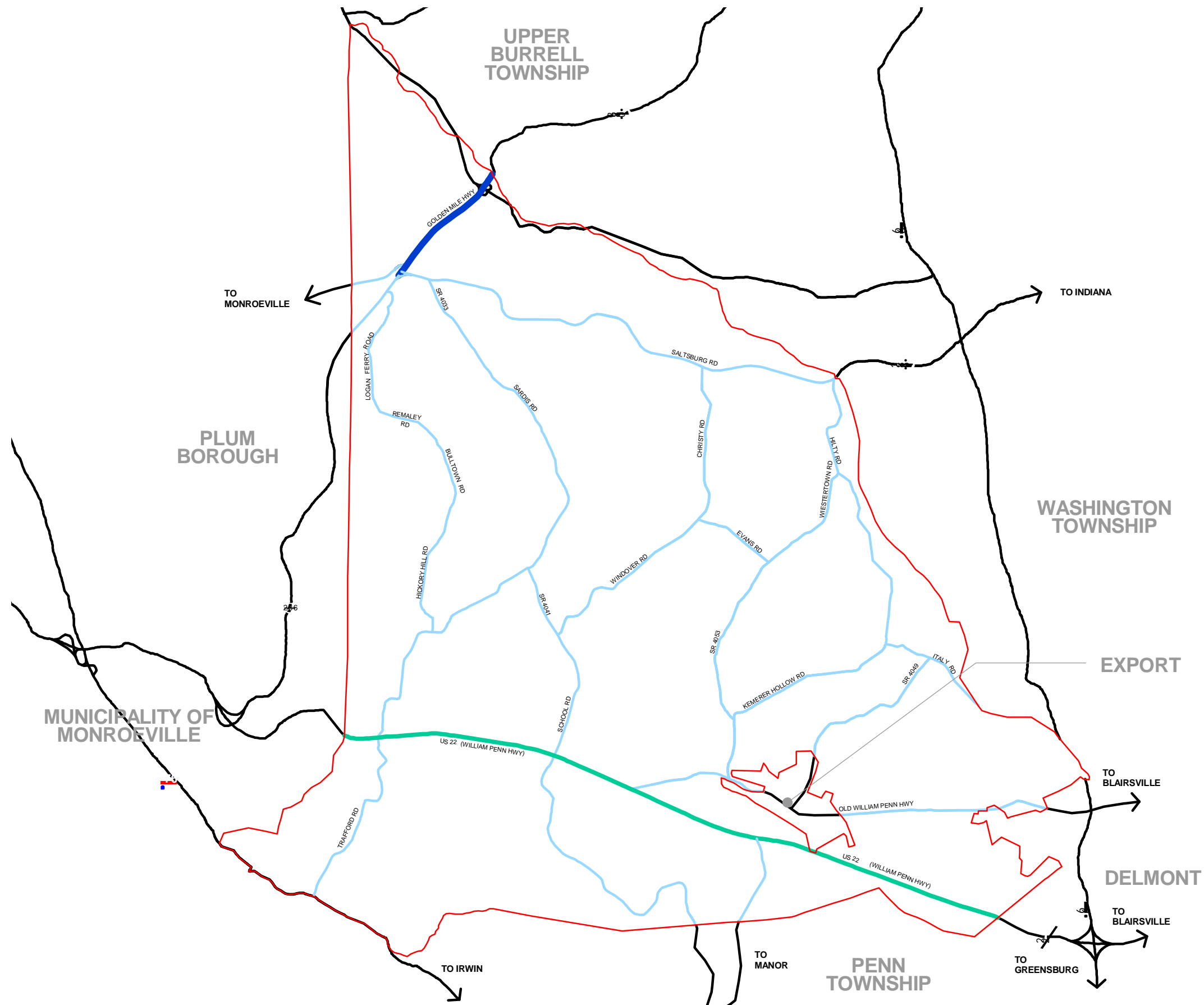
Commonwealth of Pennsylvania quantifies congestion and delay with a LOS rating that is measured on a scale from “A” to “F”. “A” is the best rating and represents minimal delays of only several seconds for vehicles. Conversely, a rating of “F” indicates that a roadway is in breakdown conditions; as a result, a travel delay of more than one minute per vehicle is anticipated. The Commonwealth’s minimum acceptable LOS is “D”.

Transportation Analysis

To understand future development’s potential impacts on Murrysville’s roadway network (Figure 15), the community needs to first understand its existing vehicular demands. The procedures and findings of the traffic analysis completed by Trans Associates are included as Appendix F. In addition, a brief explanation of how Trans Associates measured Murrysville’s existing traffic conditions has been included here.

Transportation Zones and Counts

To perform the analysis, the Municipality was divided into 18 transportation analysis zones (TAZ) using primary roadways as dividing lines (Figure 19). In the spring of 2001, Trans Associates placed an automatic traffic recorder (ATR) along each roadway segment that defined the TAZs. Figure 20 shows the locations of the ATRs. These ATRs were used to collect actual traffic data. From this data, each segment’s average daily traffic volumes (ADT) were then calculated (Figure 21). Route 22 accounts for the heaviest traffic volumes in the Municipality, followed by Golden Mile Highway. The distribution of trips was also calculated for the community’s primary gateways based on detailed regional trip production and attraction calculations from the Southwestern Pennsylvania Commission. Figure 27 identifies the distribution of trips.



LEGEND

- Municipal Boundary
- ~ 2 Lanes
- ~ 3 Lanes
- ~ 4 Lanes

↑
NORTH

0 2000 4000 Feet

EXISTING TRAFFIC NETWORK

Figure 15

Trans Associates conducted a level of service analysis for major roads by transportation link. A computer model was utilized to distribute these internal and external vehicular trips onto the community's road network. The Municipality's existing AM and PM Peak Hour Levels of Service for the community's key traffic segments are illustrated on the Figures 22 and 23. For both morning and afternoon peak hour traffic, Route 22 is at an LOS rating of E or F, exceeding the Pennsylvania Department of Transportation's minimum standards. A segment of Route 286 also has an LOS "E" rating.

Figure 24 demonstrates the "base" growth ADT volumes for a 20-year horizon (2021), i.e. without significant changes in development patterns. These ADT volumes were forecasted by applying linear growth rates to the 2001 existing traffic volumes. Data was also extrapolated to determine expected LOS ratings in the A.M. and P.M. Peak Hour conditions under "base" conditions as shown on Figures 25 and 26.

The traffic volume on Route 22 between the Allegheny County boundary and School Road South is projected to reach 40,000 vehicles daily by 2021. The other two segments of Route 22 are projected to reach 35,300 vehicles and 26,600 vehicles daily by 2021.

Based on the anticipated road improvements on Route 22 and Golden Mile Highway (Route 286 South), described below, all of the primary roadways in the Municipality are projected to meet the Pennsylvania Department of Transportation minimum standards within the "base" conditions. Three road segments are expected to have a LOS rating of "D": Sardis Road from Route 22 to School Road, School Road from Route 22 to Sardis Road and Saltsburg Route (Route 380) from the

Allegheny County boundary to the intersection with Golden Mile Highway (Route 286).

Roadway Improvements

PennDOT is currently planning improvements for Murrysville principal arterial roadways. Route 22 (William Penn Highway) and Golden Mile Highway (Route 286), as outlined in the Southwestern Pennsylvania Commission's long-range plan are scheduled to be widened and improved. US Route 22 from Murrysville to Blairsville in Indiana County currently has a combination of four-lane and two-lane sections. The road's increasing congestion and safety problems have prompted the State to make improvements. Murrysville is a part of this 23-mile project with an estimated cost of \$151 million.

To handle growing suburban travel demand, Golden Mile Highway (Route 286) through Monroeville and the Northern Tier of Murrysville is proposed for widening from two to four lanes. The 5.3-mile project is estimated to cost \$11.8 million.