

Southwestern Pennsylvania Road Safety Audit



**U.S. 119 from Youghiogheny River (Memorial
Bridge) to S.R. 982**

**Bullskin Township, Connellsville Township & City of Connellsville,
Fayette County, PA**



March 2014

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1. BACKGROUND

A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. The aim of an RSA is to answer the following questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?¹

An RSA is a proactive process that provides recommendations which can be implemented in stages as time and resources permit. As a service to its Planning Partners, the Southwestern Pennsylvania Commission (SPC) has developed an RSA program as part of its Transportation Operations & Safety planning efforts. The methodology for this program is summarized below and is based on the 8-step RSA process developed by the Federal Highway Administration.

This document represents the final report for the Road Safety Audit conducted along U.S. 119 in Fayette County from the Youghiogheny River (Memorial Bridge) in the City of Connellsville to its intersection with S.R. 982 in Bullskin Township.

2. AUDIT PROCESS

The standard steps involved in a Road Safety Audit are:

Identify the Project

Candidates for Road Safety Audits are submitted to SPC by local municipalities, Counties, and PennDOT Districts. Candidates may include projects that are already in the design stage or may be in-service roads where safety is a concern. SPC reviews RSA candidate proposals and proceeds with setting up RSAs as manpower and budgetary constraints allow. Roadway owners must commit to documenting a formal response (see Step 7) prior to initiation of an RSA.

Select the RSA Team

SPC works with the roadway owner(s) to identify potential members for the independent, multi-disciplinary team. RSA teams typically consist of 3-5 members, with outside specialists consulted as needed. Team make-up typically includes 1-2 consultant members, 1 SPC staff person, and 1-2 PennDOT staff (from outside the District where the project is located). Prior to the on-site RSA activities, SPC collects and compiles relevant data (traffic volumes, maps, aerial photographs, crash data, previous studies, etc.) and provides a binder with this information to each of the RSA team members and to the roadway owner(s).

¹ Source: Federal Highway Administration - <http://safety.fhwa.dot.gov/rsa/>

Conduct a Start-up Meeting

The RSA team conducts a start-up meeting with the roadway owner(s) in order to identify the steps to be taken, review the schedule, and discuss any opportunities and/or constraints identified by the project owner(s). This is also the time for the project owner(s) to share any background information with the RSA team. Desirable information to be provided to the RSA team includes anecdotal crash history such as first responder experiences, potential changes in land use or travel patterns in the project area, public sentiment regarding the study location, and any known constraints.

Perform Field Reviews

The RSA team reviews the data provided by SPC and the project owner(s) and conducts multiple field views of the site (typically during AM and PM peak hours, an off-peak hour, and at night in order to see the site under different conditions). The RSA team drives and walks the site in order to identify geometric, operational, roadway user/human factors, and environmental issues.

Conduct RSA Analysis

Based on its field views, the information provided, consultation with specialists (if needed), and research into applicable design guidelines, the RSA team identifies and prioritizes safety issues within the project area and develops suggestions for enhancing safety.

Present RSA Findings to Project Owner

Once the RSA team has completed its analysis, it presents the findings to the roadway owner(s) in two phases:

- Preliminary Presentation – The RSA team conducts a meeting with the roadway owner(s) and presents its findings. This meeting is an opportunity to constructively discuss the issues and suggestions identified, and for the roadway owner(s) to provide feedback.
- Written Report – Following the preliminary presentation, the RSA team prepares a written report, incorporating roadway owner feedback as appropriate.

Prepare Formal Response

Upon receipt and review of the written report, the roadway owner(s) prepare a formal response (to the project file) documenting plans to address identified issues and reasons for not addressing other issues.

Incorporate Findings

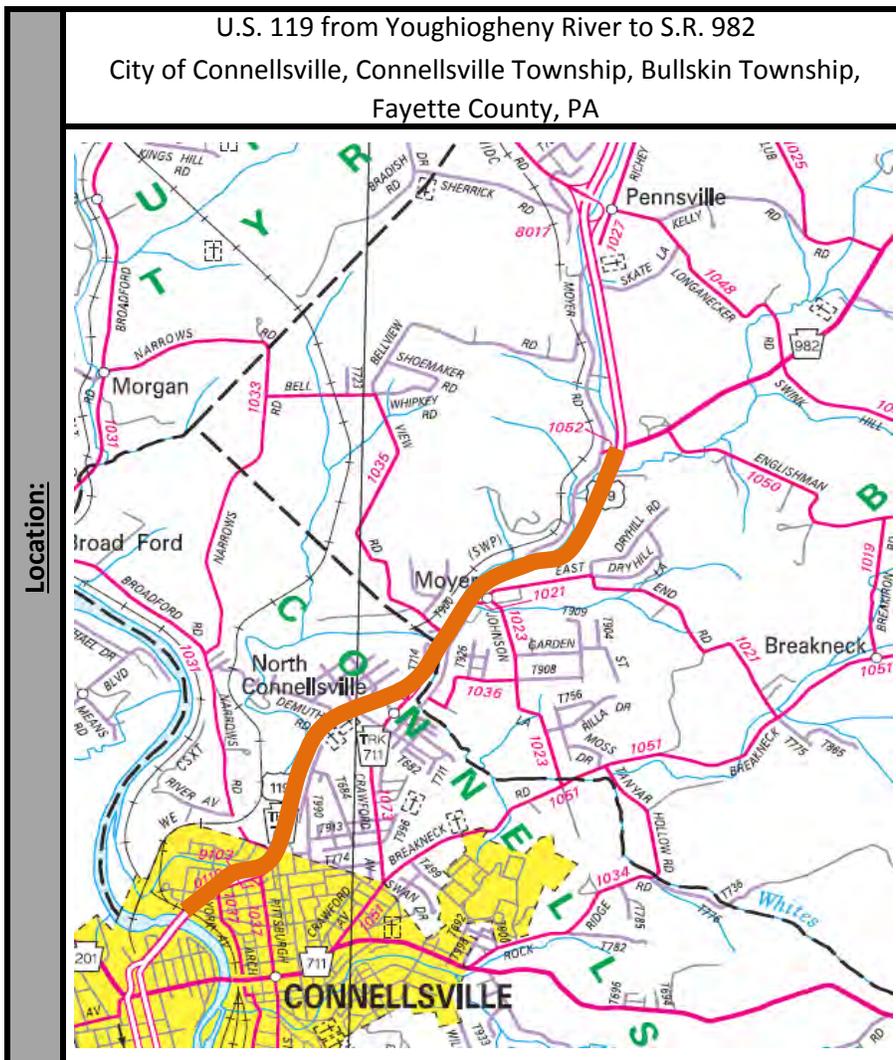
The roadway owner(s) implement improvements as outlined in the formal response.

The following page provides a summary of the RSA participants and schedule for this project.

Southwestern Pennsylvania Road Safety Audit Program

Roadway Owner Agency	Roadway Owner Representatives
City of Connellsville	Greg Lincoln, Mayor Tom Karpiak, Councilman & Director of Streets Toni Tesauro, City Clerk
Connellsville Township	Robert Carson, Roadmaster
Bullskin Township	Walter Wiltrout, Roadmaster
PennDOT District 12-0	Robb Dean, P.E., District Traffic Engineer Cory Craft, District Safety Engineer

RSA Team Members	Agency	Role
Steve Palmer, P.E.	Gannett Fleming	Transportation Engineer
Millie French, P.E.	French Engineering	Transportation Engineer
Doug Smith, P.E.	Southwestern Pennsylvania Commission	Transportation Planner



Schedule
<u>Start-up Meeting</u>
Tuesday, March 11, 2014, 10:00AM City of Connellsville Council Chambers
<u>Preliminary Presentation</u>
Thursday, March 13, 2014, 1:00PM City of Connellsville Council Chambers

Key Person Interviews
Vern Ohler, Street Foreman City of Connellsville Public Works
Bob Topper, Admin. Director NHC-Fayette EMS 724-628-8610
Jim Capitus, Chief City of Connellsville Police

3. OVERVIEW OF THE STUDY AREA

The study area for this RSA was the section of U.S. 119 from the Youghiogheny River (Memorial Bridge) in the City of Connellsville to S.R. 982 (Pleasant Valley Road) in Bullskin Township. This corridor is approximately 3.3 miles long. U.S. 119 is the major north-south roadway in Fayette County and connects the cities of Connellsville and Uniontown with West Virginia to the south and Interstate 70, the Pennsylvania Turnpike (I-76), and Greensburg to the north. It is designed as a limited access freeway north of Mount Pleasant and around Uniontown, but has at-grade intersections between these two places.

U.S. 119 is a four-lane roadway throughout the corridor with paved shoulders, a concrete median, and turn lanes at all major signalized and many unsignalized intersections. Signalized intersections in the study area include:

- Pleasant Valley Road (S.R. 982) / Greenhouse Road (S.R. 1052);
- East End Road (S.R. 1021);
- Bellview Road (S.R. 1035) / Buttermore Boulevard (T-906);
- Blake Avenue (T-688);
- Pittsburgh Street (S.R. 1037);
- McDonalds Driveway; and,
- York Avenue (S.R. 1037).

U.S. 119 is classified as a Principal Arterial and has Average Daily Traffic (ADT) of approximately 13,500 vehicles per day (vpd) south of Crawford Avenue (S.R. 1073) and 23,000 vpd north of Crawford. Crawford Avenue is signed as the PA 711 truck route due to the steep grades along S.R. 711 in Connellsville. Trucks typically make up 7-8% of traffic on U.S. 119. The speed limit through most of the study area is posted at 50 mph in both directions; however it is posted for 40 mph in the northbound direction between the Memorial Bridge and North Pittsburgh Street Extension. There is a "Reduced Speed 25 Ahead" sign on the southbound side near North Pittsburgh Street Extension, but there is no 25 mph regulatory sign following this. There is a large hill on the north side of Connellsville in this area that tends to result in increased southbound speeds approaching the City.

Land use adjacent to the roadway is mixed commercial throughout most of the corridor. Development is dense in the City of Connellsville with a shopping plaza, gas stations, restaurants, auto sales and repair places, and other businesses. Business development is less dense in the Townships, but still significant. The Sheetz gas station at U.S. 119 and S.R. 982 is particularly busy. Residential properties generally do not have direct access onto U.S. 119, but many neighborhoods are just off the roadway on connecting side streets. There are also a number of key truck generating land uses just off U.S. 119 on the side roads including a lumber yard, construction supply business, recycling center, and industrial complex. Also of note are a cemetery at the intersection of U.S. 119 and Blake Avenue and a school just northeast of the intersection of U.S. 119 and S.R. 982.

4. SAFETY HISTORY

PennDOT crash data indicates that there were 142 reportable crashes along this section of U.S. 119 for the 5-year period from January 1, 2008 through December 31, 2012. (Reportable crashes are those that result in an injury or fatality, or where a vehicle is required to be towed from the scene. A detailed analysis of the crash data was provided in the RSA binder provided at the start-up meeting.) In addition to property damage and minor injuries, these crashes resulted in 15 moderate injuries, 5 major injuries, and 4 fatalities. Many of the fatal and major injury crashes were Angle collisions involving red light running. One involved a wrong way driver. Local officials indicated that there was an additional fatal crash in 2013 involving a pedestrian.

The majority of crashes in this corridor occurred during clear weather (83%), with dry pavement (77%), and in daylight conditions (75%), which is typical. The most predominant Driver Actions listed as contributing factors to crashes were Too Fast for Conditions, Other Improper Driving, and Running Red Light. Rear Ends (44%), Angle collisions (32%), and Hit Fixed Object crashes (19%) were the predominant collision types in the corridor.

Crashes were relatively evenly distributed throughout the year with November being the month with the most crashes (19) and April being the month with the least crashes (8). Crashes were also distributed relatively evenly throughout the week, although Sunday (13) and Monday (13) had only about half as many crashes as other days (21-26). The number of crashes was highest between the hours of 3PM and 5PM, which could be expected since that is when traffic volumes are highest. Field observations indicate that this is the time of day when speeds tend to be higher and when aggressive driving behavior increases (i.e. people in a hurry to get home from work).

5. AUDIT FINDINGS

The following pages summarize the findings of the RSA team.

Safety Successes

- Concrete median treatments to reduce/eliminate head-on crashes
- Delineation (quantity and general condition)
- Positive guidance with route signage
- Do Not Enter and Wrong Way signs installed
- Left turn lanes at unsignalized intersections



Safety Successes

- Protected left turn phasing at signalized intersections
- Advance warning signs for signalized intersections
- Supplemental signal heads at some locations



Evaluating Risk to Prioritize Safety Issues

**Crash
Frequency**

Frequent	C	D	E	F
Occasional	B	C	D	E
Rare	A	B	C	D

Negligible

Low

Med

High

Crash Severity

RISK CATEGORY

A = Lowest priority

F = Highest priority

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	
OBSERVATION: Grooves cut into the concrete pavement at numerous locations (as a pavement preservation treatment) could cause a problem for motorcycles.			



SUGGESTION:

- Fill and seal these areas so they are flush with the concrete pavement.

CONSIDERATIONS:

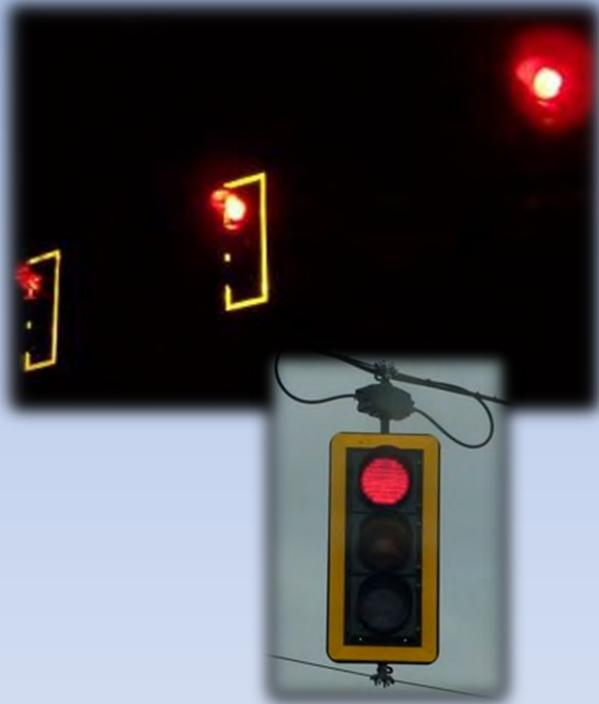
- Future plans for pavement overlay?

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	E
Occasional	High	High	
<p>OBSERVATIONS: Red light running has been a contributing factor in a number of serious crashes along the corridor. Additional clearance interval time and/or dilemma zone detection may be needed, especially at the intersections experiencing high speeds.</p>			



<p>SUGGESTIONS:</p> <ul style="list-style-type: none"> • Review clearance interval timings at signalized intersections to ensure that they are adequate and are calculated based on actual 85th percentile speeds. • Consider adding dilemma zone detection on U.S. 119 to minimize the number of high speed vehicles getting a yellow indication.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	E
Occasional	High	High	
OBSERVATION: Signal head visibility can be compromised by business signage, utilities, lighting and other items in a driver's field of vision.			



SUGGESTION:

- Provide backplates with retroreflective tape on all signal heads.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	
OBSERVATION: Maintenance is needed on some traffic signals and advance warning signs.			



Green LEDs at S.R. 982 are beginning to go bad



Wire hangs below signal at S.R. 982



Backlit Signal Ahead sign approaching York Road not functioning



Signal heads at Bellview / Buttermore slightly misaligned

SUGGESTION:

- Perform routine maintenance on signals and signing.

CONSIDERATION:

- Maintenance and protection of traffic during maintenance operations.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	
OBSERVATION: Sign visibility is hampered due to some signs being knocked down and others being faded.			



Faded Signs



Damaged Signs

SUGGESTIONS:

- Replace faded signs as necessary to maximize visibility.
- Replace sign posts where necessary.

CONSIDERATION:

- Certain sign locations may be more crash-prone

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	
OBSERVATION: Roadway cross-section (with concrete median dividing northbound and southbound traffic) could result in wrong way driving.			



SUGGESTION:

- Provide R4-7 signs on the end of median treatments to supplement existing Do Not Enter and Wrong Way signs.

CONSIDERATIONS:

- Frequency of maintenance / replacement.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	

OBSERVATIONS: Existing speed limit signs can be missed by motorists; they are small in size and only located on the right-hand side of the road. There are different NB and SB speed limits through Connellsville. SB speeds approaching the City of Connellsville are particularly high.



There are no 25 mph speed limit signs ahead

SUGGESTIONS:

- Review existing speed limit signing and make sure it is consistent and appropriate.
- Use larger signs, and try to mount in median as well.

CONSIDERATION:

- Narrow median may make sign placement difficult

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	E
Frequent	Medium	High	
OBSERVATION: Travel speeds frequently exceed posted speed limits.			



Existing Gateway Signage
(North of Moyer Road)

SUGGESTIONS:

- Undertake periodic speed enforcement.
- Install speed feedback signing to supplement regulatory speed limit signs.
- Provide enhanced “gateway” signing and landscaping closer to the City of Connellsville to provide visual cues to motorists.

CONSIDERATION:

- Power requirements and maintenance
- Effective local speed enforcement difficult without the use of radar

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	
OBSERVATION: Many businesses have long, unrestricted access points, resulting in unpredictability of vehicles entering and exiting U.S.119.			



SUGGESTION:

- Work with local businesses to consolidate the number and width of access points.
- Limit access points using the HOP process and local ordinances as part of future development/redevelopment.

CONSIDERATIONS:

- Resistance by business owners
- Restricting access points could necessitate slower turning movements, increasing conflicts with higher speed traffic

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	
OBSERVATION: Some unsignalized access points on U.S. 119 have poor sight distances due to approach geometry or embankments.			



West Georgia Avenue



Rock Street

SUGGESTION:

- Restrict or eliminate access points where other access alternatives exist, particularly when it is possible to enter U.S. 119 at a signal.
- Remove sight distance obstructions where appropriate.

CONSIDERATION:

- Additional travel needed to get to U.S. 119

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Occasional	Medium	Moderate-High	
OBSERVATION: Numerous unsignalized access points allow left turns onto U.S. 119, which creates many turning movement conflicts.			



SUGGESTION:

- Prohibit left turns onto U.S. 119, either through signage or median design, at all unsignalized locations.

CONSIDERATIONS:

- Not currently feasible at North Pittsburgh Street Extension.
- U-turns are allowed at signalized intersections and protected left turn phasing enables these movements.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Rare	High	Moderate-High	

OBSERVATION: Pedestrian infrastructure is sporadic, inconsistent, and disconnected. Side streets in the City typically have sidewalks, but there are no sidewalks along U.S. 119.



SUGGESTION:

- Take a “Complete Streets” approach to future rehabilitation/reconstruction in this corridor, including sidewalks along U.S. 119.

CONSIDERATIONS:

- Great Allegheny Passage is a major non-motorized transportation corridor & tourism destination.
- Curbed section with changes to cross-section could calm traffic within the City of Connellsville.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	
OBSERVATION: Many pedestrian facilities do not meet current ADA standards.			



Example of ADA compliant pedestrian accommodations

SUGGESTION:

- Modify sidewalks, crosswalks, curb lines, curb ramps, and other pedestrian infrastructure to meet ADA requirements as other improvements are implemented.

CONSIDERATION:

- There is at least one handicapped resident in the area (observed using a motorized wheelchair near the Bellview/Buttermore intersection).

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	
OBSERVATION: Developments are primarily designed for motor vehicle trips and do not encourage other modes. Side streets and parking areas are not clearly defined.			

Smart Transportation Concepts



SUGGESTIONS:

- Require transportation impact studies as part of future development.
- Ensure that Subdivision and Land Development Ordinances encourage access management and parcel interconnection.
- Provide curb and sidewalks to differentiate streets from parking areas.

CONSIDERATION:

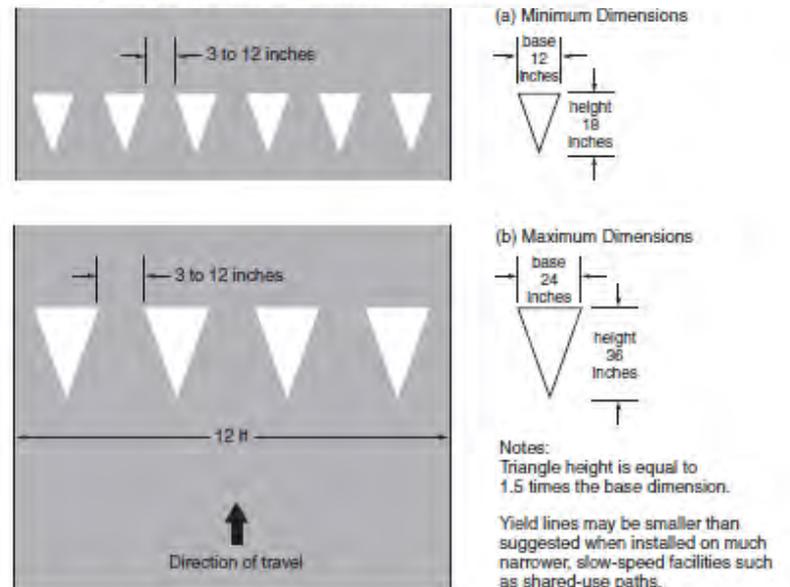
- Potential phased implementation with future development / redevelopment

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	

OBSERVATIONS: Yield and Stop signs in channelized right turn lanes could be missed by drivers due to approach angles. It is difficult for drivers, particularly older drivers, to look over their left shoulders at these locations (S.R. 982 and Crawford in particular).



Figure 3B-16. Recommended Yield Line Layouts (from MUTCD)



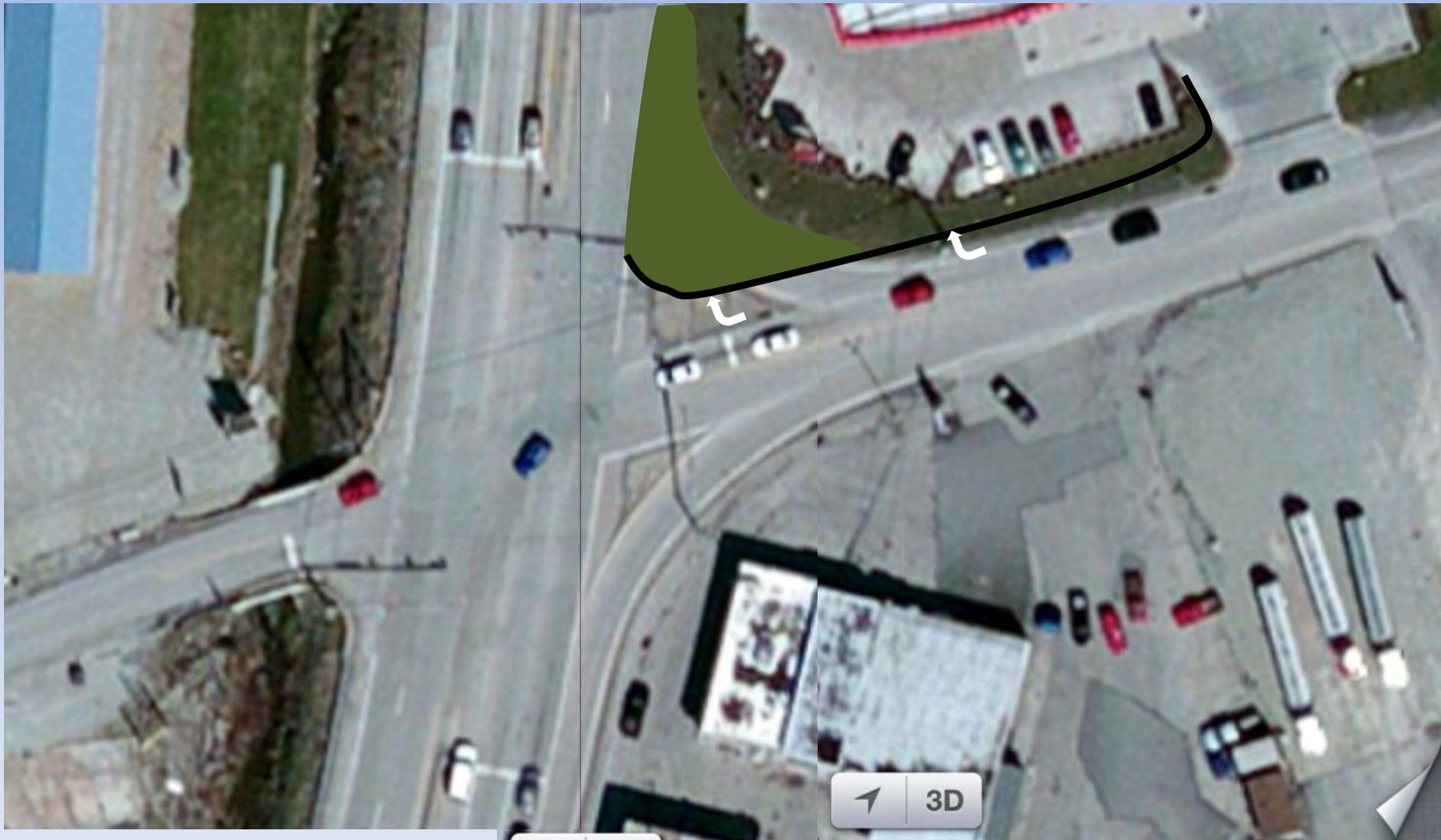
SUGGESTIONS:

- Short term: Provide supplemental pavement markings at these locations.
- Long term: Eliminate channelized locations and replace with dedicated right-turn lane with right-turn overlap phase. (See example on following page)

CONSIDERATIONS:

- Mast arm relocation
- Impacts on capacity

U.S. 119 / S.R. 982 Intersection



EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	E
Occasional	High	High	
OBSERVATION: Complex geometry (including superelevation) and sun glare can make judging gaps in traffic and executing turning movements difficult at Crawford Avenue.			

SUGGESTION:

- Limit turning movements at Crawford Avenue to NB right turn only and sign other movements to use Blake Avenue.



CONSIDERATIONS:

- Routing of oversized loads.
- Blake Avenue would need upgrades, including turn radii and WB approach grade for trucks.
- SB left turn lane at Blake Avenue would need to be extended.
- PennDOT would need to take ownership of Blake Avenue to sign it for S.R. 711 Truck.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Rare	High	Moderate-High	

OBSERVATION: WB vehicles on Blake Avenue (particularly trucks and buses) have a difficult time clearing the intersection during the allotted signal phase due to approach grades and the relatively short amount of green time for this approach.



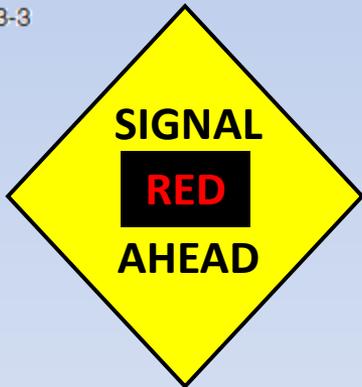
SUGGESTION:

- Review signal timing and consider extending the green phase for this approach.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Occasional	Medium	Moderate-High	
<p>OBSERVATIONS: Overhead advance signal ahead devices are present along the corridor except on U.S. 119 approaching Blake Avenue. Existing signal ahead devices may not be placed far enough in advance to give effective notification due to speeds.</p>			



W3-3



SUGGESTIONS:

- Install advance signal ahead devices on NB and SB U.S. 119 approaching Blake Avenue.
- Consider relocating or supplementing existing signal ahead warning devices and locating additional devices based on actual speeds rather than posted speeds.

CONSIDERATIONS:

- Cost
- Power requirements

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	

OBSERVATION: Shoulder rumble strips are installed in portions of the corridor but are not present between North Pittsburgh Street Extension and Buttermore Avenue.



NB U.S. 119

SUGGESTION:

- Install edge line or shoulder rumble strips along U.S. 119 between North Pittsburgh Street Extension and Buttermore Avenue.

CONSIDERATION:

- Use of shoulders by bicyclists
- Pavement conditions

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	
OBSERVATION: Inadequate drainage creates ponding along S.R. 0119 between Pittsburgh Street and Blake Avenue.			



SUGGESTIONS: <ul style="list-style-type: none">• Perform maintenance to clear debris from inlets.• Make drainage improvements to prevent water from ponding on travel lanes.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Rare	High	Moderate-High	
OBSERVATION: Opposing left turning vehicles at North Pittsburgh Street Extension and Advanced Auto can block sight distance and limit visibility of oncoming traffic.			



SUGGESTION:

- Utilize the northern driveway at Advance Auto for ingress in order to move left turning traffic further north.

CONSIDERATION:

- Would require reconfiguration of Advance Auto parking lot and adjustment to mountable curb in median.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	D
Rare	High	Moderate-High	

OBSERVATION: Traffic from North Pittsburgh Street Ext. (Broadford Road) and Advanced Auto create unsignalized turning conflicts with high speed traffic on U.S. 119. A weight limited bridge (on York Ave) and a residential neighborhood currently limit options to reroute traffic.

SUGGESTION:

- When the bridge on North Pittsburgh Street Extension needs to be replaced at some point in the future, realign this approach to come out at a signalized intersection with McCormick Avenue.



CONSIDERATIONS:

- In conjunction with changes at North Pittsburgh Street, could eliminate turning conflicts at North Pittsburgh Street and Francis Avenue by improving access in this area.
- Right-of-Way / property acquisition
- Reducing SB speeds to prevent a large number of rear end crashes at the signal.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Occasional	Low	Moderate	

OBSERVATION: Protected left turn phasing is utilized throughout the U.S. 119 corridor, with the exception of the McDonald's intersection.



SUGGESTION:

- Add protected-only left turn phasing, a three-section signal head, and appropriate signage at this signal.

CONSIDERATIONS:

- Verify that protected only phasing is warranted by evaluating conflict factors and other qualitative factors.
- Coordinated signals will need to be retimed.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Rare	Medium	Moderate	

OBSERVATION: The traffic signal at McDonalds could be overlooked by NB motorists due to anticipation of the right turn ramp, wide shoulder, and signage.



- SUGGESTIONS:
- Consider adding a supplemental signal head on the mast arm at the McDonalds driveway.
 - Consider relocating the Highlands Hospital and other wayfinding signage.

- CONSIDERATION:
- Geometry of the ramp will remain an issue.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	

OBSERVATION: Large vehicles were observed parking along the right-turn ramp to access McDonalds in violation of the no parking signs.



- SUGGESTIONS:
- Install new “no parking” signs
 - Use pavement markings to hatch shoulder.
 - Increase enforcement.

- CONSIDERATION:
- This problem could be addressed further with long-term redesign ideas presented later.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	C
Occasional	Low	Moderate	
<p>OBSERVATION: Channelized right turn ramp from NB U.S. 119 to North Pittsburgh Street encourages high speed movements, creates conflicts at the McDonalds signal, and results in unpredictable turning movements between the ramp and Francis Avenue.</p>			



SUGGESTION:

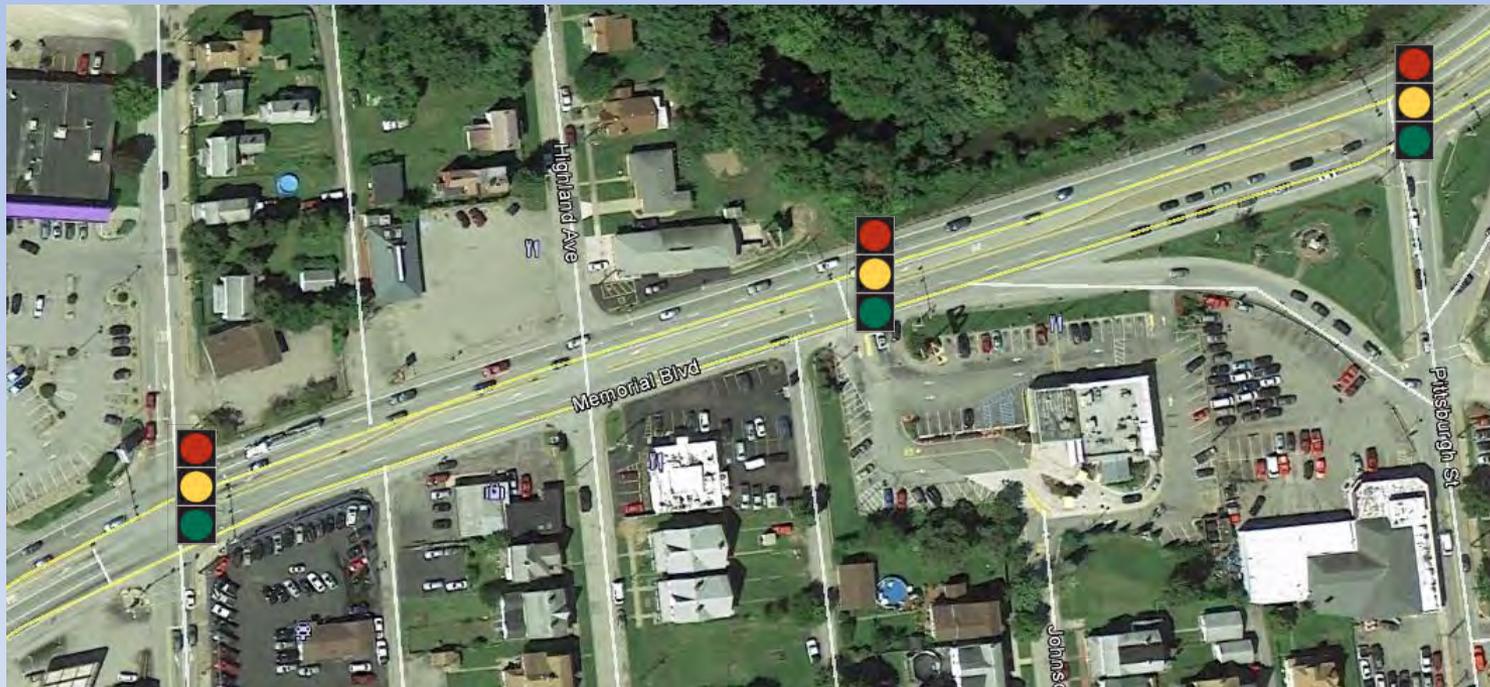
- Eliminate the high speed ramp by creating a right turn lane (with overlap phase) that runs through the signalized intersection.
- Install a mountable concrete median on North Pittsburgh Street to eliminate left turns onto Francis Avenue.

CONSIDERATIONS:

- Turn radii for large trucks.
- May need to shift Vets' monument, but could increase size and accessibility of parklet.
- Most effective in combination with signalization of McCormick to improve access to Francis Avenue.

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	B
Rare	Low	Moderate-Low	

OBSERVATION: The close proximity of the signals at York, McDonalds and Pittsburgh Street causes congestion along the U.S. 119 corridor.



SUGGESTION:

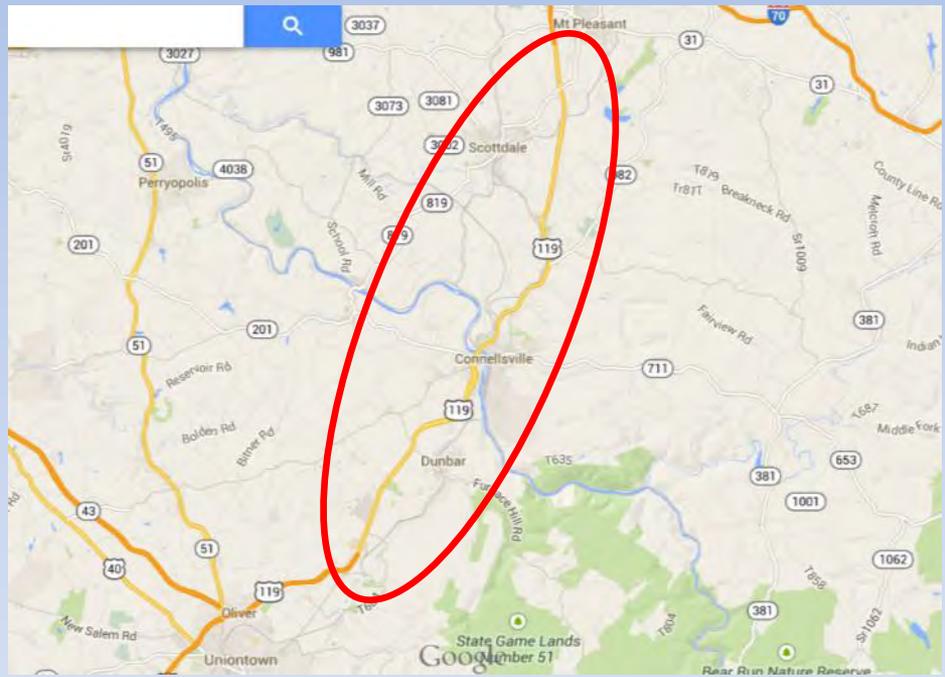
- Evaluate the timing and coordination of York Avenue, McDonalds and Pittsburgh Street signals to ensure that mainline U.S. 119 is receiving maximum progression.

CONSIDERATION:

- Increase in vehicle speeds

EXPECTED FREQUENCY	EXPECTED SEVERITY	RISK RATING	E
Frequent	Medium	High	

OBSERVATION: U.S. 119 is a high speed limited access freeway in some areas of Fayette and Westmoreland Counties, has at-grade signalized intersections in some areas, and is a highly developed urban corridor through Connellsville. The cross-section of the road does not differ significantly with the varying land use contexts so speeds tend to remain high throughout.



SUGGESTION:

- Consider potential long-term changes to this corridor as part of the Laurel Ridge travelshed of the Regional Operations Plan in order to improve operations and safety.

CONSIDERATION:

- Consider alternatives such as roundabouts, two-way vs. one-way streets, lane narrowing, bike lanes, and other traffic calming techniques through Connellsville.

6. CONCLUSION

The road safety audit program is conducted to identify opportunities for improvements in safety for transportation system users. The safety issues identified during this audit and documented in this report, along with the outlined improvement strategies, should enhance the overall safety of the study area. The full impact of the improvement strategies will be realized when they are combined, but time and budget constraints may dictate when remedial strategies are implemented.

PennDOT and the municipalities have already deployed various safety enhancements in this corridor including concrete median treatments, left turn lanes, signage and delineation, and protected left turn phasing at signalized intersections. As part of the audit, the following strategies were identified to continue to enhance safety:

Short-Range

- Fill and seal concrete pavement saw cuts to provide a smoother pavement surface. (P)
- Review clearance interval timings at all signalized intersections and ensure they are adequate given prevailing speeds. (P & M)
- Add dilemma zone detection at signalized intersections where U.S. 119 speeds are high in order to minimize the number of high speed vehicles that get a yellow indication. (M)
- Provide backplates with retroreflective tape on all signal heads. (M)
- Perform routine maintenance on traffic signals and flashing advance intersection warning signs. (M & P)
- Replace faded and damaged signs. (P & M)
- Provide R4-7 signs on the end of concrete median treatments. (P)
- Review existing speed limit signing for consistency and appropriateness. Revise as needed and provide signs on both sides of the roadway with larger signs where feasible. (P)
- Supplement regulatory speed limit signs with speedminder ITS devices in key locations in order to provide feedback to drivers. (P)
- Conduct periodic speed enforcement. (M)
- At side street intersections, calculate minimum sight distances based on prevailing speeds and remove sight distance obstructions where appropriate. (P)
- Prohibit left turns onto U.S. 119 (through signage or preferably through median treatments) from side streets, alleys, and business driveways in the City. (P & M)
- Provide supplemental pavement markings at all channelized right turn locations. (M & P)
- Review signal timings at the Blake Avenue intersection to ensure that WB vehicles have adequate green time. (M)
- Perform maintenance to clear debris from inlets. (P)
- Improve drainage between North Pittsburgh Street Extension and Blake Avenue to prevent water from ponding in the travel lanes. (P)

- Adjust the SB left turn lane at Advance Auto and work with the property owner to adjust access so traffic enters at the northern edge of their parking lot. (P)
- Add a supplemental signal head on the vertical mast arm pole on the north side of the McDonalds driveway. (M)
- Add SB protected only left turn phasing at the McDonalds traffic signal. (M)
- Review signal timing and coordination between York Street, McDonalds, and Pittsburgh Street signalized intersections and adjust as needed to ensure good progression. (M)
- Relocate hospital signage further north beyond McDonalds driveway. (M)
- Install new “No Parking” signs and pavement markings on the roadway shoulder in front of McDonalds. (M)
- Increase parking enforcement in front of McDonalds. (M)

Mid-Range

- Provide enhanced “gateway” signing and landscaping entering Connellsville to provide visual cues to motorists that they need to reduce speeds. (M)
- Work with business owners to consolidate the number and width of direct access points onto U.S. 119. Limit access points using the Highway Occupancy Permit (HOP) process and local ordinances as part of future development/redevelopment. (P & M)
- Restrict or eliminate full access points (side streets) where other access alternatives exist. (P & M)
- Review local ordinances to ensure that access management principles are incorporated into future development / redevelopment. (M)
- Ensure that local ordinances require traffic impact studies and encourage mixed use developments and multimodal transportation in order to decrease the number of motor vehicle trips generated. (M)
- Provide curb and sidewalks along Gibson Avenue and Francis Avenue in order to separate streets from parking areas. (M)
- Consider eliminating the channelized right turn and providing a dedicated right turn lane with right turn overlap phase from WB S.R. 982 to NB U.S. 119 if crash patterns emerge at this location. (P)
- Limit turning movements at Crawford Avenue to NB right turns only and sign other movements to Blake Avenue (which would necessitate an upgrade of Blake Avenue and other changes). (P)
- Provide advance signal ahead warning devices on U.S. 119 approaching Blake Avenue. (P)
- Consider relocating or supplementing existing signal ahead warning devices to provide additional advance notification. (P)
- Provide shoulder rumble strips along U.S. 119 between North Pittsburgh Street Extension and Buttermore Avenue. (P)
- Consider potential long-term operational and safety changes to the non-limited access portion of this corridor between Uniontown and Mount Pleasant as part of the Laurel Ridge travelshed of the Regional Operations Plan. (P)

Long-Range

- Realign North Pittsburgh Street Extension / Broadford Road and provide a signalized intersection with McCormick Avenue. (P)
- Eliminate the NB right turn ramp from U.S. 119 to North Pittsburgh Street and provide a right turn lane with overlap phasing at the signalized intersection. (P)
- Install a mountable concrete median on North Pittsburgh Street in order to eliminate left turns onto Francis Avenue. (P)
- Utilize a “Complete Streets” approach when undertaking rehabilitation / reconstruction along this corridor in order to provide adequate sidewalks and other pedestrian and bicycle infrastructure. (P & M)
- Modify existing sidewalks, crosswalks, curbs, pedestrian push buttons, and other infrastructure to meet ADA requirements as other improvements are implemented. (P & M)