Route 422/Glade Run Road Intersection

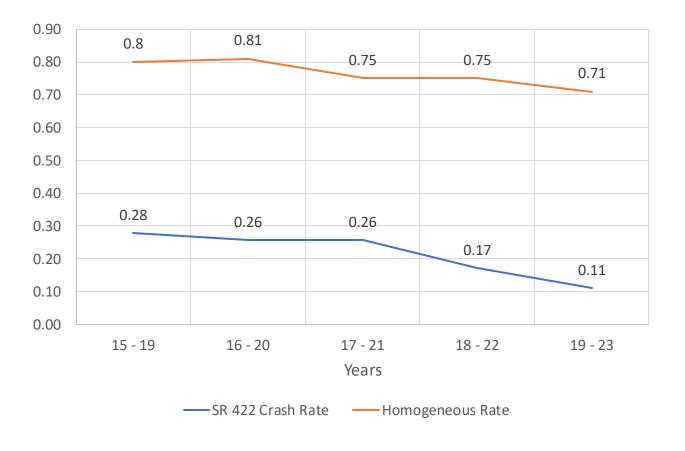
Public Meeting September 26, 2024

East Franklin Township Building 106 Cherry Orchard Avenue, Kittanning



INTERSECTION CRASH HISTORY

422 Crash Rate vs. Homogeneous Rate



5 Year Crash History

- Crash Totals
 - 2024 crash data is not complete
 - 5 reportable crashes between 1/1/19 12/31/23
- Time of Day
 - Five PM crashes (1:00 pm 6:00 pm)
- Collision Types
 - 4 Angle Crashes
 - 1 Rear End Crash
- Crash Severity
 - 1 Fatal
 - 1 Suspected Serious Injury
 - 3 Property Damage Only



ROAD SAFETY AUDIT

A Road Safety Audit (RSA) was performed in 2022 by the Southwestern Pennsylvania Commission's Operations & Safety Team. PennDOT reviewed the list of recommendations and determined the following would have a direct impact on types of crashes occurring.

Recommended Short-Term Enhancements

- Minor signing and pavement markings, enhancements, & upgrades to draw motorists' attention to the upcoming intersection - COMPLETED
- Addition of Speed Reduction Markings to calm traffic and reduce the intersection approach speed COMPLETED
- Increased speed enforcement and speed minder placement ONGOING

Recommended Mid-Term Enhancements

Changes to access controls and restricting turning movements

Potential Long-Term Enhancements – These enhancements will require coordination with our local planning partners to plan, fund, design, and build.

- Regrade westbound approach to increase sight distance
- Reconfigure the intersection to a Restricted Crossing U-Turn (RCUT) to mitigate conflicting movements



SHORT-TERM ENHANCEMENTS COMPLETED



- Requests for increased enforcement from Pennsylvania State Police
- The regular placement of speed minders for enhanced awareness

Upgrades and improvements to signs and pavement markings





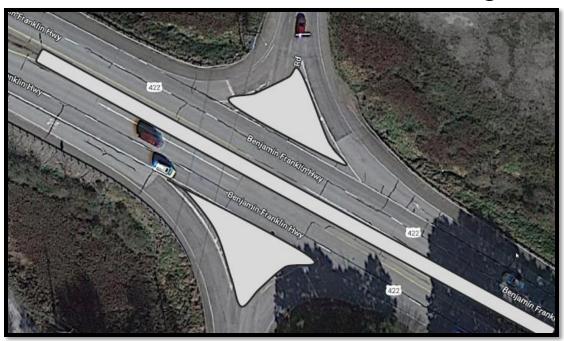
Speed reduction markings to enhance awareness



Left turn lanes were shifted to eliminate sight distance conflicts and reduce the amount of time to complete a crossing maneuver

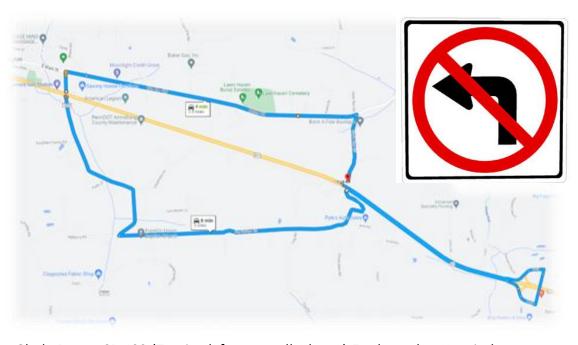
POTENTIAL MID-TERM ENHANCEMENTS

Restricting Left Turning Movements







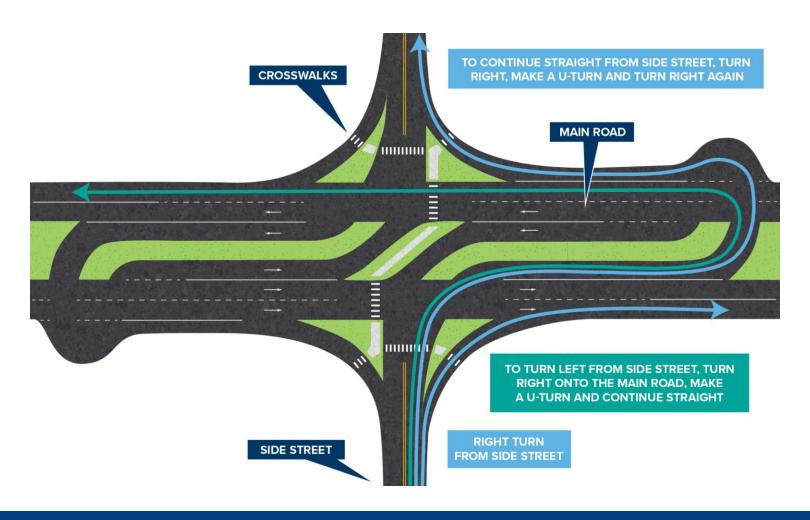


- Glade Run to SR 422 (Turning left across all 4 lanes) Eastbound to Hospital
 - Map Quest Time 4 Minutes
 - Actual Time 3 Minutes 27 Seconds.
- Glade Run to Old Butler Road (SR 4010) to Parkview Drive (Past PSP Barracks) to Hospital
 - Map Quest Time 9 Minutes
 - Actual Time 7 Minutes 49 Seconds
- Glade Run to Old Butler Road (SR 4010) to Paradise Valley Road to Parkview (Past PSP Barracks) to Hospital
 - Map Quest Time 9 Minutes
 - Actual Time 7 Minutes 24 Seconds



POTENTIAL LONG-TERM ENCHANCEMENTS

A RCUT intersection eliminates crossing all lanes of an intersection and creates a more perpendicular crossing direction for turns from the center lane.





TRAFFIC SIGNAL WARRANTS

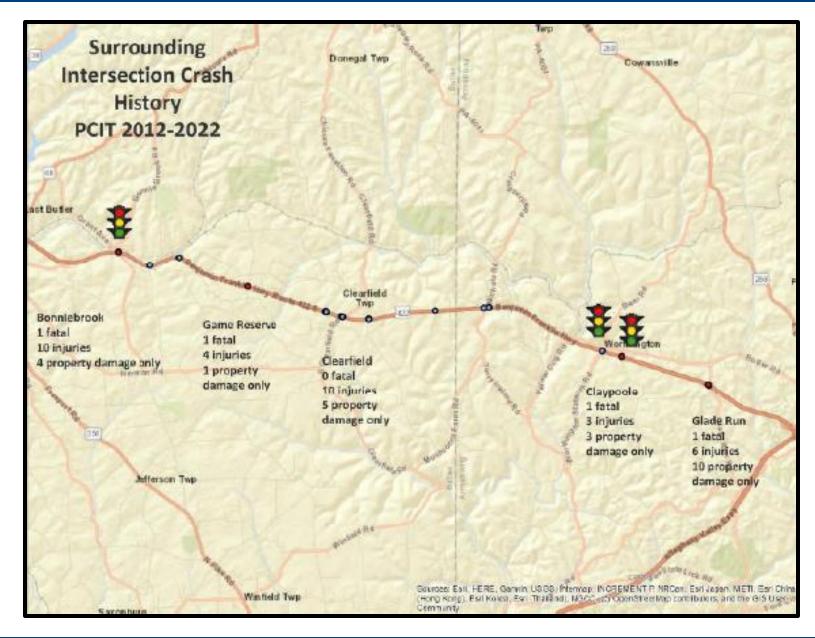
A Traffic Signal Warrant Analysis was performed in May of 2022. None of the five applicable signal warrants were met. MUTCD:

	Applicable?	Warrant Met?
Warrant 1, Eight-Hour Vehicular Volume	Yes	No
Warrant 2, Four-Hour Vehicular Volume	Yes	No
Warrant 3, Peak Hour	Yes	No
Warrant 4, Pedestrian Volume	No	N/A
Warrant 5, School Crossing	No	N/A
Warrant 6, Coordinated Signal System	No	N/A
Warrant 7, Crash Experience	Yes	No
Warrant 8, Roadway Network	No	N/A
Warrant 9, Intersection Near a Grade Crossing	No	N/A
Warrant PA-1, ADT Volume Warrant	Yes	No
Warrant PA-2, Midblock and Trail Crossings	No	N/A

As a result, a Signal was not recommended as part of the Road Safety Audit.



INTERSECTION COMPARISON



Non-compatible factors for a Traffic Signal:

- ✓ Speed
- ✓ Approach sight distance
- ✓ Sun glare

