
TO: City of Peoria

FROM: Nada Naffakh E.I.

DATE: December 22, 2022

SUBJECT: N Allen Road Closure Detour Analysis

The segment of Allen Road between War Memorial Drive and Northmoor Road will be reconstructed in two stages, southbound construction, and northbound construction. An alternative analysis was conducted for the potential detours for each stage of work.

- ❖ Detour 1
 - War Memorial and Glen Ave
 - Glen Ave and University St
 - University St and Northmoor Rd
- ❖ Detour 2
 - Willow Knolls and War Memorial
 - Willow Knolls and Allen Rd

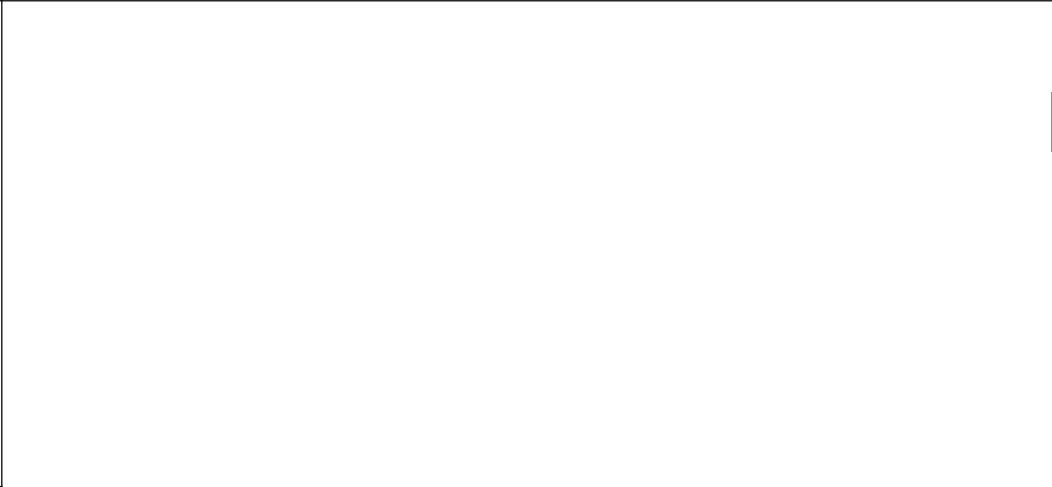
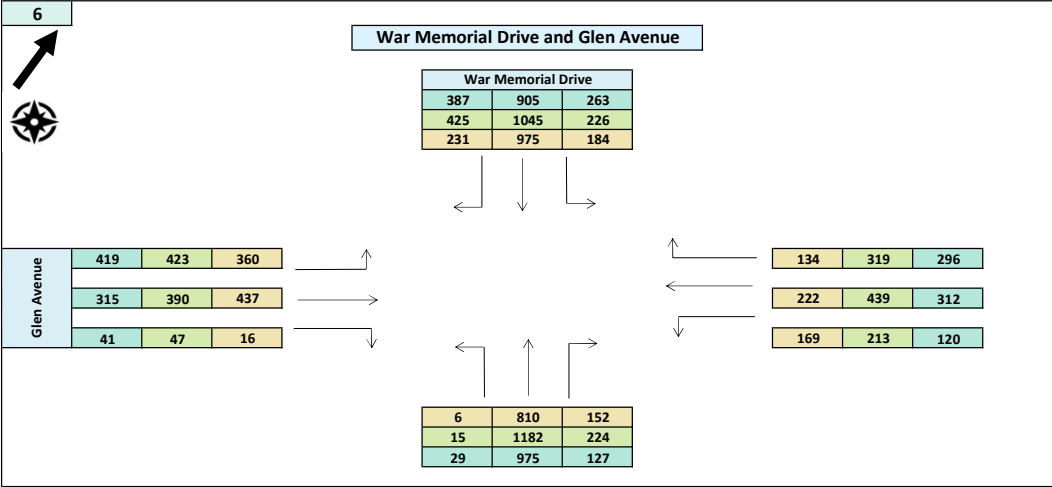
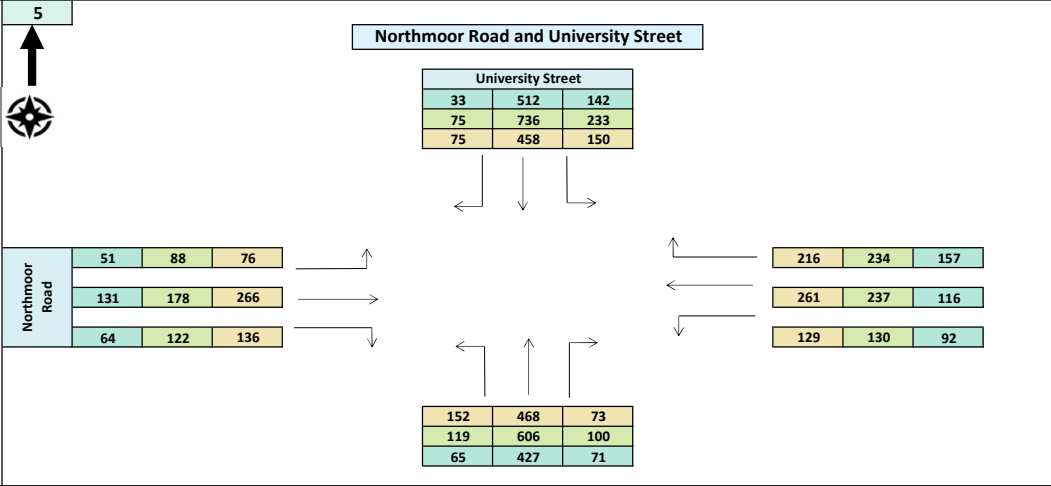
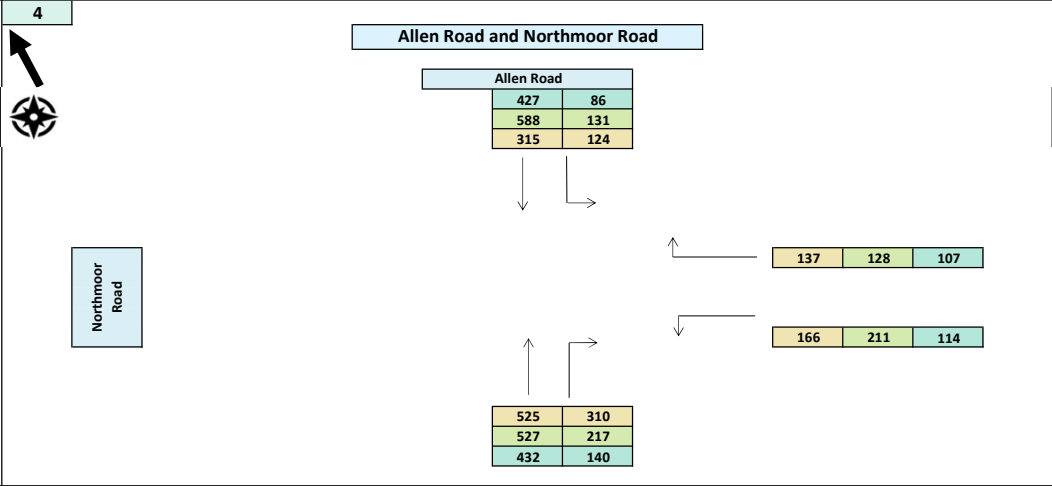
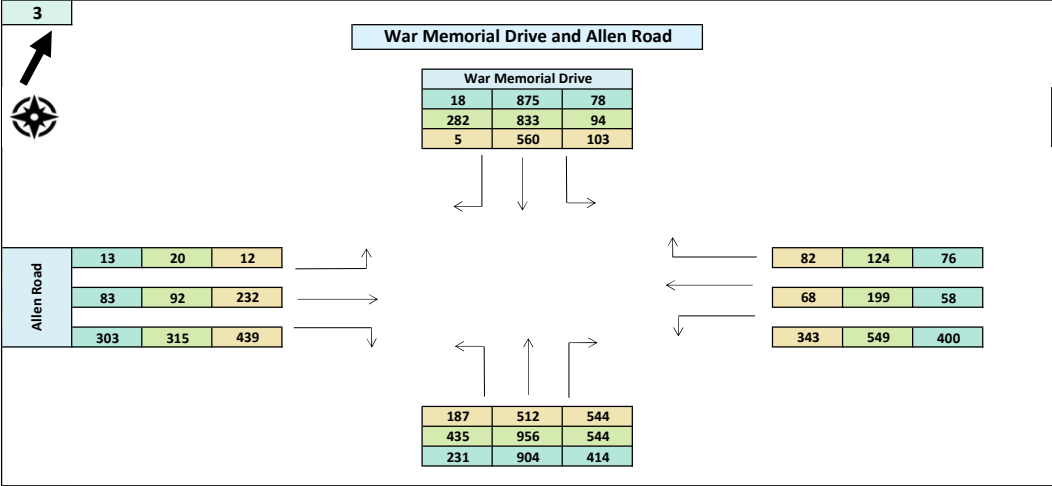
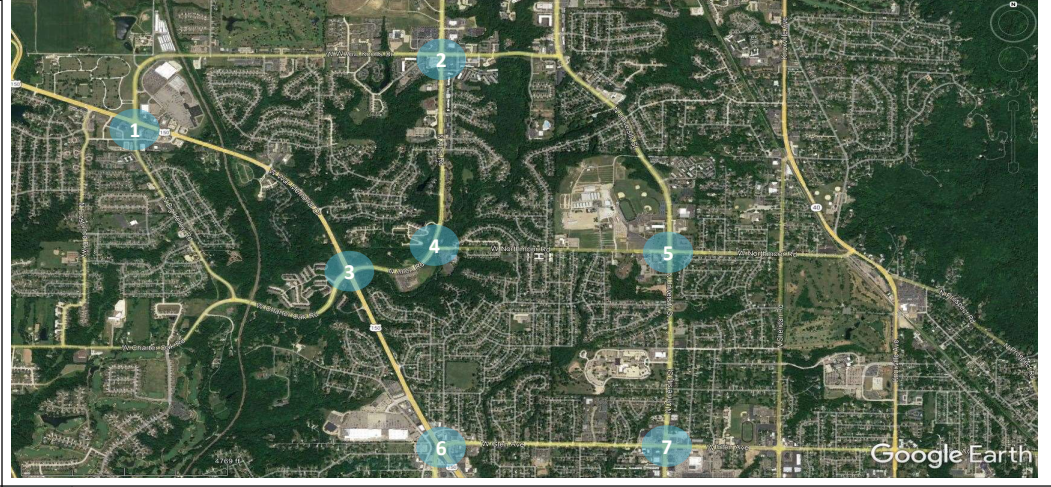
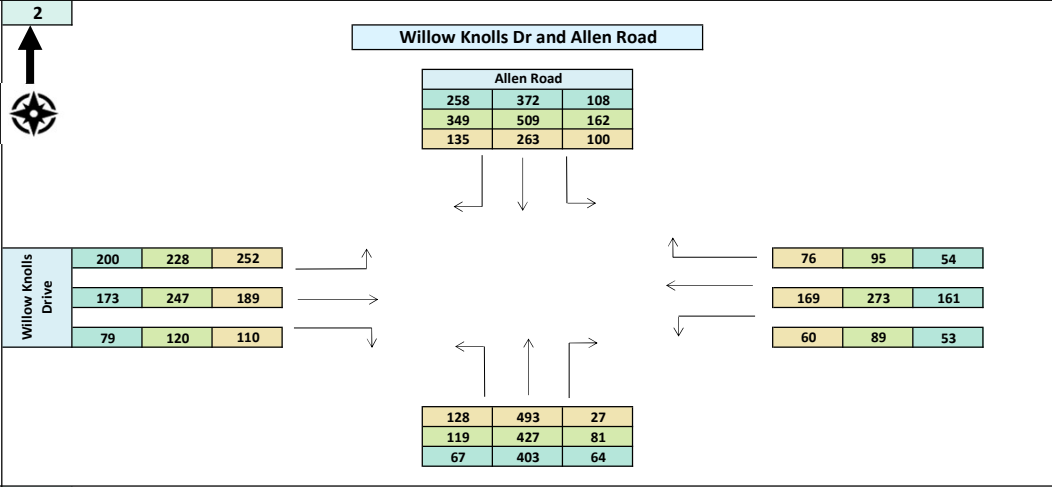
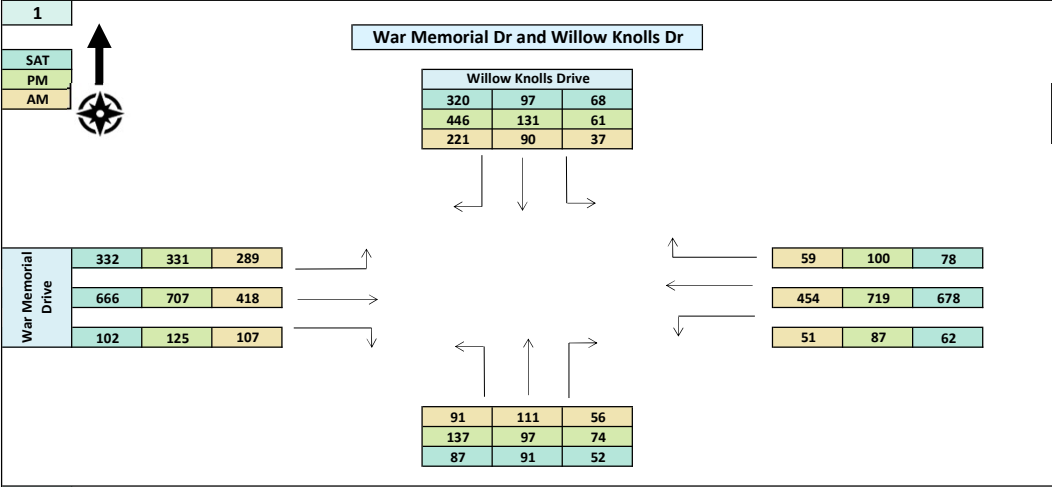
Existing traffic counts at the following intersections were taken for a typical AM peak hour, PM peak hour, and Midday weekend peak hour.

1. Willow Knolls and War Memorial
2. Willow Knolls and Allen
3. War Memorial and Allen
4. Allen and Northmoor
5. University St and Northmoor Rd
6. War Memorial and Glen Ave
7. Glen Ave and University St

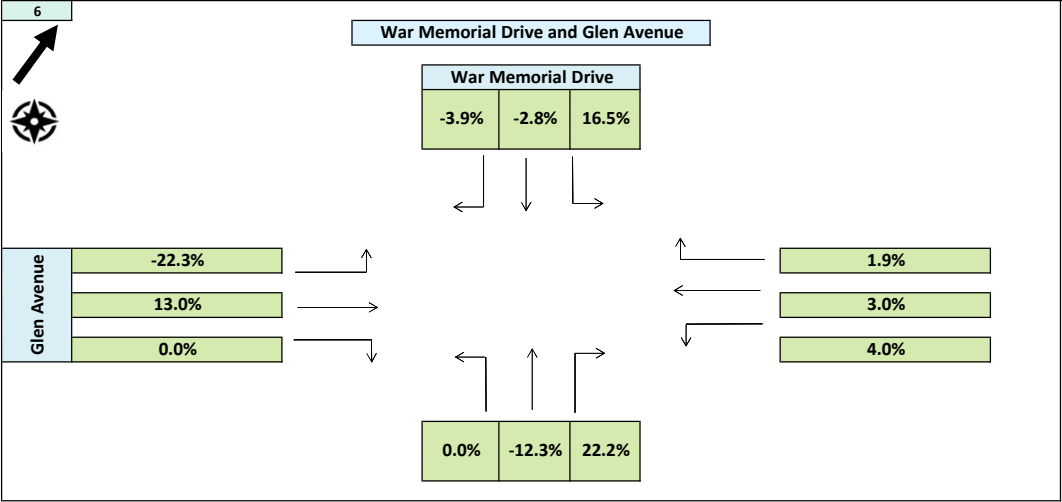
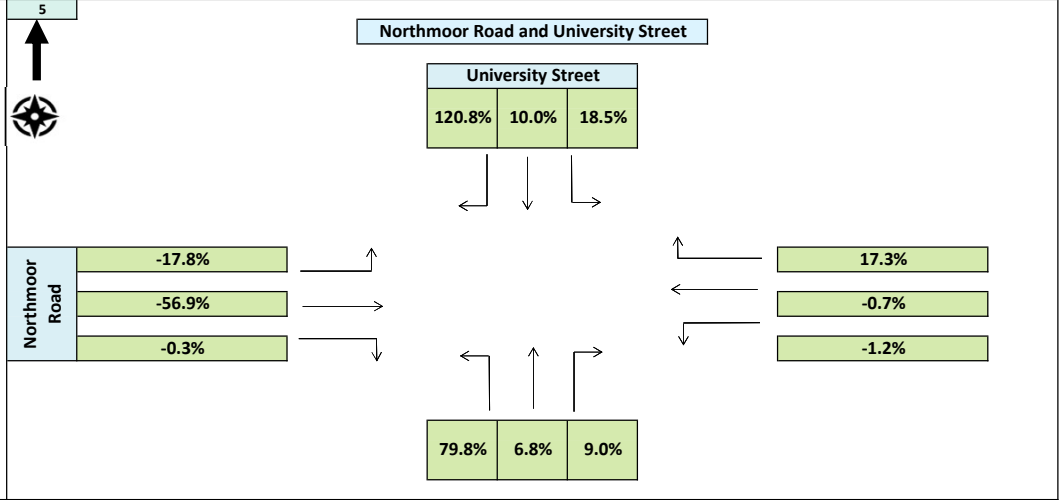
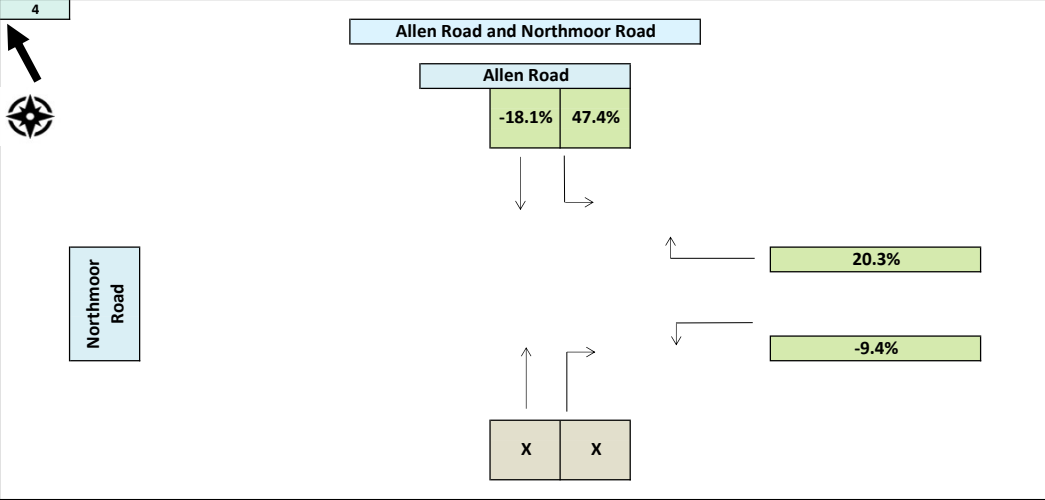
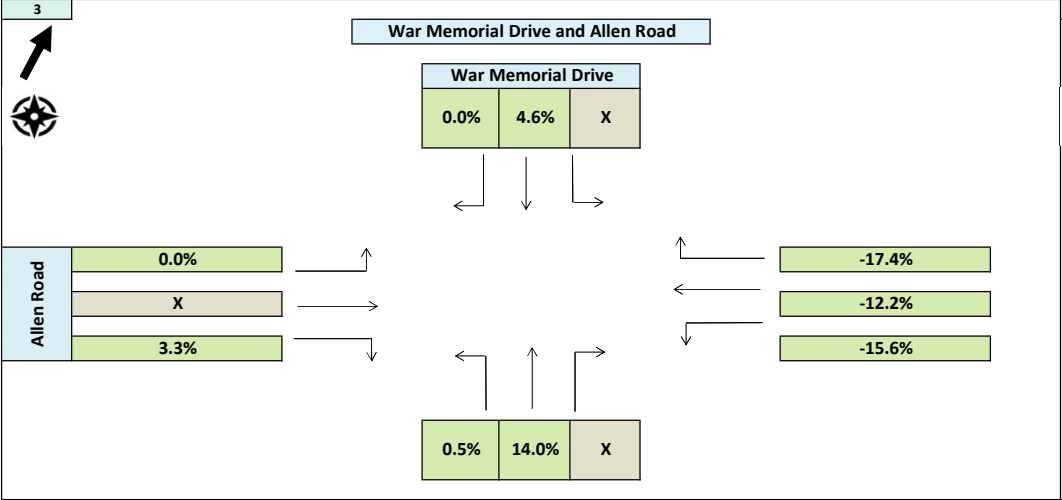
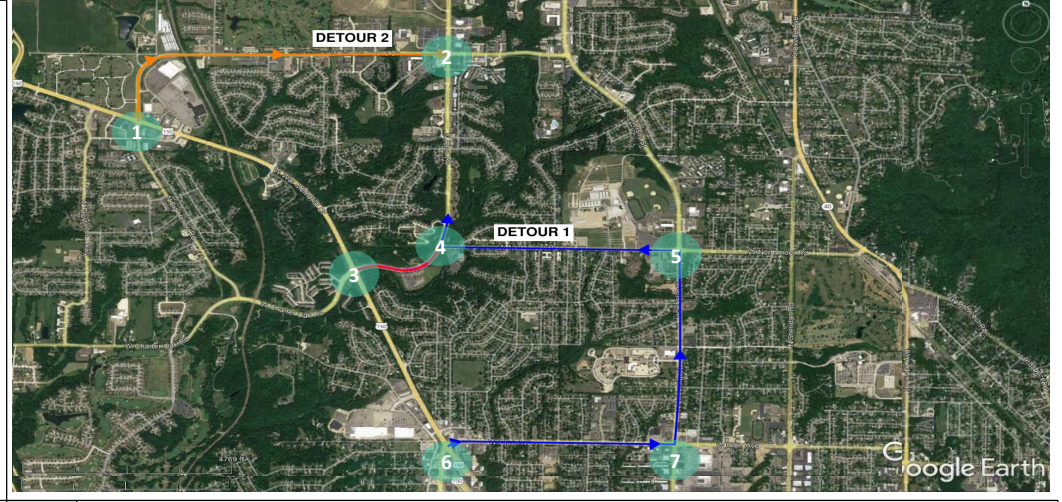
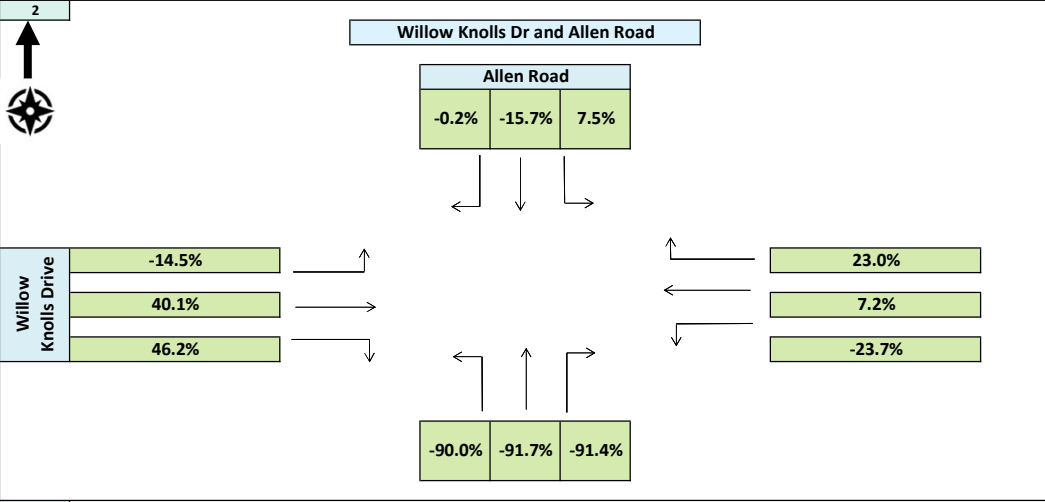
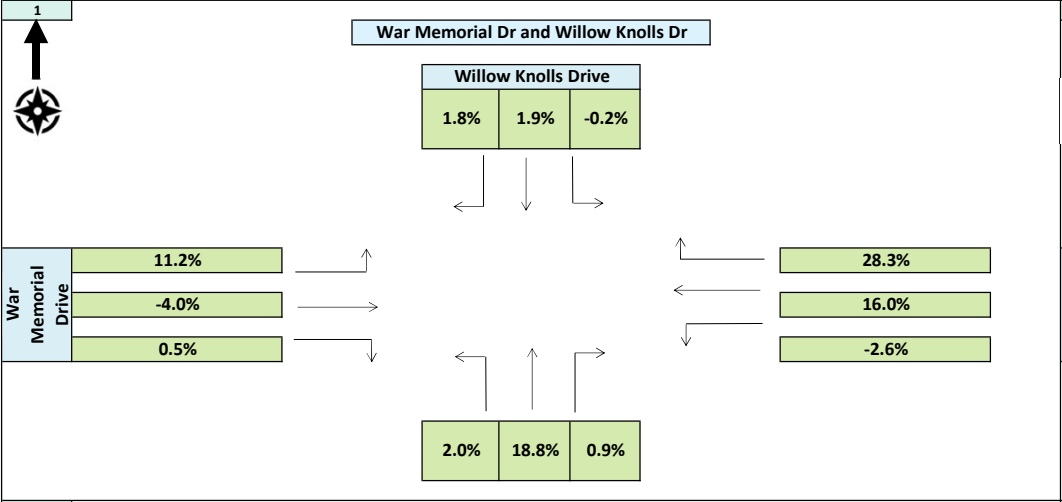
The Travel Demand Model (TDM) was updated to include the alternatives for analysis within the existing+committed (2025) year. It was determined that most of the rerouted vehicles would be local travelers, meaning that the vehicle rerouting would be minimally affected by the marked detour route. The detour behavior shown in the updated TDM was validated and used to calculate projected detour design hour volumes.

The percent differences between the TDM results for existing traffic and each closure condition were calculated and applied to the existing count volumes. The resultant volumes are shown in the attached volume exhibits

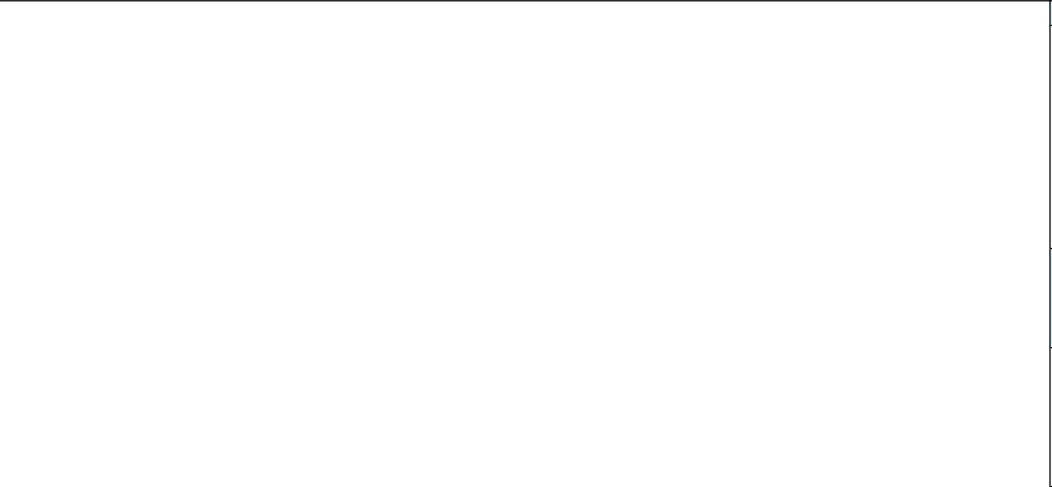
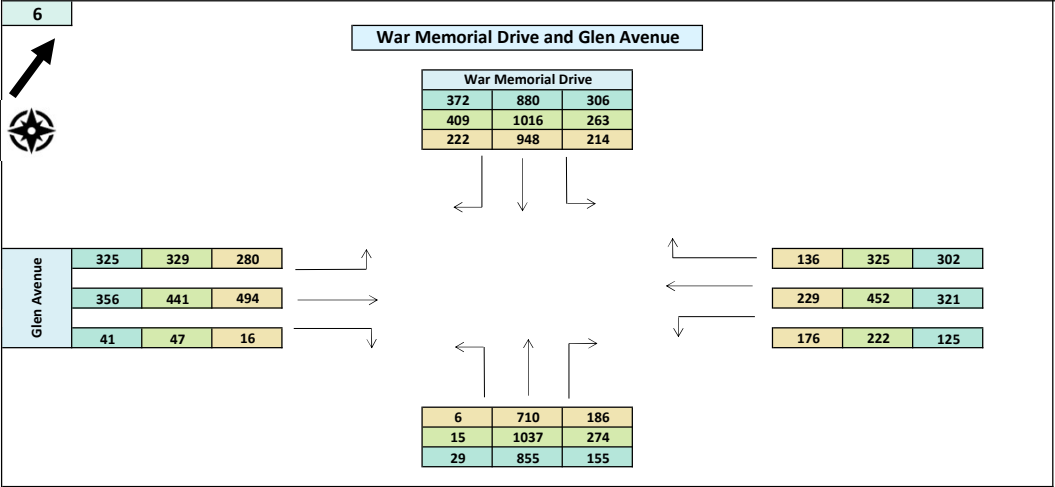
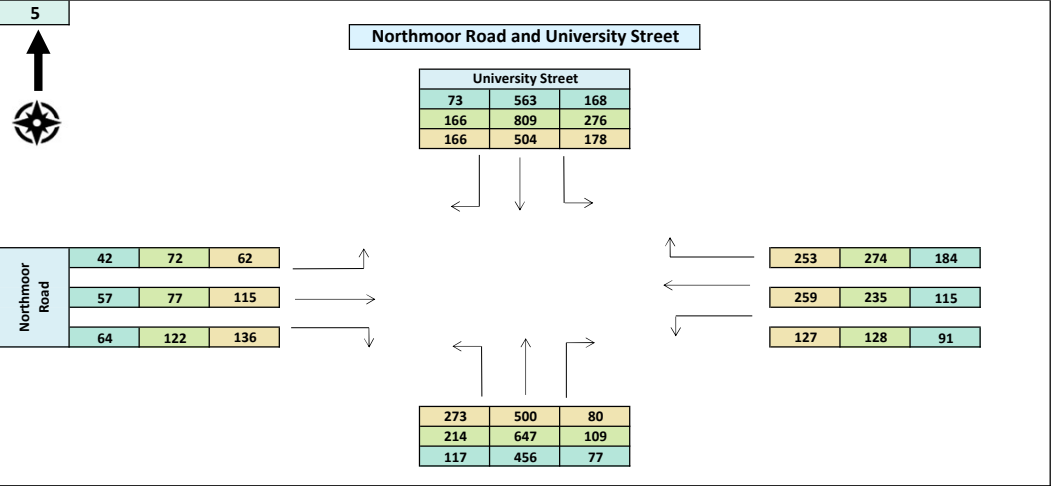
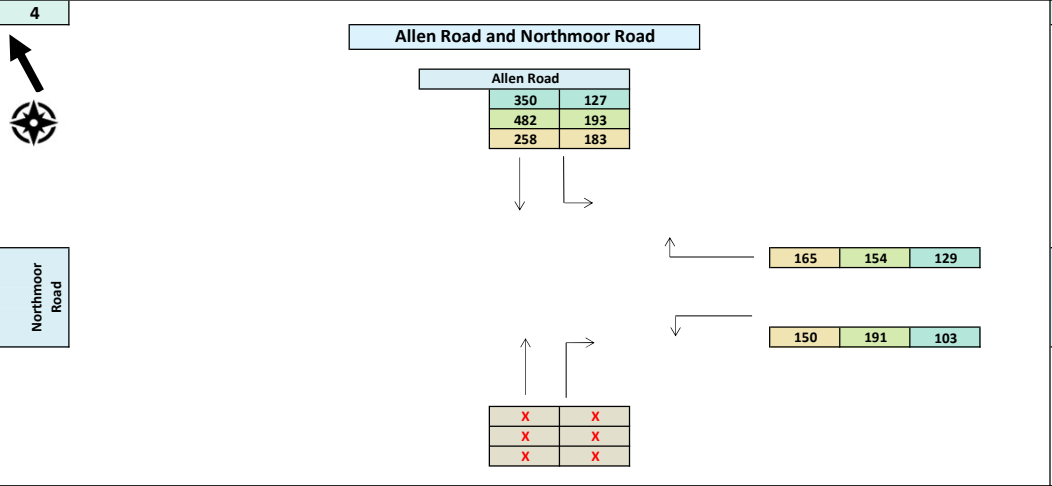
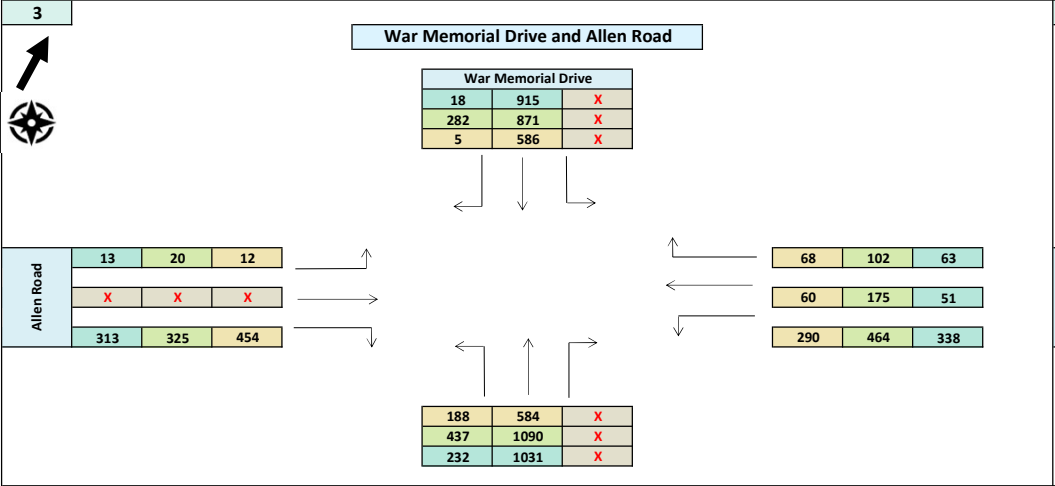
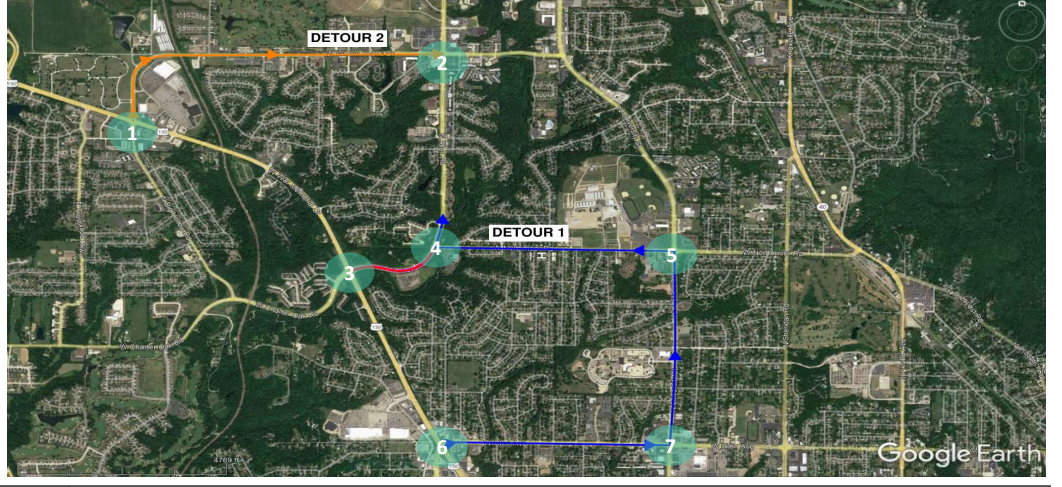
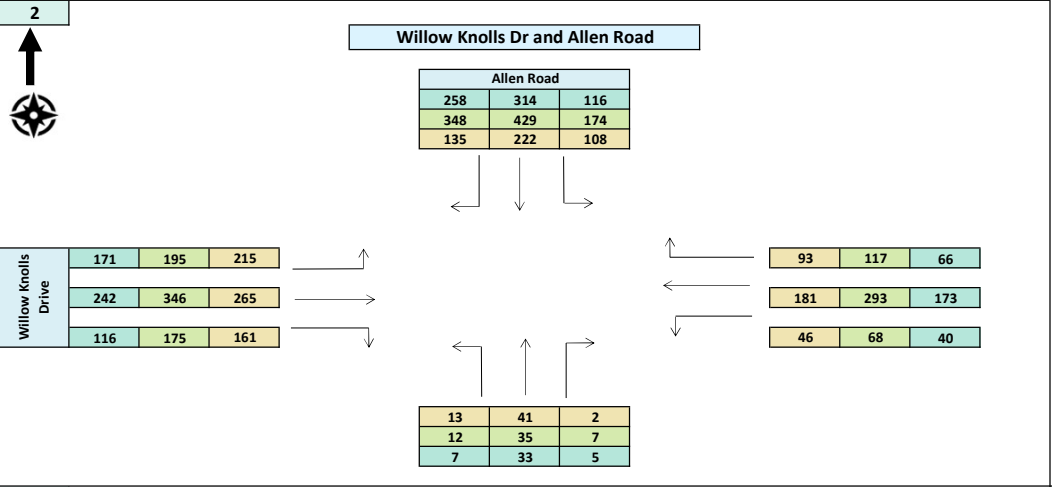
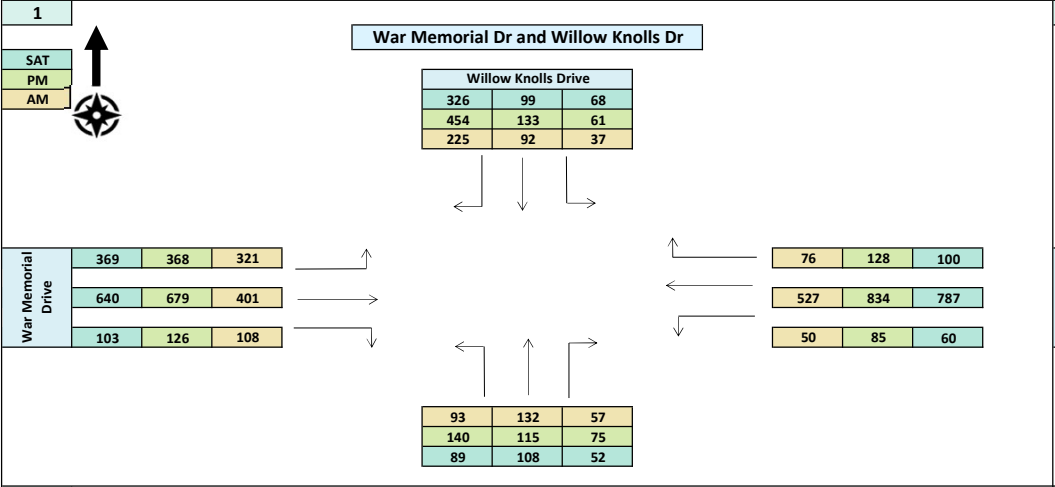
Existing Counts



Northbound Closure Percent Difference



Northbound Closure



Southbound Closure Percent Difference

