Alternative 1 Full Closure of Harmony Road

If Alternative 5 is added with Alternative 1, traffic operations along SR 273 are improved.

Advantages

- Removes right turn lane and converts lane from SB I-95 ramp to a merge lane
- Eliminates weave condition
- Removes Harmony Road signal phases, which increases green time on SR 273
- Greatly reduces traffic volumes on Harmony Road
- No known environmental resources affected

Disadvantages

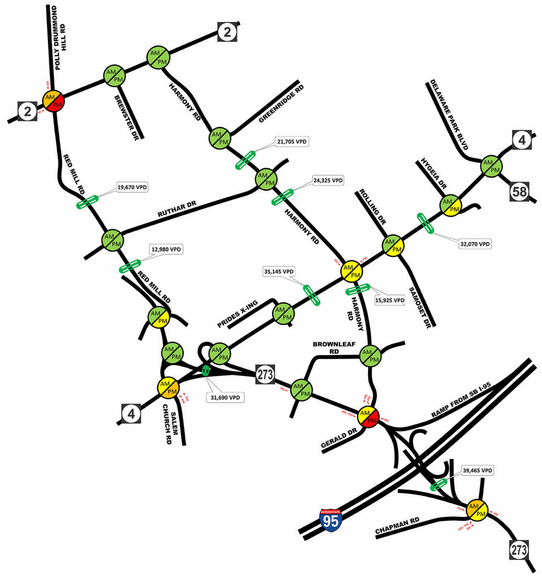
- Does not increase the merge distance from SB I-95 ramp onto WB 273
- Reduces access points to the community from SR 273 and SR 4
- Increases traffic on Brownleaf and other residential streets
- Increases through traffic on SR 273

Regional Impacts from Full closure of Harmony Road:

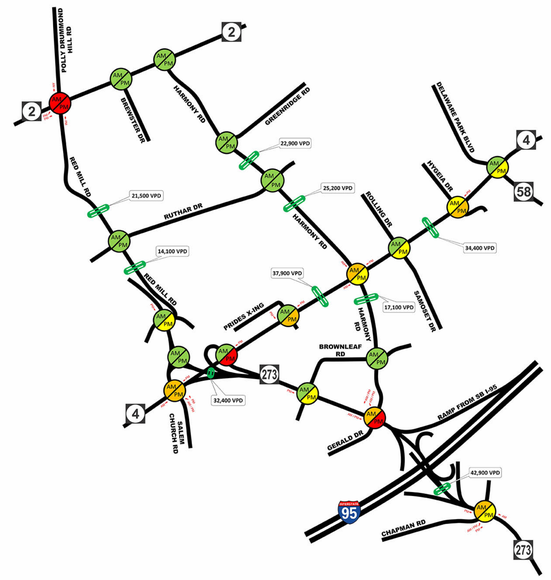
- Traffic volumes on Red Mill Road between SR 273 and Ruthar Drive increase by about 20%
- Traffic volumes on Red Mill Road between SR 2 and Ruthar Drive increase by about 15%
- Traffic volumes on SR 273 between Harmony Road and SR 4 increase by about 15%
- Traffic volumes on SR 4 between SR 273 and Harmony Road increase by about 10%
- Traffic volumes on SR 4 between Harmony Road and SR 58 increase by about 5%
- The AM Peak Hour operations at the intersection of:
  - SR 273 and Brownleaf Road, causing it to fail (>60 sec of delay/vehicle)
- The PM Peak Hour operations at the following intersections, causing them to fail (>60 sec of delay/vehicle):
  - SR 273 and Brownleaf Road
  - SR 4 and Salem Church Road
  - SR 4 and Hygeia Drive

Closure of Harmony Road

2013



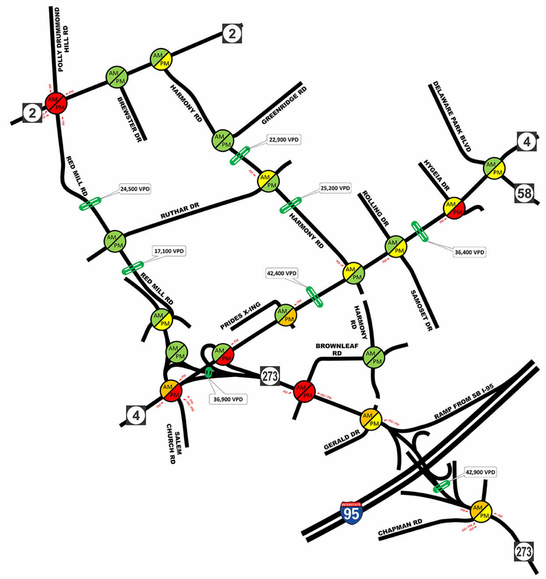
2040 No-Build



Harmony Road Closure Facts

- Closure of Harmony Road was originally studied almost two decades ago (mid-1990's) as part of the Churchmans Crossing Study
- Closure was considered for the following reasons:
  - Relatively high traffic volumes (19,000 vehicles-per-day using Harmony Road in 1998)
  - The speed of traffic on Harmony Road
  - The short weaving section on SR 273
- DelDOT temporarily closed the road during the month of November 1998
- DelDOT monitored the volume of traffic on surrounding roads to see where the 19,000 vehicles-per-day (vpd) from Harmony Road went:

vehicles-per-day (vpd)	
4,500	increase on the ramp from SR 273 to SR 4
3,500	increase on Dorchester Road (e.g., vehicles cutting through the neighborhood
3,000	increase on Red Mill Road
1,500	increase on Ruthar Drive
2,000	increase on SR 7
4,500	not accounted for - assumed to have shifted to Salem Church Road, SR 141 or other roads not studied
19,000	TOTAL

- This data was used to help estimate where traffic would go if Harmony Road were to be permanently closed

2040 Alternative 1