

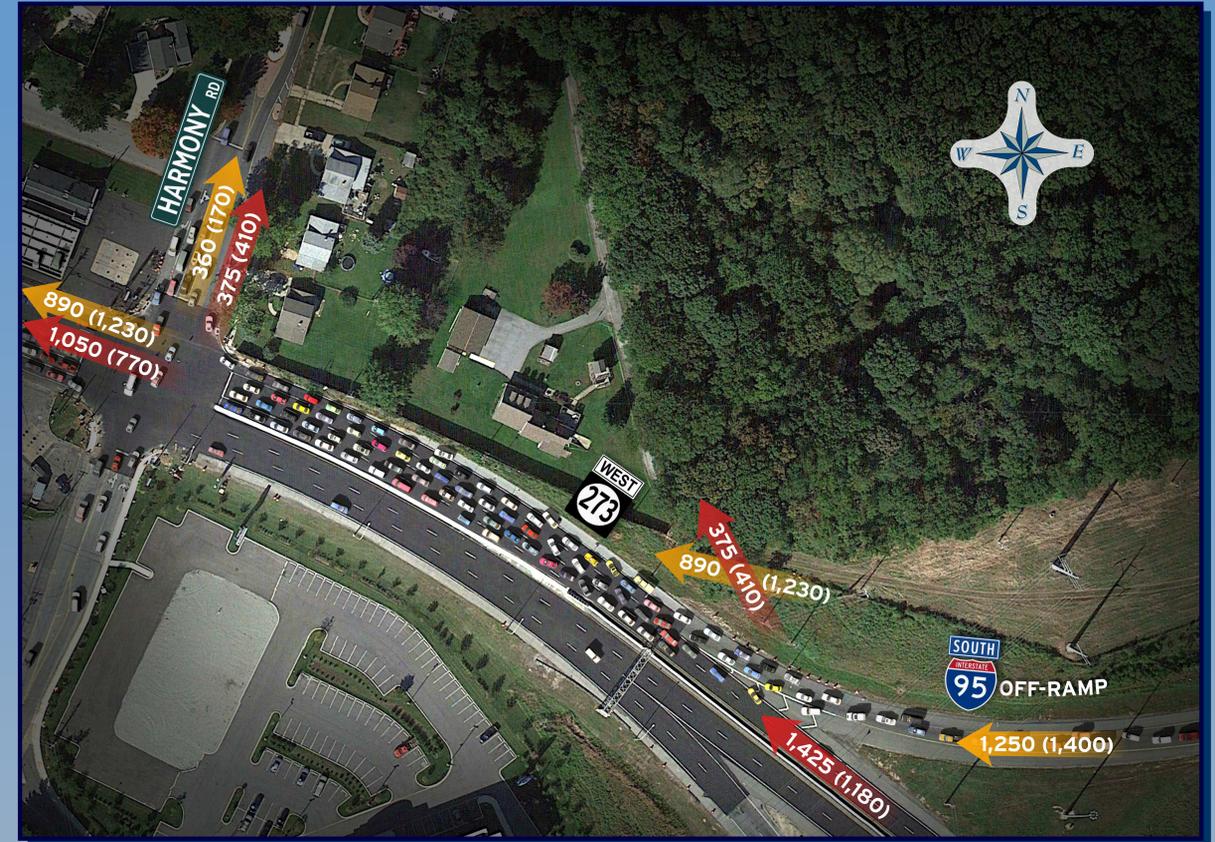
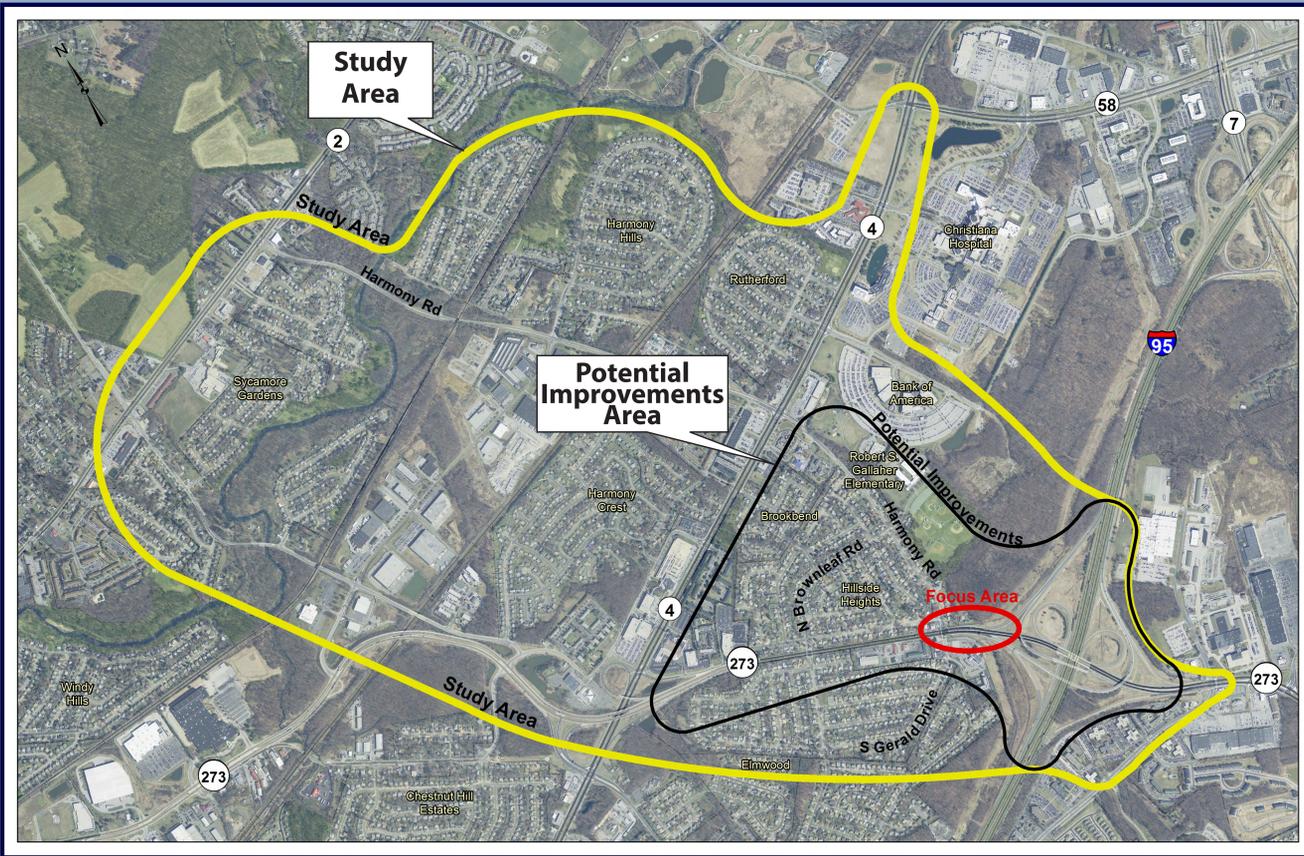
# Purpose & Need

## Project Purpose

- To improve traffic operations and safety on SR 273 between I-95 and Harmony Road.

## Project Needs

- **SR 273 Safety:** Reduce the high frequency of crashes related to the Focus Area.
- **Weaving on Westbound 273 between Southbound I-95 ramp and Harmony Road:** Address the short (475 feet) weaving area on westbound SR 273 between the southbound I-95 ramp and Harmony Road.
- **Intersection Capacity:** Address the long, peak-hour queues and delays at the SR 273/Harmony Road intersection.
- **Interchange Design & Function:** Improve the function of the I-95 /SR 273 interchange.



## SR 273 Weaving Section

### Problems:

- Motorists entering westbound SR 273 from southbound I-95 often encounter westbound SR 273 traffic merging right to reach Harmony Road
- This "weaving" traffic creates turbulence in the westbound SR 273 traffic flow
- The short distance between the southbound I-95 off-ramp and the Harmony Road intersection compounds the weaving issue

### Impacts:

- The short weaving section has resulted in numerous sideswipe and rear-end collisions between Harmony Road and the southbound I-95 ramp
- The short weaving section also creates long queues of stopped vehicles on the southbound I-95 off-ramp
- These queues occasionally extend onto mainline I-95 in both the AM and PM peak hours
- By 2040, these queues are expected to increase by 25% in the AM peak period and 100% in the PM peak period
- Several crashes have occurred on the southbound I-95 ramp due to stopped traffic

## SR 273/Harmony Road Intersection

- The traffic signal at Harmony Road creates queues along westbound SR 273 that worsens the short weaving area described above
- On average, motorists are delayed by 55 seconds in the AM Peak Period and by 100 seconds in the PM peak period as they pass through the intersection
- Without any improvements, by 2040, these peak period delays are expected to increase by 35-40%

