

Overview of Scope

Reston Detailed Network Analysis

The Purpose of the network analysis is as to evaluate the conceptual grids of streets and road elements at gateways to the Reston TSAs, which would result in traffic flowing at acceptable conditions while maintaining a walkable grid of streets. The end result should be TSA street networks that are cost effective, and require the minimum right-of-way, with the least negative impacts to adjacent properties and the environment and take into consideration the provisions of the Reston Phase I Master Plan. These improvements will mitigate problem locations in the three TSAs.

Task 1: Data Collection

Task 2: Establish Existing Conditions

- Quantify current traffic conditions in the TSAs to use as a baseline for the project.

Task 3: Analyze Future Conditions

- Finalize the conceptual grid of streets in the TSAs, determine the number of lanes, bike lanes, and what new connections might be needed.

Task 4: Phasing Analysis

- Analyze which improvements recommended in Phase I of the Reston Comprehensive plan are needed first. Which improvements provide the greatest amount of connectivity and help alleviate congestion.

Task 5: DRPT Classifications

- Determine the appropriate DRPT classifications for the new network in the TSAs

Task 6: Meetings

- Up to five public meetings during the process at key process points to ensure they remain involved in the process
- Monthly meetings with the Advisory Group to seek their input and update them on the project process
- Monthly meetings with stakeholders to ensure that the property owners and developers are onboard with the recommendations being made in the study.

Task 7: Documentation

- Final Report that documents the process, findings and recommendations of the study

Discrete Tasks

There are four specific tasks associated with the Reston Detailed Network Analysis.

1. Reston Parkway Capacity Improvements

As an extension of the Network analysis, this task will conduct a corridor analysis of Reston Parkway from Baron Cameron Avenue to Lawyers Road focused on mitigating the excessive delays at these intersections.

2. *Fairfax County Parkway & Spring Street Interchange*

The interchange of Spring Street and Fairfax County Parkway currently experiences heavy queuing on westbound Spring Street, as vehicles try to make a left hand turn to access northbound Fairfax County Parkway. As an extension of the Network analysis, this task will look at alternative interchange configurations to alleviate this queuing.

3. *Fairfax County Parkway & Sunrise Valley Drive*

The interchange of Sunrise Valley Drive and Fairfax County Parkway currently fails during both the AM and PM peak, with delays over 100 seconds. The analysis conducted as part of Reston Phase I determined that the delay at this intersection cannot be mitigated with intersection improvements, and that a grade separated interchange is needed. As an extension of the Network analysis, this task will re-evaluate if the intersection can be mitigated by at grade improvements. If it is determined that the excessive delays cannot be mitigated at grade, this task will look at alternative interchange configurations to alleviate the failing conditions.

4. *Rock Hill Bridge at Sunrise Valley Drive*

The Comprehensive Plan for Innovation Station, Land Unit A in the Dulles Suburban Center, modified the recommendation for a bridge crossing the DAAR, connecting the Innovation Center TSA with Loudoun County. The County wants to evaluate how Sunrise Valley Drive can connect with the proposed bridge