

Roadway Connection over Dulles Toll Road / Dulles International Airport Access Highway
(Sunrise Valley Drive to Innovation Avenue / Rock Hill Road / Davis Drive / Shaw Road)

Alternatives Comparison

Alternative 1

Advantages:

- Crosses Dulles Greenway Ramp at lower elevation than Alternatives 2 and 3, resulting in:
 - lower and shorter bridge (37' to 42' high at highest point and approximately 1050' long)
 - less impact to Sunrise Valley Drive profile and adjacent parcel access*

Disadvantages:

- Impacts driveway along Sunrise Valley Drive for 2325 Dulles Corner Boulevard parking structure (approximate Station 14+20); proposed roadway elevation is 0' to 1' higher than existing*
- Impacts driveway for the National Concrete Masonry Association at 13750 Sunrise Valley Drive (approximate Station 15+00); proposed roadway elevation is 0.5' to 3' higher than existing*
- Requires relocation of two overhead sign structures, one on EB Dulles International Airport Access Highway (DIAAH) and one on WB Dulles Toll Road (DTR)
- Requires proposed bridge/structure to continue along Innovation Avenue to intersection with Dulles Green Boulevard (due to elevation differences between proposed and existing conditions)
 - Could impact intersection of Innovation Avenue and Dulles Green Boulevard (depending on vertical alignment selected)
- Vertical clearance restraints under the overpass does not allow Sunrise Valley Drive to connect to properties west of the overpass on the south side of the Dulles Toll Road or additional road connections under the overpass on the north side of the Toll Road
- Could potentially eliminate/hinder operations of the bus bays and/or kiss and ride spaces on the north side of the Dulles Toll Road
- Eliminates TOD opportunity within ¼-mile of the planned Route 28 Metrorail station forming a physical and visual barrier between the station and developable land
- Impacts designated Resource Protection Area (RPA) and possible Environmental Quality Corridor (EQC) that should be protected under adopted Fairfax County policy
- Provides roadway connection and additional traffic volumes to an existing roadway and area where there are already concerns regarding traffic congestion

- Eliminates the possibility of moving transit facilities further west and integrating these facilities with planned future development

Alternative 2

Advantages:

- Crosses Dulles Greenway Ramp at lower elevation than Alternative 3, resulting in:
 - lower and shorter bridge (39' to 50' high at highest point and approximately 1075' long)
 - less impact to Sunrise Valley Drive profile and adjacent parcel access*
- Provides the most direct and nearest to perpendicular connection over DIAAH and DTR minimizing the bridge span lengths and superstructure depths

Disadvantages:

- Impacts driveway for 13755 Sunrise Valley Drive (approximate Station 102+90); proposed roadway elevation is 1.5' to 5' higher than existing*
- Impacts driveway along Sunrise Valley Drive for 2325 Dulles Corner Boulevard parking structure (approximate Station 104+20); proposed roadway elevation is 3.5' to 9' higher than existing*
- Impacts driveway for the National Concrete Masonry Association at 13750 Sunrise Valley Drive (approximate Station 105+00); proposed roadway elevation is 5' to 11.5' higher than existing*
- Requires proposed bridge/structure to continue along Rock Hill Road past CIT driveway (due to elevation differences between proposed and existing conditions)
 - Could impact CIT driveway (depending on vertical alignment selected)
- Provides roadway connection and additional traffic volumes to an existing roadway and area where there are already concerns regarding traffic congestion
- Requires proposed bridge/structure to continue past CIT building affecting views from the building
- Vertical clearance restraints under the overpass does not allow Sunrise Valley Drive to connect to properties west of the overpass on the south side of the Dulles Toll Road or additional road connections under the overpass on the north side of the Toll Road
- Impacts designated Resource Protection Area (RPA) and possible Environmental Quality Corridor (EQC) that should be protected under adopted Fairfax County policy.
- Significantly reduces TOD opportunity within ¼-mile of the planned Route 28 Metrorail station by bisecting developable land and constructing

physical and visual barriers between the station and existing CIT development.

- Eliminates the possibility of moving transit facilities further west and integrating these facilities with planned future development

Alternative 3

Advantages:

- Provides greater opportunities for potential TOD development within ¼-mile of planned Route 28 Metrorail station
- Provides opportunity for station access to be moved further west and to be integrated with planned new development of the CIT site as well as property located adjacent to the station south of the Dulles Toll Road.
- Provides design and alignment flexibility; roadway can connect to future extensions of Shaw Road or Davis Drive with few constraints to match existing alignments.
- Does not impact RPA or possible EQC in Fairfax County (Loudoun County impact to be determined)
- Allows flexibility in providing an alternate underpass (for Sunrise Valley Drive), and may allow access to airport parcel for Loudoun County

Disadvantages:

- Crosses Dulles Greenway Ramp at higher elevation than Alternatives 1 and 2, resulting in:
 - higher and longer bridge (49' to 63' high at highest point and 1450' long)
 - more impact to Sunrise Valley Drive profile and parcel access*
- Impacts driveway for 13755 Sunrise Valley Drive (approximate Station 200+35); proposed roadway elevation is 0' to 2.5' higher than existing*
- Impacts driveway for 13755 Sunrise Valley Drive (approximate Station 203+90); proposed roadway elevation is 3.5' to 14' higher than existing*
- Impacts driveway along Sunrise Valley Drive for 2325 Dulles Corner Boulevard parking structure (approximate Station 204+20); proposed roadway elevation is 6.5' to 19' higher than existing*
- Impacts driveway for the National Concrete Masonry Association at 13750 Sunrise Valley Drive (approximate Station 205+05); proposed roadway elevation is 9' to 22' higher than existing*
- Requires proposed bridge/structure to continue past CIT building affecting the views from the building

* ***The actual amount of impact is dependent on which profile is utilized for this alternative.***