

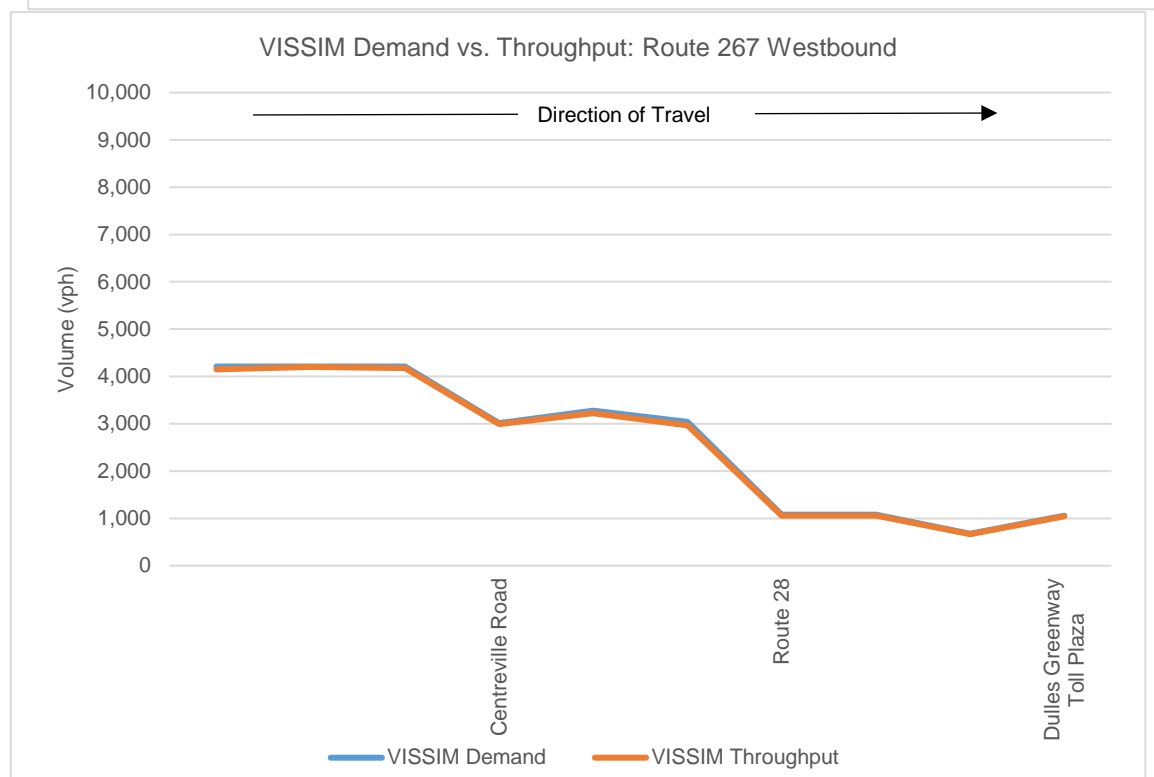
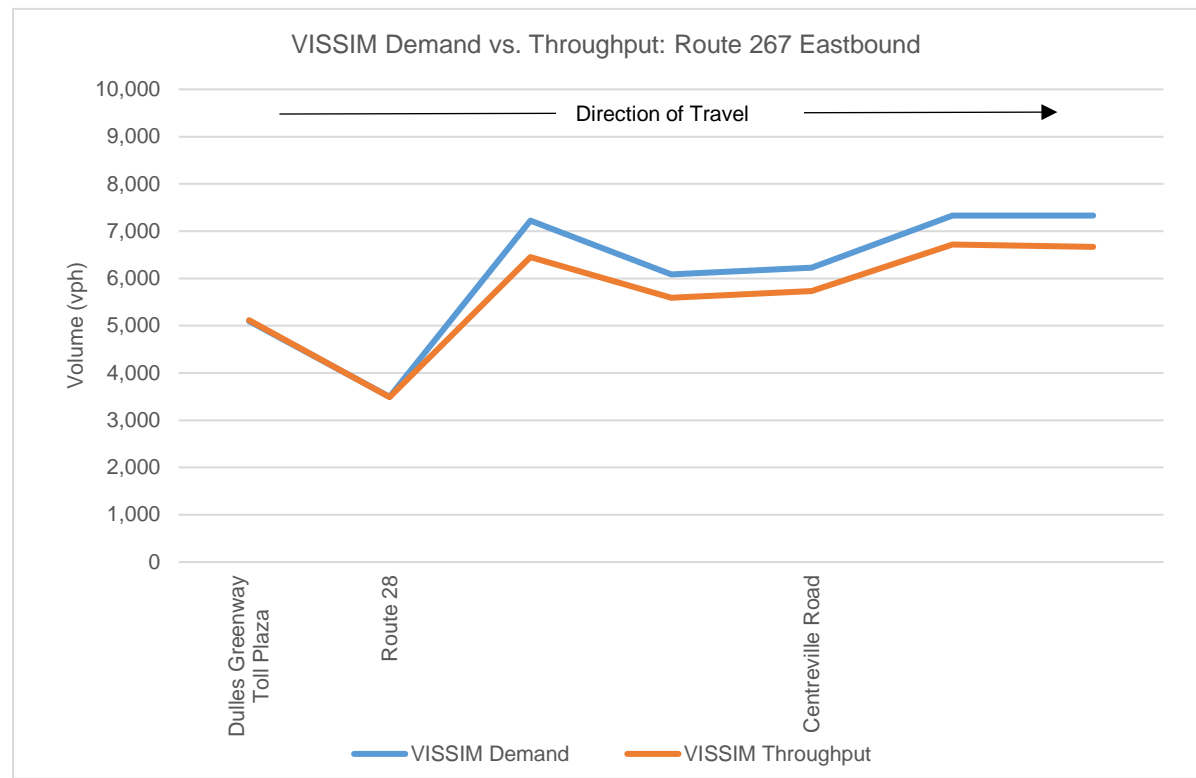
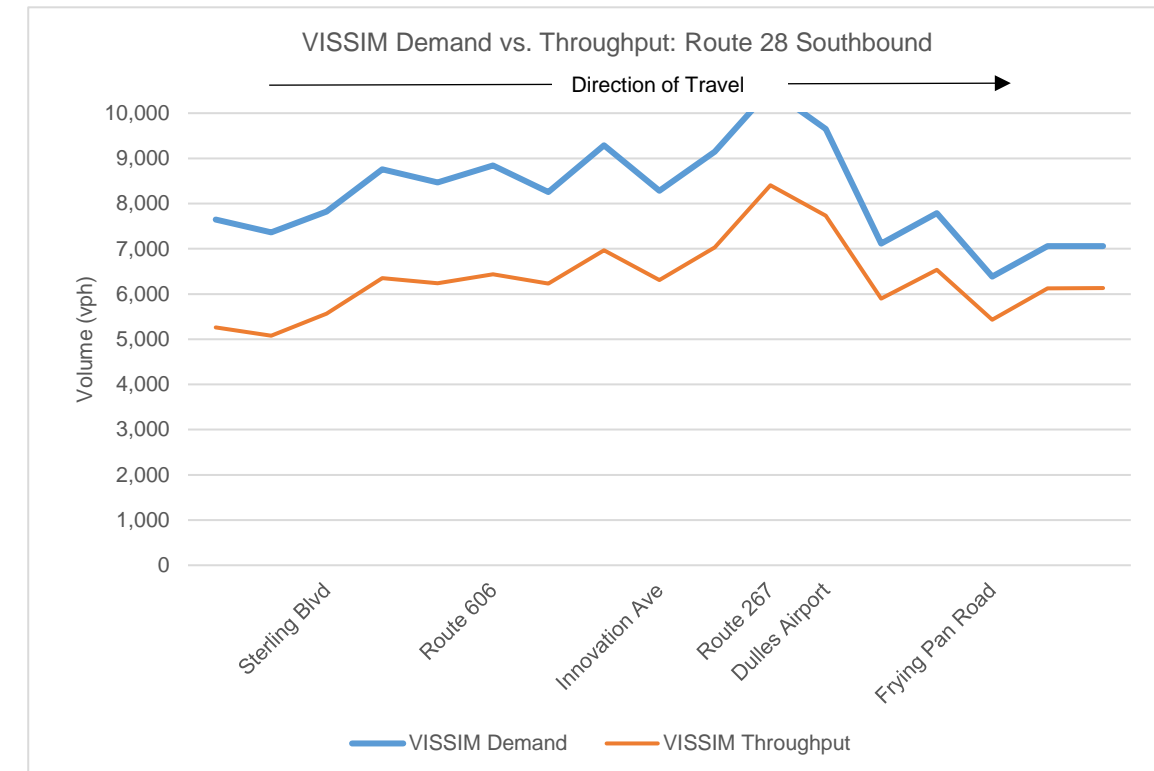
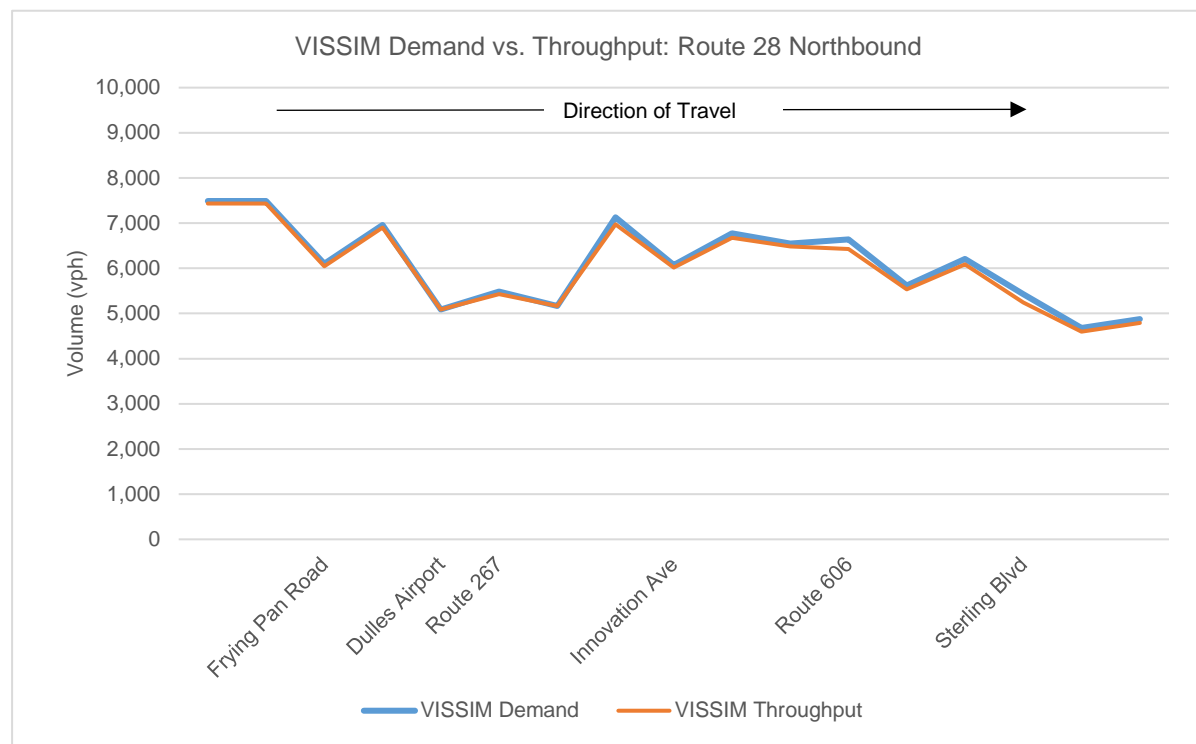
Freeway Segment and Ramp MOEs

AM Peak Hour (8:00 AM - 9:00 AM)

| Facility | Segment | Type | Balanced Count (vph) | VISSIM Throughput (vph) | Difference (vph) | Difference (%) | Average Speed (mph) | Average Density (vpmp) | % Demand Served |
|--|---|---------|----------------------|-------------------------|------------------|----------------|---------------------|------------------------|-----------------|
| Northbound Route 28 | Mainline south of Frying Pan Road | Basic | 7,490 | 7,434 | -56 | -1% | 38 | 49.6 | 99% |
| | Mainline south of Frying Pan Road | Diverge | 7,490 | 7,434 | -56 | -1% | 39 | 42.0 | 99% |
| | Between off-ramp to Frying Pan Road and on-ramp from Frying Pan Road | Basic | 6,100 | 6,048 | -52 | -1% | 55 | 27.6 | 99% |
| | Between on-ramp from Frying Pan Road and off-ramp to Route 267 EB/Dulles Airport | Weave | 6,960 | 6,901 | -59 | -1% | 55 | 24.9 | 99% |
| | Between off-ramp to Route 267 EB/Dulles Airport and on-ramp from Route 267 EB | Basic | 5,085 | 5,090 | 5 | 0% | 56 | 22.6 | 100% |
| | Between on-ramp from Route 267 EB and off-ramp to Route 267 WB | Weave | 5,485 | 5,427 | -58 | -1% | 55 | 20.6 | 99% |
| | Between off-ramp to Route 267 WB and on-ramp from Route 267 WB | Basic | 5,165 | 5,165 | 0 | 0% | 56 | 22.8 | 100% |
| | Between on-ramp from Route 267 WB and off-ramp to Innovation Ave | Weave | 7,130 | 6,971 | -159 | -2% | 54 | 25.7 | 98% |
| | Between off-ramp to Innovation Ave and on-ramp from Innovation Ave | Basic | 6,070 | 6,018 | -52 | -1% | 57 | 21.1 | 99% |
| | Between on-ramp from innovation Ave and off-ramp to Route 606 EB | Weave | 6,775 | 6,674 | -101 | -1% | 50 | 25.5 | 99% |
| | Between off-ramp to Route 606 EB and on-ramp from Route 606 EB | Basic | 6,550 | 6,484 | -66 | -1% | 53 | 30.2 | 99% |
| | Between on-ramp from Route 606 EB and off-ramp to Route 606 WB | Weave | 6,640 | 6,429 | -211 | -3% | 54 | 23.8 | 97% |
| | Between off-ramp to Route 606 WB and on-ramp from Route 606 WB | Basic | 5,620 | 5,533 | -87 | -2% | 56 | 24.5 | 98% |
| | Between on-ramp from Route 606 WB and off-ramp to Sterling Blvd EB | Weave | 6,210 | 6,084 | -126 | -2% | 55 | 22.3 | 98% |
| | Between off-ramp to Sterling Blvd EB and off-ramp to Sterling Blvd WB | Diverge | 5,430 | 5,248 | -182 | -3% | 56 | 21.2 | 97% |
| Between off-ramp to Sterling Blvd WB and on-ramp from Sterling Blvd | Basic | 4,680 | 4,598 | -82 | -2% | 57 | 20.0 | 98% | |
| Mainline north of Sterling Blvd | Basic | 4,875 | 4,790 | -85 | -2% | 57 | 16.8 | 98% | |
| Southbound Route 28 | Mainline north of Sterling Blvd | Basic | 7,645 | 5,259 | -2,386 | -31% | 8 | 132.0 | 69% |
| | Between off-ramp to Sterling Blvd and on-ramp from Sterling Blvd WB | Basic | 7,365 | 5,078 | -2,287 | -31% | 11 | 115.0 | 69% |
| | Between on-ramp from Sterling Blvd WB and on-ramp from Sterling Blvd EB | Basic | 7,825 | 5,564 | -2,261 | -29% | 10 | 115.5 | 71% |
| | Between on-ramp from Sterling Blvd EB and off-ramp to Route 606 WB | Weave | 8,755 | 6,348 | -2,407 | -27% | 11 | 108.3 | 73% |
| | Between off-ramp to Route 606 WB and on-ramp from Route 606 WB | Basic | 8,465 | 6,239 | -2,226 | -26% | 18 | 86.7 | 74% |
| | Between on-ramp from Route 606 WB and off-ramp to Route 606 EB | Weave | 8,845 | 6,439 | -2,406 | -27% | 16 | 78.7 | 73% |
| | Between off-ramp to Route 606 EB and on-ramp from Route 606 EB | Basic | 8,255 | 6,230 | -2,025 | -25% | 21 | 72.0 | 75% |
| | Between on-ramp from Route 606 EB and off-ramp to Innovation Ave | Weave | 9,290 | 6,965 | -2,325 | -25% | 18 | 78.7 | 75% |
| | Between off-ramp to Innovation Ave and on-ramp from Innovation Ave | Basic | 8,285 | 6,310 | -1,975 | -24% | 29 | 53.8 | 76% |
| | Between on-ramp from Innovation Ave and on-ramp from Route 267 | Basic | 9,145 | 7,032 | -2,113 | -23% | 22 | 62.7 | 77% |
| | Between on-ramp from Route 267 and off-ramp to Dulles Airport | Weave | 10,520 | 8,405 | -2,115 | -20% | 19 | 73.4 | 80% |
| | Between off-ramp to Dulles Airport and off-ramp to Route 267 EB | Diverge | 9,650 | 7,734 | -1,916 | -20% | 27 | 56.8 | 80% |
| | Between off-ramp to Route 267 EB and on-ramp from Route 267 EB | Basic | 7,115 | 5,896 | -1,219 | -17% | 55 | 26.5 | 83% |
| | Between on-ramp from Route 267 EB and off-ramp to Frying Pan Road | Weave | 7,785 | 6,538 | -1,247 | -16% | 56 | 23.3 | 84% |
| | Between off-ramp to Frying Pan Road and on-ramp from Frying Pan Road | Basic | 6,385 | 5,432 | -953 | -15% | 56 | 23.9 | 85% |
| Mainline south of Frying Pan Road | Merge | 7,060 | 6,128 | -932 | -13% | 54 | 24.1 | 87% | |
| Mainline south of Frying Pan Road | Basic | 7,060 | 6,130 | -930 | -13% | 55 | 27.9 | 87% | |
| Eastbound Route 267 | Mainline west of Dulles Greenway Toll Plaza | Basic | 5,100 | 5,117 | 17 | 0% | 30 | 59.1 | 100% |
| | Between Dulles Greenway Toll Plaza and mainline from Route 28/Dulles Airport | Basic | 3,495 | 3,489 | -6 | 0% | 8 | 137.4 | 100% |
| | Mainline leaving Dulles Airport near Rudder Road | Weave | 2,460 | 2,441 | -19 | -1% | 47 | 13.1 | 99% |
| | Between off-ramp to Rudder Road/Route 267 WB and off-ramp to DIAAH EB (west) | Diverge | 2,315 | 2,299 | -16 | -1% | 40 | 19.1 | 99% |
| | Between off-ramp to DIAAH EB and on-ramp from Aviation Dr | Basic | 1,010 | 1,018 | 8 | 1% | 44 | 11.3 | 101% |
| | Between on-ramp from Aviation Dr and off-ramp to Route 28 SB | Weave | 1,605 | 1,578 | -27 | -2% | 43 | 12.2 | 98% |
| | Between off-ramp to Route 28 SB and off-ramp to DIAAH EB (east) | Diverge | 935 | 887 | -48 | -5% | 44 | 10.1 | 95% |
| | Between off-ramp to DIAAH EB (east) and on-ramp from Route 28 SB | Basic | 380 | 394 | 14 | 4% | 45 | 4.3 | 104% |
| | Between on-ramp from Route 28 SB and off-ramp to Route 28 NB | Weave | 2,915 | 2,256 | -659 | -23% | 42 | 18.0 | 77% |
| | Between off-ramp to Route 28 NB and on-ramp from Route 28 NB | Basic | 2,515 | 1,903 | -612 | -24% | 53 | 17.8 | 76% |
| | Between on-ramp from Route 28 NB and DTR Toll Plaza | Basic | 3,545 | 2,918 | -627 | -18% | 47 | 18.9 | 82% |
| | Between DTR Toll Plaza and on-ramp from DIAAH EB (west) | Merge | 3,545 | 2,962 | -584 | -16% | 26 | 58.4 | 84% |
| | Between on-ramp from DIAAH EB (west) and mainline from Dulles Greenway | Basic | 3,730 | 3,160 | -570 | -15% | 17 | 57.6 | 85% |
| | Mainline between on-ramps from Dulles Greenway & Route 28/Dulles Airport/DIAAH and off-ramp to Centreville Road | Weave | 7,225 | 6,450 | -775 | -11% | 12 | 108.3 | 89% |
| | Between off-ramp to Centreville Road and on-ramp from DIAAH EB (east) | Basic | 6,085 | 5,589 | -496 | -8% | 14 | 99.7 | 92% |
| Between on-ramp from DIAAH EB (east) and on-ramp from Centreville Road | Merge | 6,225 | 5,734 | -491 | -8% | 13 | 84.7 | 92% | |
| Mainline east of Centreville Road | Merge | 7,330 | 6,717 | -613 | -8% | 14 | 104.4 | 92% | |
| Mainline east of Centreville Road | Basic | 7,330 | 6,666 | -664 | -9% | 26 | 64.5 | 91% | |
| Westbound Route 267 | Mainline east of off-ramp to DIAAH WB | Diverge | 4,210 | 4,153 | -57 | -1% | 57 | 18.1 | 99% |
| | Between off-ramp to DIAAH WB and off-ramp to Centreville Road | Basic | 4,210 | 4,201 | -9 | 0% | 57 | 18.3 | 100% |
| | Between off-ramp to DIAAH WB and off-ramp to Centreville Road | Diverge | 4,210 | 4,178 | -32 | -1% | 56 | 17.5 | 99% |
| | Between off-ramp to Centreville Road and on-ramp from Centreville Road | Basic | 3,015 | 2,994 | -21 | -1% | 57 | 13.0 | 99% |
| | Between on-ramp from Centreville Road and off-ramp to Dulles Airport | Weave | 3,280 | 3,224 | -56 | -2% | 57 | 11.3 | 98% |
| | Between off-ramp to Dulles Airport and off-ramp to Route 28 NB | Diverge | 3,040 | 2,964 | -76 | -3% | 39 | 18.9 | 97% |
| | Between off-ramp to Route 28 NB and off-ramp to Route 28 SB | Basic | 1,075 | 1,058 | -17 | -2% | 57 | 6.2 | 98% |
| | Between off-ramp to Route 28 NB and off-ramp to Route 28 SB | Diverge | 1,075 | 1,056 | -19 | -2% | 57 | 6.1 | 98% |
| | Between off-ramp to Route 28 SB and Dulles Greenway Toll Plaza | Basic | 675 | 666 | -9 | -1% | 58 | 5.3 | 99% |
| | Mainline west of Dulles Greenway Toll Plaza | Basic | 1,060 | 1,046 | -14 | -1% | 67 | 5.2 | 99% |
| Eastbound DIAAH | Mainline leaving Dulles Airport near Rudder Road | Basic | 690 | 691 | 1 | 0% | 45 | 7.6 | 100% |
| | Between on-ramp from Route 267 EB (west) and on-ramp from Route 267 EB (east) | Merge | 1,995 | 2,007 | 12 | 1% | 44 | 19.7 | 101% |
| | Between on-ramp from Route 267 EB (east) and off-ramp to Route 267 EB (west) | Merge | 2,550 | 2,566 | 16 | 1% | 54 | 18.1 | 101% |
| | Between on-ramp from Route 267 EB (east) and off-ramp to Route 267 EB (west) | Diverge | 2,550 | 2,538 | -12 | 0% | 53 | 16.1 | 100% |
| | Between off-ramp to Route 267 EB (west) and off-ramp to Route 267 EB (east) | Basic | 2,365 | 2,378 | 13 | 1% | 56 | 21.1 | 101% |
| | Between off-ramp to Route 267 EB (west) and off-ramp to Route 267 EB (east) | Diverge | 2,365 | 2,314 | -51 | -2% | 55 | 19.9 | 98% |
| Mainline east of Centreville Road | Basic | 2,225 | 2,243 | 18 | 1% | 56 | 20.2 | 101% | |
| Westbound DIAAH | Mainline east of on-ramp from Route 267 WB | Basic | 1,055 | 1,057 | 2 | 0% | 58 | 9.1 | 100% |
| | Between on-ramp from Route 267 WB near Centreville Road and on-ramp from Route 267 WB to Dulles Airport | Merge | 1,055 | 1,059 | 4 | 0% | 58 | 8.6 | 100% |
| | Between on-ramp from Route 267 WB near Centreville Road and on-ramp from Route 267 WB to Dulles Airport | Basic | 1,055 | 1,071 | 16 | 2% | 57 | 9.3 | 102% |
| | Between on-ramp from Route 267 WB to Dulles Airport and off-ramp to Rudder Road (Rental Car Return/Economy Parking) | Weave | 1,295 | 1,299 | 4 | 0% | 57 | 7.6 | 100% |
| | Between off-ramp to Rudder Road (Rental Car Return/Economy Parking) and on-ramps from Route 28/Route 267 EB | Basic | 815 | 832 | 17 | 2% | 39 | 8.2 | 102% |
| Mainline west of on-ramps from Route 28/Route 267 EB | Basic | 2,310 | 2,192 | -118 | -5% | 43 | 10.1 | 95% | |

AM Freeway MOEs

| Facility | Segment | Type | Balanced Count (vph) | VISSIM Throughput (vph) | Difference (vph) | Difference (%) | Average Speed (mph) | Average Density (vpmp) | % Demand Served |
|--|---|------|----------------------|-------------------------|------------------|----------------|---------------------|------------------------|-----------------|
| Frying Pan Road Interchange Ramps | Route 28 NB to Frying Pan Road EB | | 1,390 | 1,386 | -4 | 0% | 34 | 40.5 | 100% |
| | Frying Pan Road WB to Route 28 NB | | 860 | 881 | 21 | 2% | 38 | 11.5 | 102% |
| | Route 28 SB to Frying Pan Road EB | | 1,400 | 1,134 | -266 | -19% | 23 | 44.0 | 81% |
| | Frying Pan Road WB to Route 28 SB | | 675 | 688 | 13 | 2% | 24 | 28.1 | 102% |
| Route 267 Interchange Ramps | Route 28 NB to Route 267 EB/Dulles Airport (Combined) | | 1,875 | 1,838 | -37 | -2% | 42 | 21.7 | 98% |
| | Route 28 NB to Dulles Airport | | 845 | 830 | -15 | -2% | 39 | 10.5 | 98% |
| | Route 28 NB to Route 267 EB | | 1,030 | 1,013 | -17 | -2% | 37 | 27.5 | 98% |
| | Route 267 EB (leaving Dulles Airport) to Route 28 NB | | 400 | 394 | -6 | -2% | 25 | 15.9 | 98% |
| | Route 28 NB to Route 267 WB | | 320 | 320 | 0 | 0% | 39 | 8.1 | 100% |
| | Route 267 WB to Route 28 NB | | 1,965 | 1,900 | -65 | -3% | 42 | 44.5 | 97% |
| | Route 267 EB (Dulles Greenway) to Route 28 SB | | 975 | 969 | -6 | -1% | 26 | 42.0 | 99% |
| | Route 267 WB to Route 28 SB | | 400 | 388 | -12 | -3% | 22 | 17.5 | 97% |
| | Route 267 EB/WB to Route 28 SB (Combined) | | 1,375 | 1,353 | -22 | -2% | 15 | 89.0 | 98% |
| | Route 28 SB to Dulles Airport | | 870 | 711 | -159 | -18% | 22 | 32.3 | 82% |
| | Route 28 SB to Route 267 EB | | 2,535 | 1,901 | -634 | -25% | 23 | 82.1 | 75% |
| | Route 267 EB (leaving Dulles Airport) to Route 28 SB | | 670 | 672 | 2 | 0% | 26 | 25.8 | 100% |
| Innovation Avenue Interchange Ramps | Route 28 NB to Innovation Ave EB | | 1,060 | 1,045 | -15 | -1% | 30 | 34.0 | 99% |
| | Innovation Ave WB to Route 28 NB | | 705 | 699 | -6 | -1% | 36 | 19.4 | 99% |
| | Route 28 SB to Innovation Ave EB | | 1,005 | 713 | -292 | -29% | 27 | 26.0 | 71% |
| | Innovation Ave WB to Route 28 SB | | 860 | 839 | -21 | -2% | 21 | 39.8 | 98% |
| Route 606 / Old Ox Road Interchange Ramps | Route 28 NB to Route 606 EB | | 225 | 227 | 2 | 1% | 42 | 5.3 | 101% |
| | Route 606 EB to Route 28 NB | | 90 | 69 | -21 | -24% | 27 | 2.6 | 76% |
| | Route 28 NB to Route 606 WB | | 1,020 | 1,018 | -2 | 0% | 25 | 40.6 | 100% |
| | Route 606 WB to Route 28 NB | | 590 | 583 | -7 | -1% | 36 | 16.4 | 99% |
| | Route 28 SB to Route 606 WB | | 290 | 189 | -101 | -35% | 29 | 6.6 | 65% |
| | Route 606 WB to Route 28 SB | | 380 | 380 | 0 | 0% | 24 | 15.6 | 100% |
| | Route 28 SB to Route 606 EB | | 590 | 394 | -196 | -33% | 24 | 16.5 | 67% |
| | Route 606 EB to Route 28 SB | | 1,030 | 793 | -237 | -23% | 31 | 25.2 | 77% |
| Sterling Blvd Interchange Ramps | Route 28 NB to Sterling Blvd EB | | 780 | 776 | -4 | -1% | 31 | 24.9 | 99% |
| | Route 28 NB to Sterling Blvd WB | | 750 | 738 | -12 | -2% | 20 | 36.5 | 98% |
| | Sterling Blvd to Route 28 NB | | 200 | 203 | 3 | 1% | 32 | 6.3 | 101% |
| | Route 28 SB to Sterling Blvd | | 280 | 196 | -84 | -30% | 33 | 5.8 | 70% |
| | Sterling Blvd WB to Route 28 SB | | 460 | 463 | 3 | 1% | 15 | 33.6 | 101% |
| | Sterling Blvd EB to Route 28 SB | | 930 | 830 | -100 | -11% | 6 | 130.7 | 89% |
| Route 267 / Centreville Road Interchange Ramps | Route 267 EB to Centreville Road | | 1,140 | 1,086 | -54 | -5% | 10 | 71.6 | 95% |
| | Centreville Road to Route 267 EB | | 1,105 | 970 | -135 | -12% | 32 | 30.9 | 88% |
| | Route 267 WB to Centreville Road | | 1,195 | 1,195 | 0 | 0% | 25 | 48.1 | 100% |
| | Centreville Road to Route 267 WB | | 265 | 248 | -17 | -6% | 50 | 5.0 | 94% |
| Various Dulles Airport / DIAAH Ramps | Route 267 EB to Dulles Airport | | 630 | 635 | 5 | 1% | 47 | 13.3 | 101% |
| | Route 267 WB to Dulles Airport | | 240 | 236 | -4 | -2% | 57 | 4.1 | 99% |
| | DIAAH WB to Rudder Road | | 480 | 482 | 2 | 0% | 39 | 6.1 | 100% |
| | Ramps from Route 267 EB/Route 28 to Rudder Road | | 850 | 792 | -58 | -7% | 38 | 20.3 | 93% |
| | Ramps from Route 267 EB/Route 28 to Dulles Airport | | 1,495 | 1,385 | -111 | -7% | 39 | 17.6 | 93% |
| | DIAAH EB (Outer Lanes) to Rudder Road | | 145 | 145 | 0 | 0% | 27 | 5.2 | 100% |
| | Dulles Airport to Route 267 WB | | 65 | 67 | 2 | 3% | 34 | 2.0 | 103% |
| | Aviation Blvd to Route 267 EB | | 595 | 594 | -1 | 0% | 45 | 13.3 | 100% |
| | Route 267 EB to DIAAH EB (west) | | 1,305 | 1,308 | 3 | 0% | 42 | 30.5 | 100% |
| | Route 267 EB to DIAAH EB (east) | | 555 | 554 | -1 | 0% | 44 | 12.5 | 100% |
| | DIAAH EB to Route 267 EB (west) | | 185 | 196 | 11 | 6% | 56 | 3.5 | 106% |
| | DIAAH EB to Route 267 EB (east) | | 140 | 141 | 1 | 1% | 54 | 2.5 | 101% |



Arterial Intersection MOEs

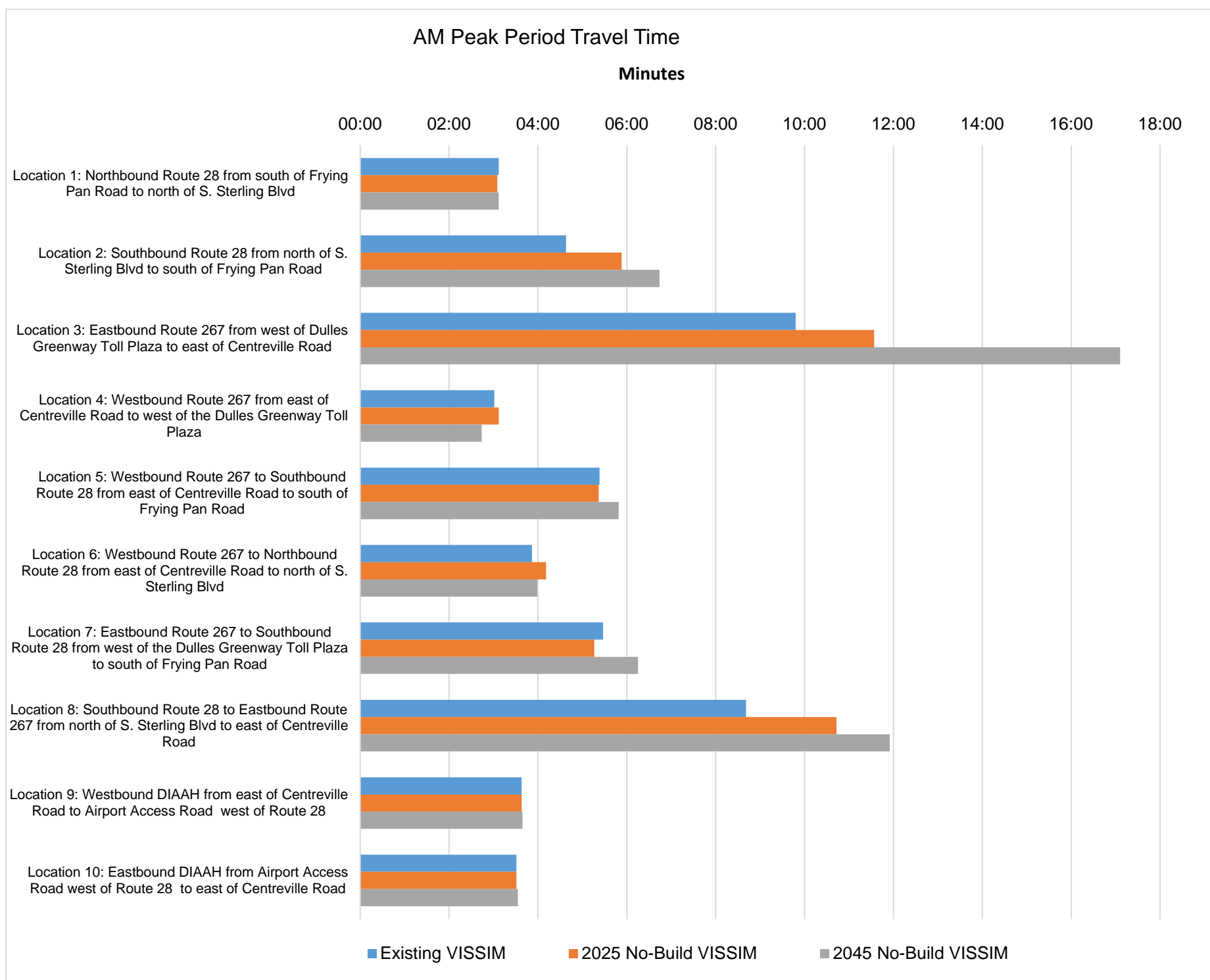
AM Peak Hour (8:00 AM - 9:00 AM)

| # | Intersection | Approach | Movement | Balanced Count (vph) | | VISSIM Throughput (vph) | | Difference (vph) | | Difference (%) | | Average Delay (sec/veh) | | Average Queue Length (feet) | | Max Queue Length (feet) | | LOS | |
|--------------|---|--------------|----------|----------------------|-------|-------------------------|-------|------------------|------|----------------|------|-------------------------|-------|-----------------------------|-------|-------------------------|-------|-----|---|
| | | | | | | | | | | | | | | | | | | | |
| 1 | Route 846 (Sterling Boulevard) and Pacific Boulevard | NB | LT | 25 | 175 | 24 | 167 | -1 | -8 | -4% | -5% | 67.8 | 78.0 | 9 | 56 | 74 | 304 | E | E |
| | | | TH | 45 | | 46 | | 1 | | 2% | | 56.0 | | 14 | | 104 | | E | |
| | | | RT | 105 | | 97 | | -8 | | -8% | | 90.9 | | 56 | | 304 | | F | |
| | | SB | LT | 685 | 1,040 | 538 | 861 | -147 | -179 | -21% | -17% | 474.2 | 380.5 | 1,397 | 1,397 | 1,952 | 1,952 | F | F |
| | | | TH | 270 | | 245 | | -25 | | -9% | | 240.5 | | 774 | | 1,951 | | F | |
| | | | RT | 85 | | 78 | | -7 | | -8% | | 174.1 | | 2 | | 121 | | F | |
| | | EB | LT | 100 | 1,155 | 98 | 1,106 | -2 | -49 | -2% | -4% | 219.3 | 204.3 | 820 | 996 | 1,231 | 1,283 | F | F |
| | | | TH | 940 | | 895 | | -45 | | -5% | | 204.1 | | 961 | | 1,230 | | F | |
| | | | RT | 115 | | 113 | | -2 | | -2% | | 193.2 | | 996 | | 1,283 | | F | |
| | | WB | LT | 315 | 1,325 | 297 | 1,230 | -18 | -95 | -6% | -7% | 136.2 | 54.6 | 272 | 272 | 635 | 635 | F | D |
| | | | TH | 460 | | 431 | | -29 | | -6% | | 46.2 | | 72 | | 426 | | D | |
| | | | RT | 550 | | 502 | | -48 | | -9% | | 13.6 | | 46 | | 445 | | B | |
| | | Intersection | | | | 3,695 | | 3,364 | | -331 | | -9% | | 188.4 | | | | | |
| 2 | Route 846 (Sterling Boulevard) and Route 28 SB Off-Ramp | SB | LT | 35 | 280 | 21 | 173 | -14 | -107 | -40% | -38% | 425.9 | 389.6 | 4 | 4 | 54 | 54 | F | F |
| | | | RT | 245 | | 152 | | -93 | | -38% | | 384.6 | | 0 | | 0 | | F | |
| | | EB | TH | 800 | 800 | 718 | 718 | -82 | -82 | -10% | -10% | 26.5 | 26.5 | 2 | 2 | 163 | 163 | C | C |
| | | | TH | 1,080 | | 1,080 | | 0 | | 0% | | 2.2 | | 3 | | 129 | | A | |
| | | Intersection | | | | 2,160 | | 1,965 | | -195 | | -9% | | 45.2 | | | | | |
| 3 | Route 846 (Sterling Boulevard) and Route 28 NB Ramps | NB | RT | 780 | 780 | 776 | 776 | -4 | -4 | -1% | -1% | 6.8 | 6.8 | 0 | 0 | 52 | 52 | A | A |
| | | | LT | 10 | | 9 | | -1 | | -10% | | 40.2 | | 2 | | 41 | | D | |
| | | EB | TH | 820 | 830 | 737 | 746 | -83 | -84 | -10% | -10% | 0.6 | 1.1 | 0 | 2 | 0 | 41 | A | A |
| | | | TH | 790 | | 795 | | 5 | | 1% | | 0.7 | | 1 | | 109 | | A | |
| | | WB | RT | 190 | 980 | 193 | 988 | 3 | 8 | 2% | 1% | 1.7 | 0.9 | 0 | 1 | 34 | 109 | A | A |
| | | | RT | 190 | | 193 | | 3 | | 2% | | 1.7 | | 0 | | 34 | | A | |
| Intersection | | | | 2,590 | | 2,510 | | -80 | | -3% | | 2.8 | | | | | | A | |
| 4 | Route 846 (Sterling Boulevard) and Shaw Road | NB | LT | 65 | 275 | 65 | 274 | 0 | -1 | 0% | 0% | 60.0 | 25.7 | 22 | 22 | 135 | 137 | E | C |
| | | | TH | 15 | | 15 | | 0 | | 0% | | 61.8 | | 5 | | 58 | | E | |
| | | | RT | 195 | | 194 | | -1 | | -1% | | 11.5 | | 13 | | 137 | | B | |
| | | SB | LT | 5 | 25 | 5 | 23 | 0 | -2 | 0% | -8% | 53.5 | 14.2 | 1 | 1 | 29 | 59 | D | B |
| | | | TH | 10 | | 8 | | -2 | | -20% | | 0.2 | | 0 | | 0 | | A | |
| | | | RT | 10 | | 10 | | 0 | | 0% | | 5.7 | | 0 | | 59 | | A | |
| | | EB | U | 10 | 1,600 | 11 | 1,510 | 1 | -90 | 10% | -6% | 13.9 | 15.7 | 2 | 56 | 71 | 509 | B | B |
| | | | TH | 70 | | 65 | | -5 | | -7% | | 14.8 | | 2 | | 71 | | B | |
| | | | TH | 1,085 | | 1,019 | | -66 | | -6% | | 15.2 | | 56 | | 509 | | B | |
| | | | RT | 435 | | 415 | | -20 | | -5% | | 17.3 | | 50 | | 346 | | B | |
| | | | RT | 280 | | 274 | | -6 | | -2% | | 16.4 | | 13 | | 247 | | B | |
| | | WB | TH | 895 | 1,200 | 900 | 1,200 | 5 | 0 | 1% | 0% | 8.1 | 10.0 | 29 | 29 | 325 | 357 | A | A |
| | | | TH | 280 | | 274 | | -6 | | -2% | | 16.4 | | 13 | | 247 | | B | |
| | | | RT | 25 | | 26 | | 1 | | 4% | | 6.6 | | 29 | | 357 | | A | |
| | | Intersection | | | | 3,100 | | 3,007 | | -93 | | -3% | | 14.3 | | | | | |
| 5 | Route 606 (Old Ox Road) and Pacific Boulevard | NB | LT | 115 | 425 | 113 | 419 | -2 | -6 | -2% | -1% | 67.0 | 54.9 | 58 | 82 | 351 | 372 | E | D |
| | | | TH | 40 | | 38 | | -2 | | -5% | | 68.2 | | 58 | | 351 | | E | |
| | | | RT | 270 | | 268 | | -2 | | -1% | | 48.0 | | 82 | | 372 | | D | |
| | | SB | U | 5 | 685 | 5 | 678 | 0 | -7 | 0% | -1% | 111.2 | 94.6 | 224 | 224 | 709 | 709 | F | F |
| | | | LT | 385 | | 388 | | 3 | | 1% | | 123.6 | | 224 | | 709 | | F | |
| | | | TH | 70 | | 70 | | 0 | | 0% | | 125.1 | | 224 | | 709 | | F | |
| | | EB | RT | 225 | 3,070 | 215 | 2,159 | -10 | -911 | -4% | -30% | 32.0 | 174.9 | 81 | 2,163 | 617 | 2,560 | C | F |
| | | | LT | 155 | | 108 | | -47 | | -30% | | 223.9 | | 2,162 | | 2,559 | | F | |
| | | | TH | 2,770 | | 1,953 | | -817 | | -29% | | 173.3 | | 2,163 | | 2,560 | | F | |
| | | WB | RT | 145 | 2,100 | 98 | 2,025 | -47 | -75 | -32% | -4% | 153.7 | 50.9 | 4 | 351 | 82 | 1,565 | F | D |
| | | | U | 10 | | 8 | | -2 | | -20% | | 85.0 | | 35 | | 136 | | F | |
| | | | LT | 125 | | 116 | | -9 | | -7% | | 94.8 | | 35 | | 136 | | F | |
| | | | TH | 1,480 | | 1,436 | | -44 | | -3% | | 52.2 | | 351 | | 1,565 | | F | |
| | | | RT | 485 | | 465 | | -20 | | -4% | | 35.4 | | 140 | | 1,314 | | D | |
| | | Intersection | | | | 6,280 | | 5,281 | | -999 | | -16% | | 107.5 | | | | | |
| 6 | Route 606 (Old Ox Road) and Route 28 NB Off-Ramp | NB | TH | 40 | 40 | 39 | 39 | -1 | -1 | -3% | -3% | 45.1 | 45.1 | 8 | 8 | 78 | 78 | D | D |
| | | | TH | 2,905 | | 2,905 | | 0 | | 0% | | 15.4 | | 101 | | 1,000 | | B | |
| | | WB | TH | 1,170 | 1,170 | 1,186 | 1,186 | 16 | 16 | 1% | 1% | 2.3 | 2.3 | 0 | 0 | 10 | 10 | A | A |
| | | | TH | 1,170 | | 1,186 | | 16 | | 1% | | 2.3 | | 0 | | 10 | | A | |
| Intersection | | | | 4,115 | | 3,385 | | -730 | | -18% | | 11.2 | | | | | | B | |

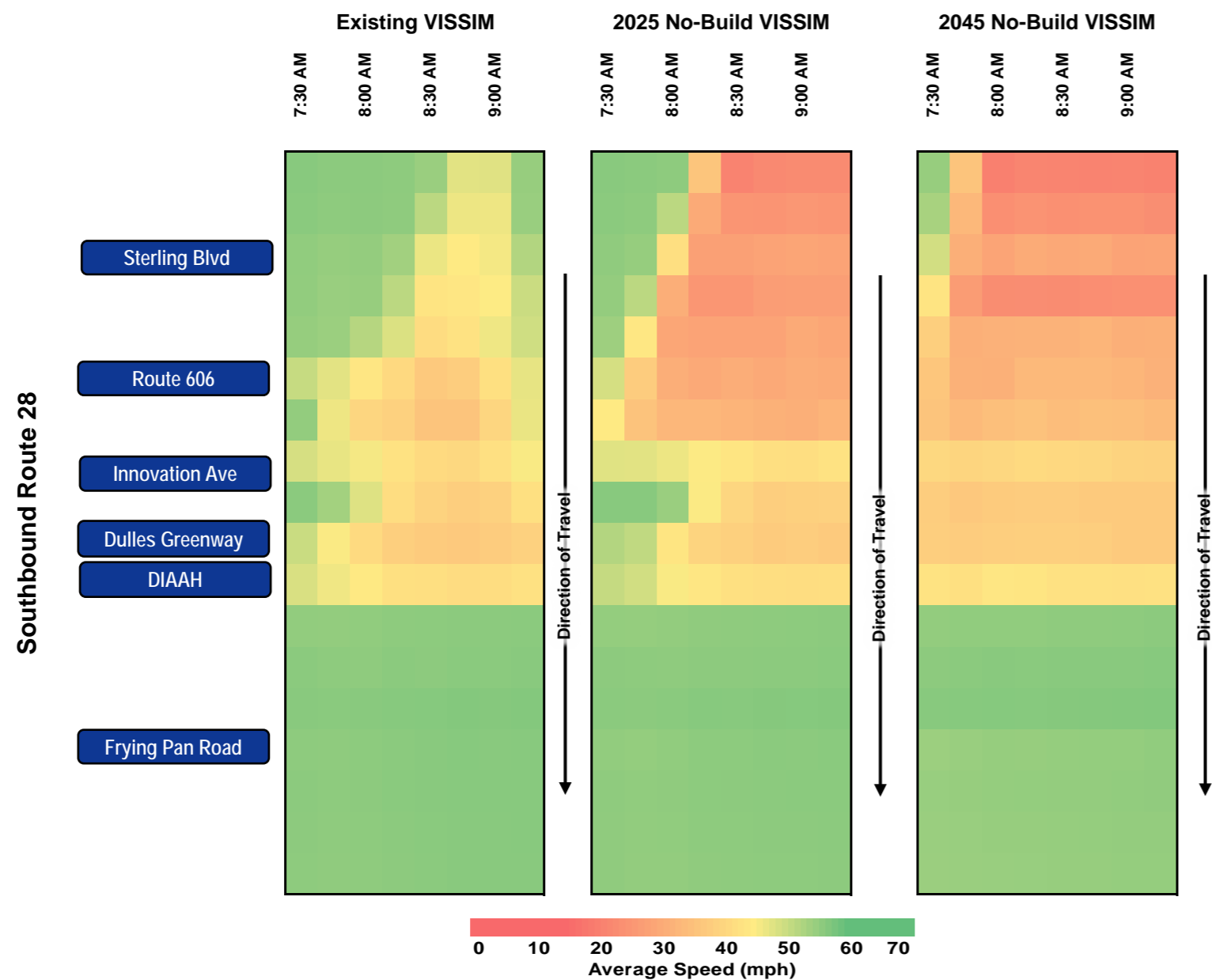
Travel Time Comparison

AM Peak Period (7:30 AM - 9:30 AM)

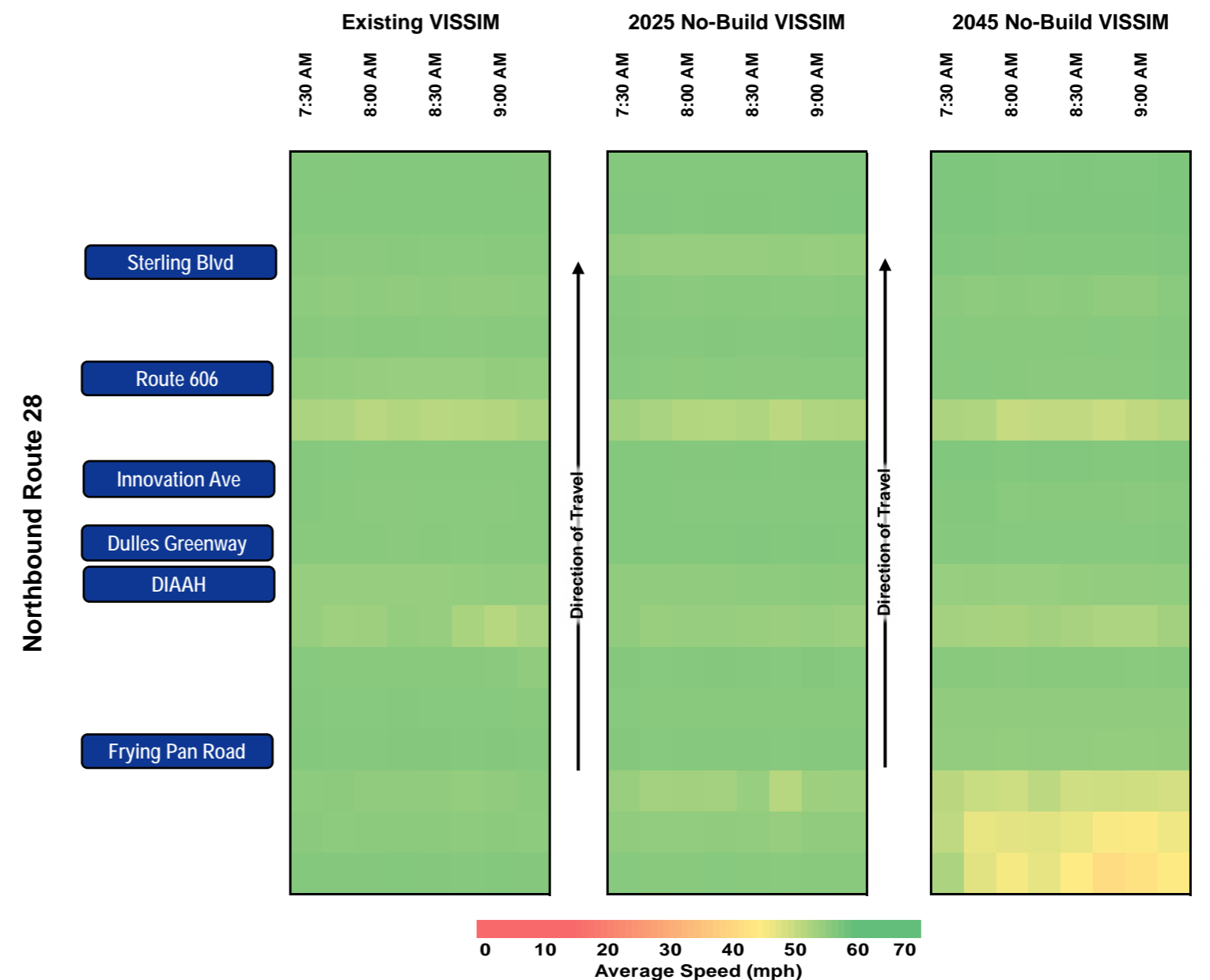
| Segment ID | Route | Peak Period Travel Time | | | | | | |
|--|-------|-------------------------|------------------------------|------------------------------|---------------------------------------|-----------------------------------|----------------------------------|------------------------------|
| | | Existing VISSIM (MM:SS) | 2025 No-Build VISSIM (MM:SS) | 2045 No-Build VISSIM (MM:SS) | Difference from 2025 No-Build (MM:SS) | Difference from 2025 No-Build (%) | Difference from Existing (MM:SS) | Difference from Existing (%) |
| Location 1: Northbound Route 28 from south of Frying Pan Road to north of S. Sterling Blvd | | 03:07 | 03:05 | 03:07 | 00:02 | 1% | 00:00 | 0% |
| Location 2: Southbound Route 28 from north of S. Sterling Blvd to south of Frying Pan Road | | 04:38 | 05:53 | 06:44 | 00:51 | 14% | 02:06 | 45% |
| Location 3: Eastbound Route 267 from west of Dulles Greenway Toll Plaza to east of Centreville Road | | 09:48 | 11:34 | 17:06 | 05:32 | 48% | 07:18 | 74% |
| Location 4: Westbound Route 267 from east of Centreville Road to west of the Dulles Greenway Toll Plaza | | 03:01 | 03:07 | 02:44 | -00:23 | -12% | -00:17 | -9% |
| Location 5: Westbound Route 267 to Southbound Route 28 from east of Centreville Road to south of Frying Pan Road | | 05:23 | 05:22 | 05:49 | 00:27 | 8% | 00:26 | 8% |
| Location 6: Westbound Route 267 to Northbound Route 28 from east of Centreville Road to north of S. Sterling Blvd | | 03:52 | 04:11 | 03:59 | -00:12 | -5% | 00:07 | 3% |
| Location 7: Eastbound Route 267 to Southbound Route 28 from west of the Dulles Greenway Toll Plaza to south of Frying Pan Road | | 05:28 | 05:16 | 06:15 | 00:59 | 19% | 00:47 | 14% |
| Location 8: Southbound Route 28 to Eastbound Route 267 from north of S. Sterling Blvd to east of Centreville Road | | 08:41 | 10:43 | 11:55 | 01:12 | 11% | 03:14 | 37% |
| Location 9: Westbound DIAAH from east of Centreville Road to Airport Access Road west of Route 28 | | 03:38 | 03:38 | 03:39 | 00:01 | 0% | 00:01 | 0% |
| Location 10: Eastbound DIAAH from Airport Access Road west of Route 28 to east of Centreville Road | | 03:31 | 03:31 | 03:33 | 00:02 | 1% | 00:02 | 1% |



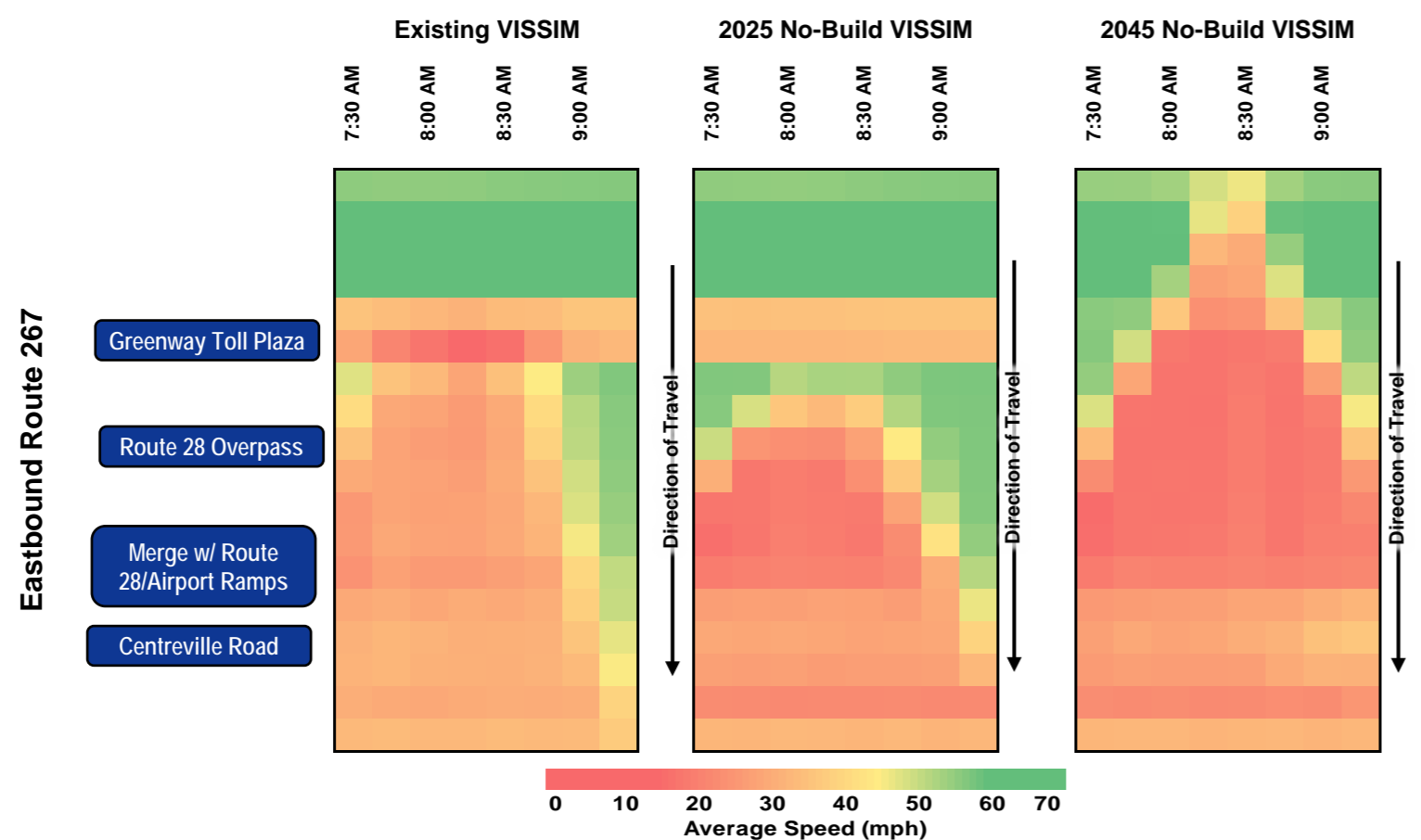
Freeway Average Speed Comparison: Route 28 SB



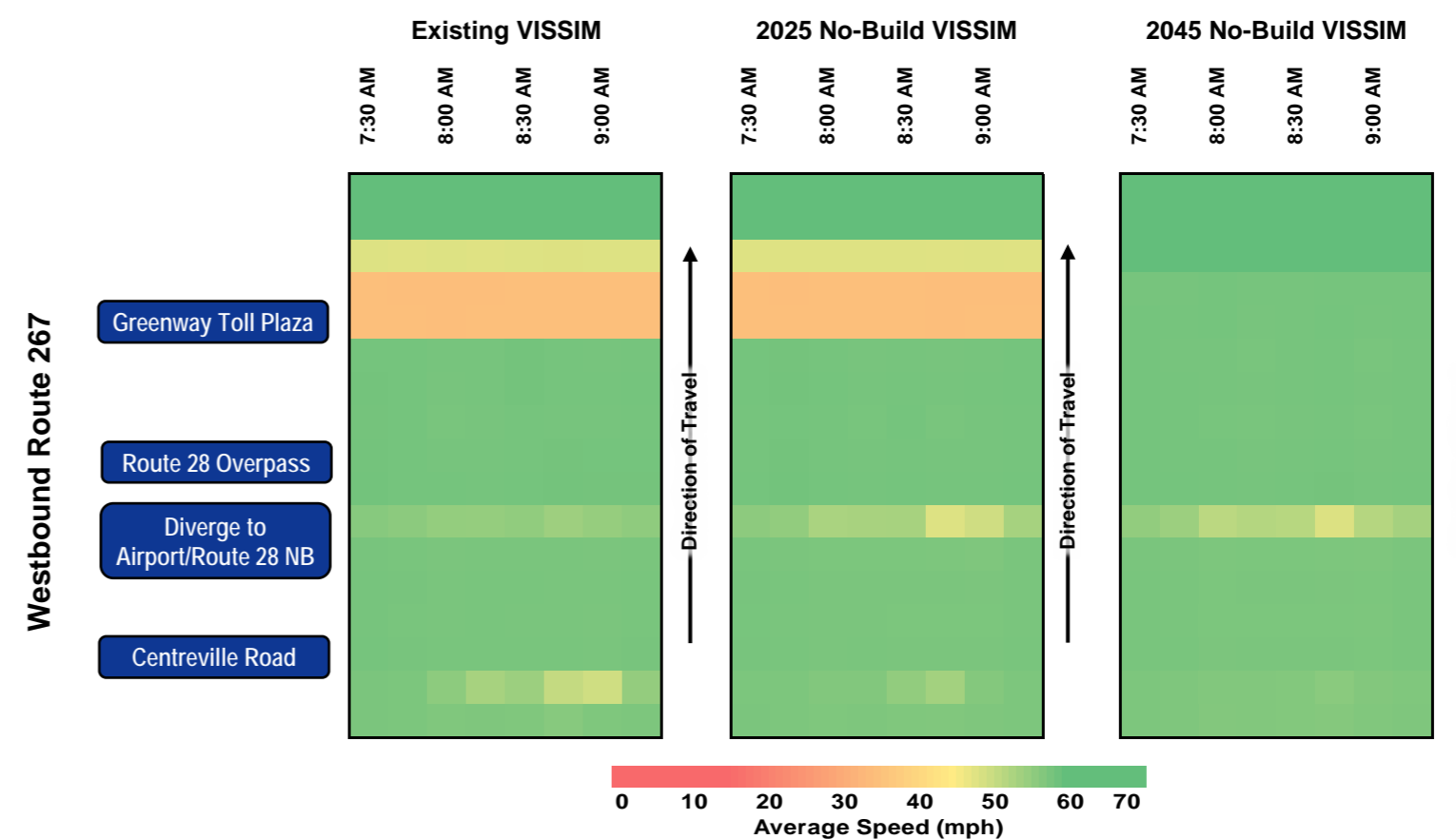
Freeway Average Speed Comparison: Route 28 NB



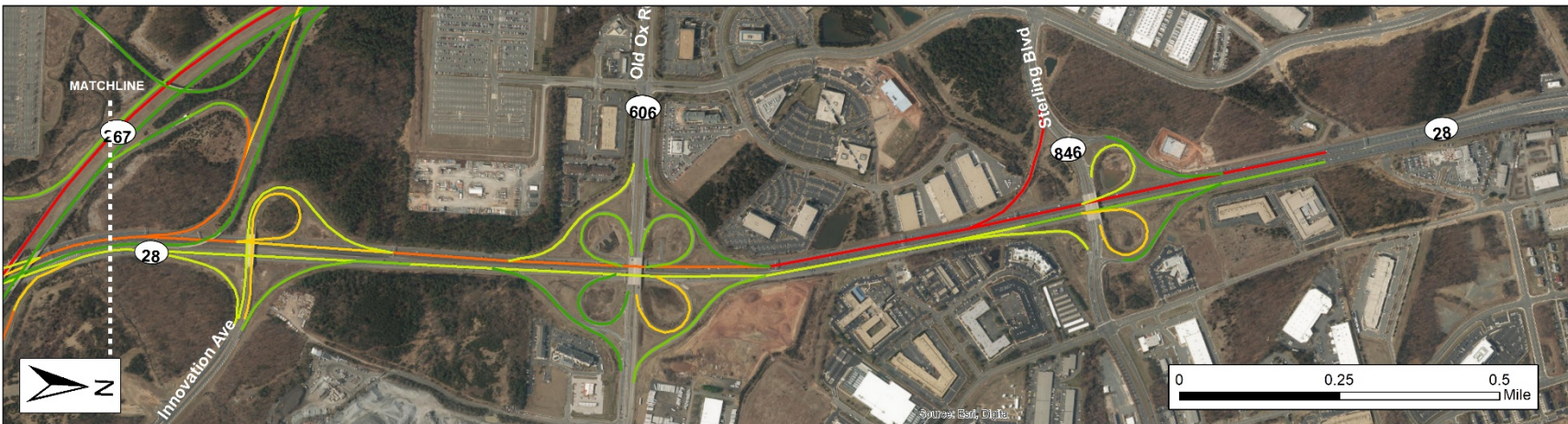
Freeway Average Speed Comparison: Route 267 (Dulles Toll Road/Dulles Greenway) EB



Freeway Average Speed Comparison: Route 267 (Dulles Toll Road/Dulles Greenway) WB

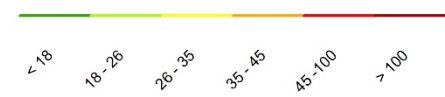


2045 No-Build AM Peak Hour Freeway and Ramp Density – Route 28 Corridor

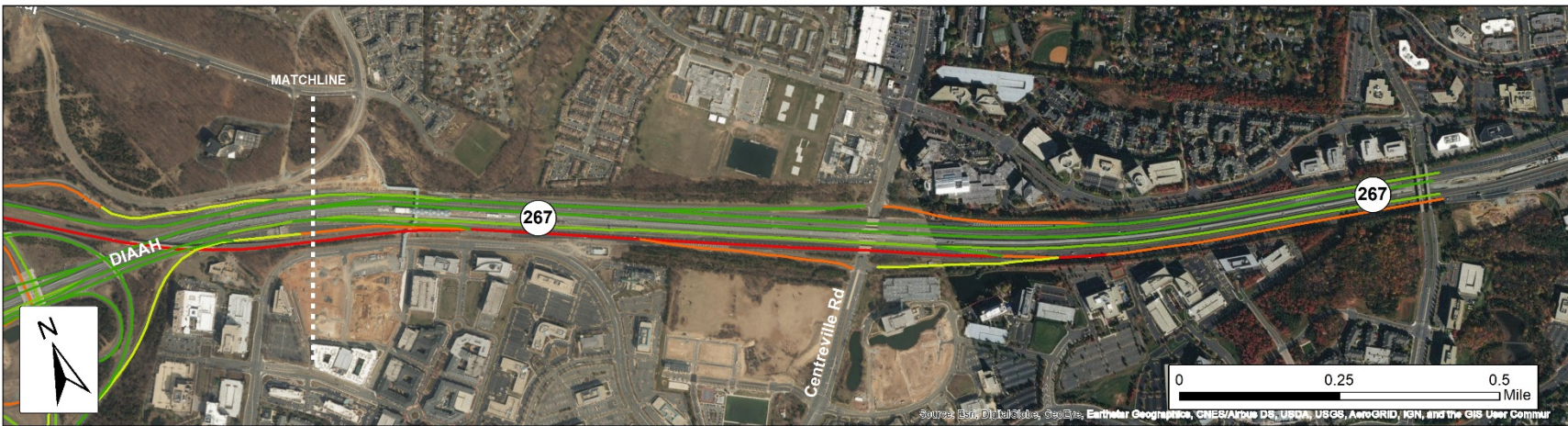
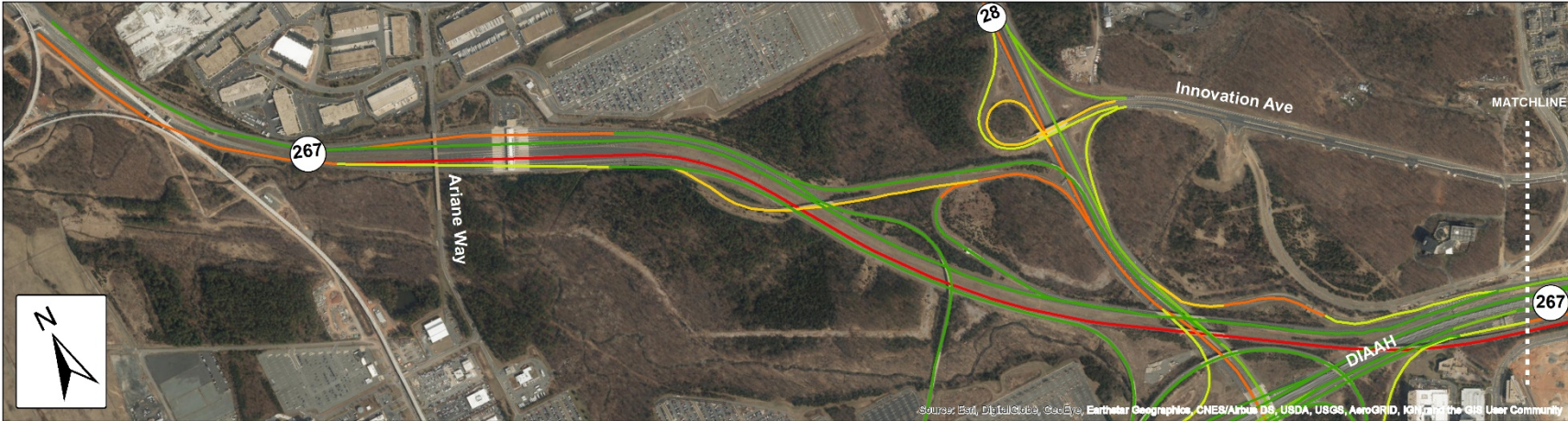


Route 28 Corridor
Mainline and Ramp Density
2045 No-Build AM

Density (vpmp)

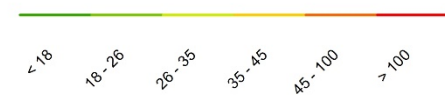


2045 No-Build AM Peak Hour Freeway and Ramp Density – Route 267 Corridor

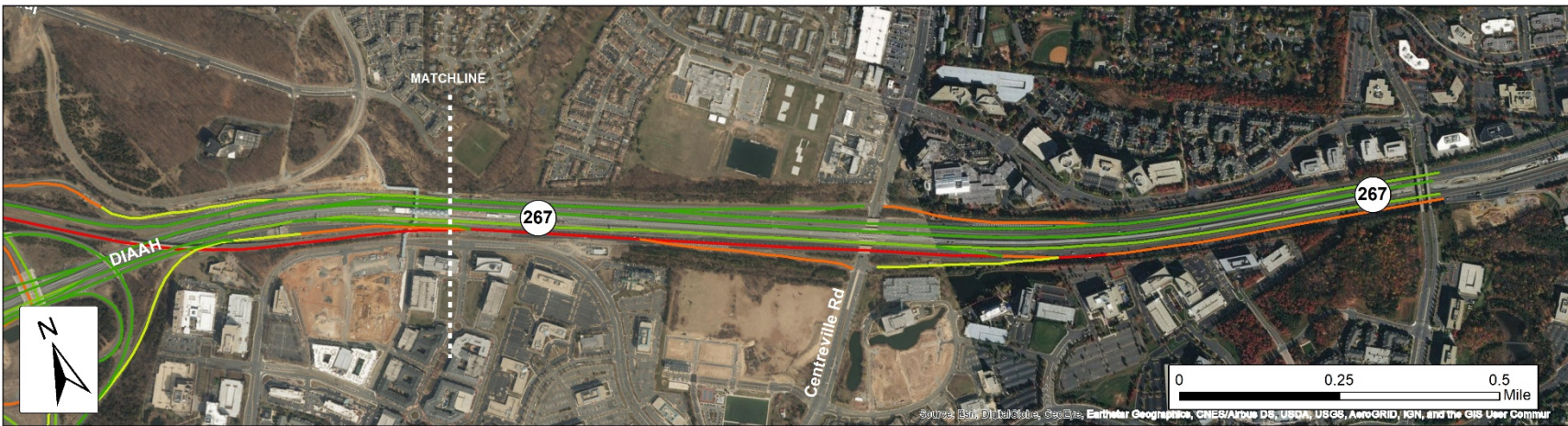
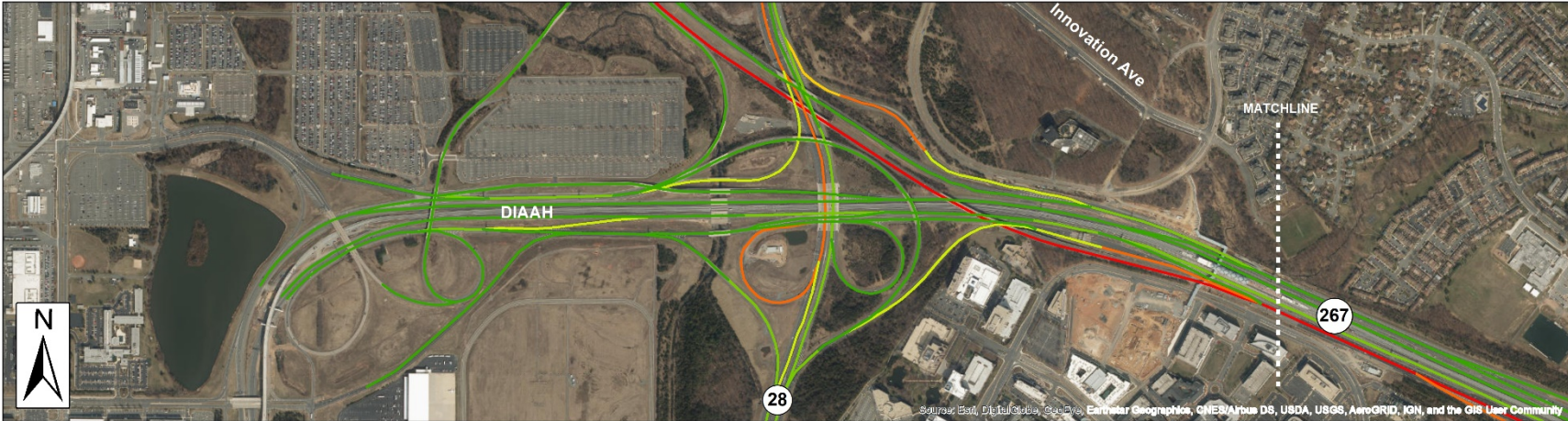


Route 267 Corridor
Mainline and Ramp Density
2045 No-Build AM

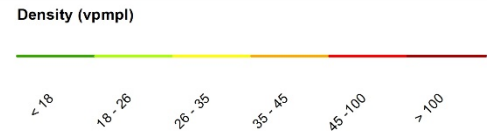
Density (vpmp)



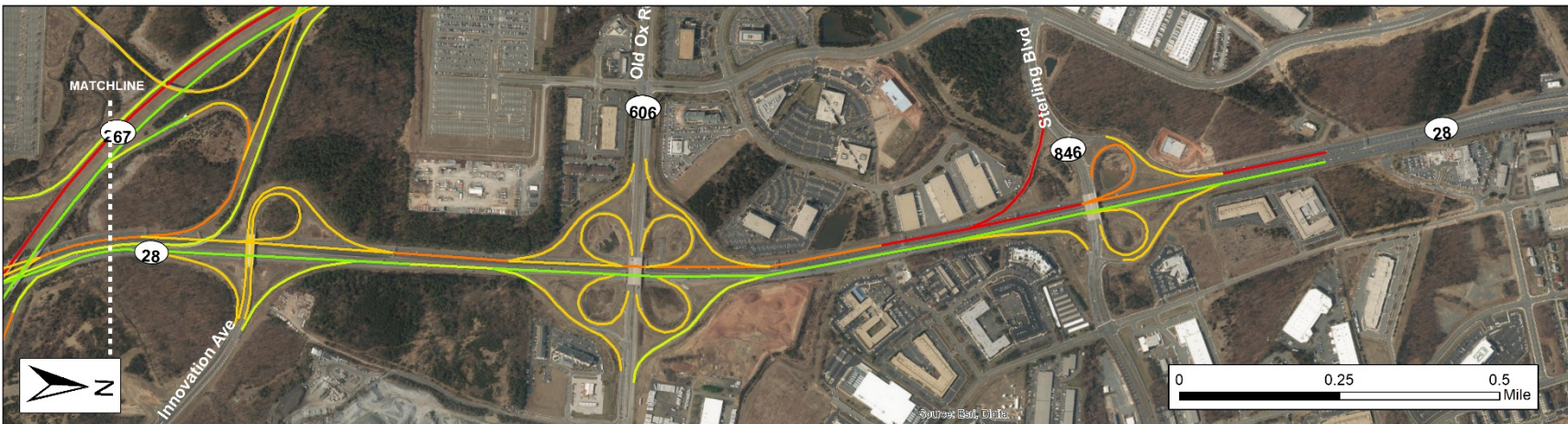
2045 No-Build AM Peak Hour Freeway and Ramp Density – DIAAH Corridor



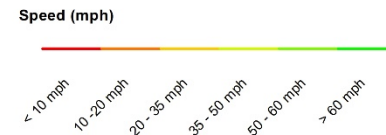
**DIAAH Corridor
Mainline and Ramp Density
2045 No-Build AM**



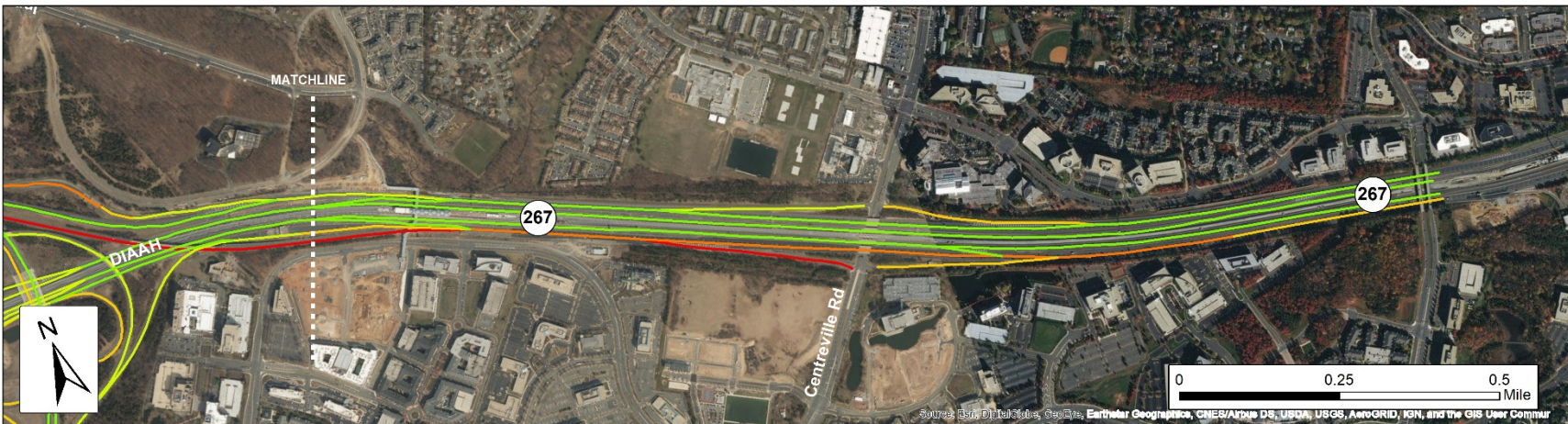
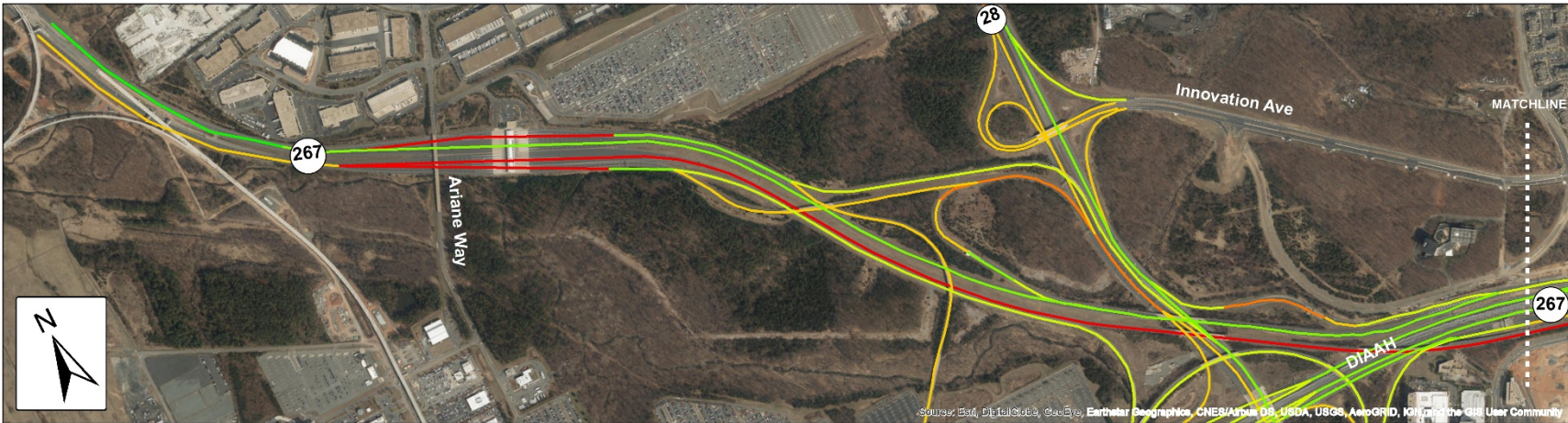
2045 No-Build AM Peak Hour Freeway and Ramp Speeds – Route 28 Corridor



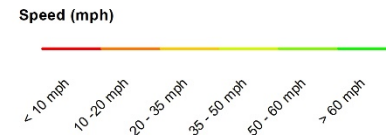
**Route 28 Corridor
Mainline and Ramp Speed
2045 No-Build AM**



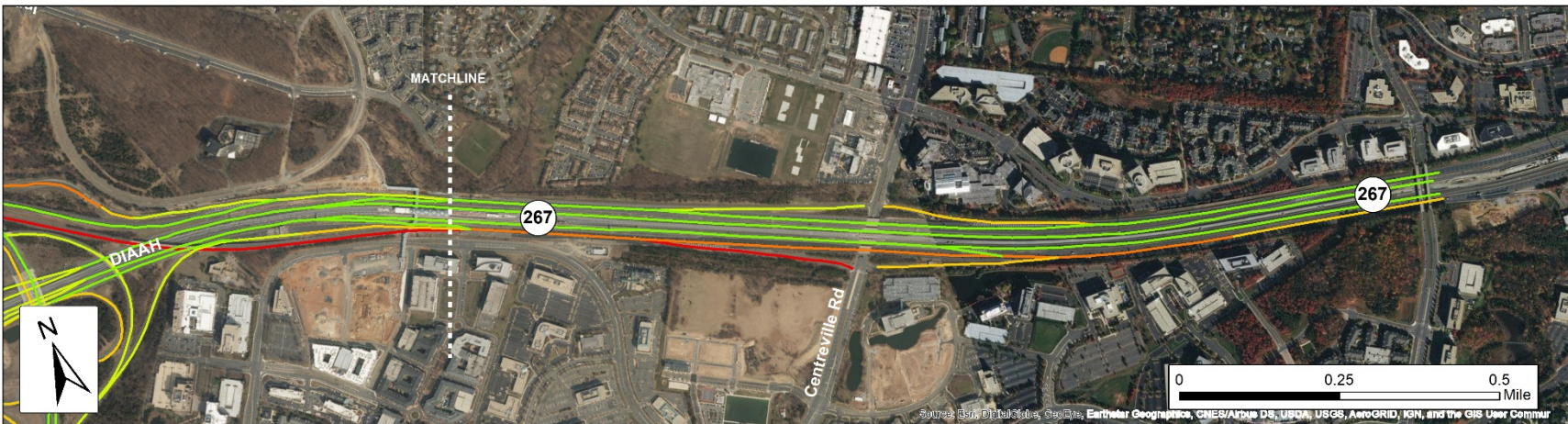
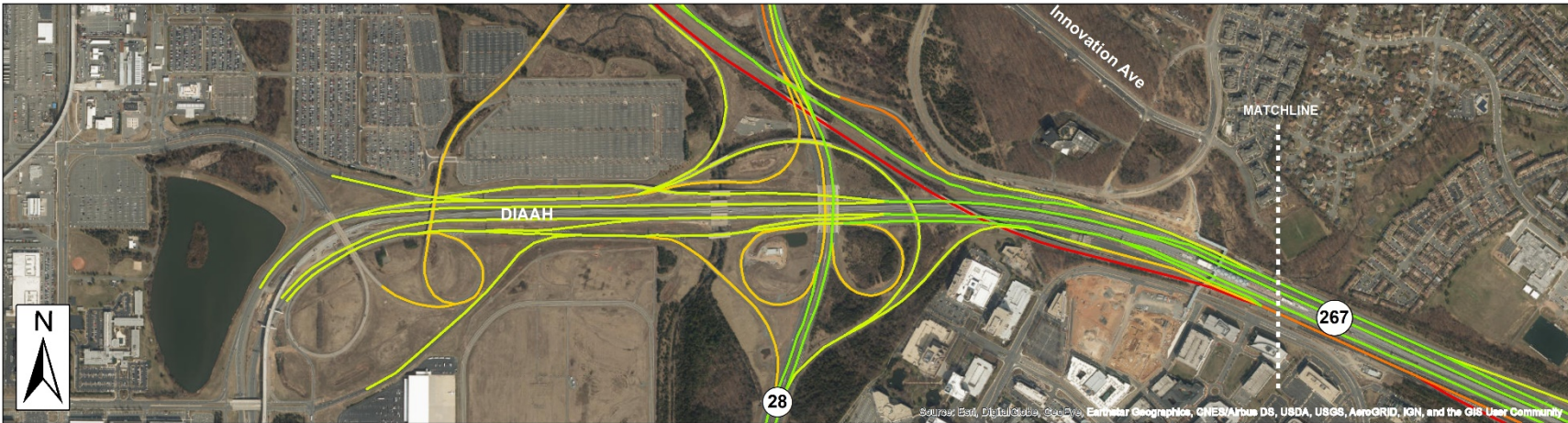
2045 No-Build AM Peak Hour Freeway and Ramp Speeds – Route 267 Corridor



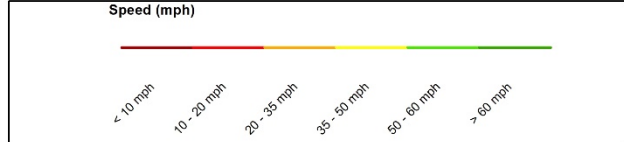
**Route 267 Corridor
Mainline and Ramp Speed
2045 No-Build AM**



2045 No-Build AM Peak Hour Freeway and Ramp Speeds – DIAAH Corridor



**DIAAH Corridor
Mainline and Ramp Speed
2045 No-Build AM**



Freeway Segment and Ramp MOEs

PM Peak Hour (5:00 PM - 6:00 PM)

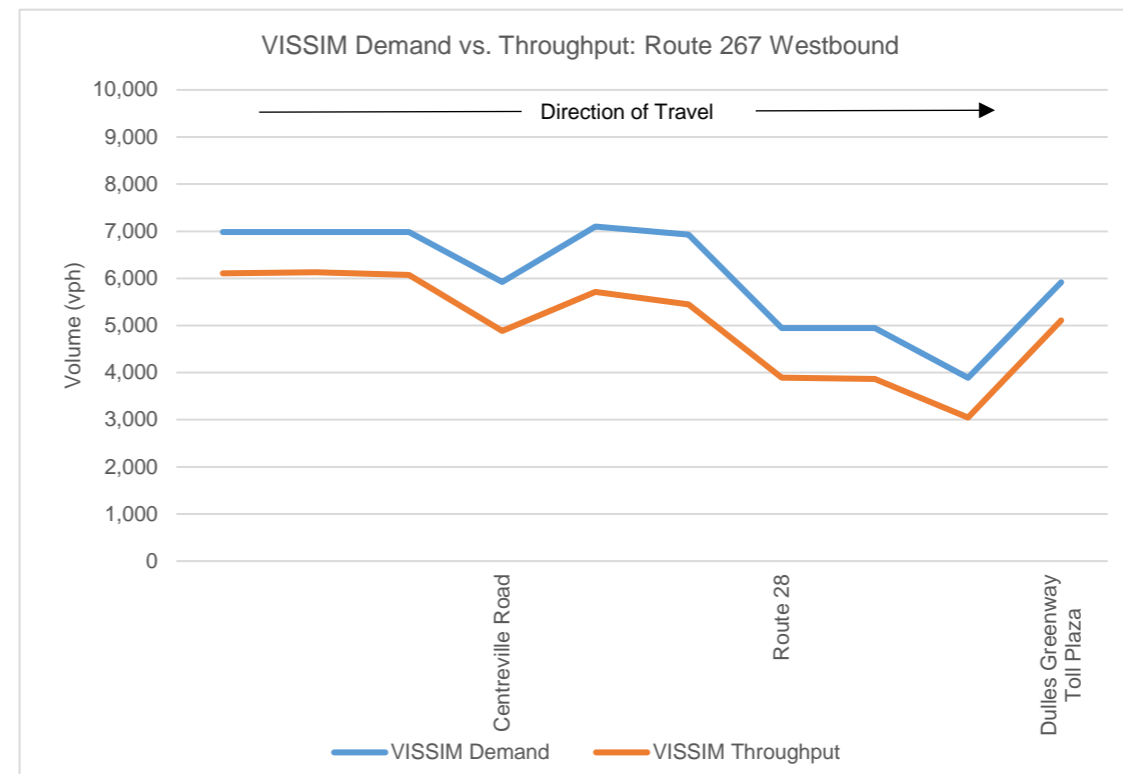
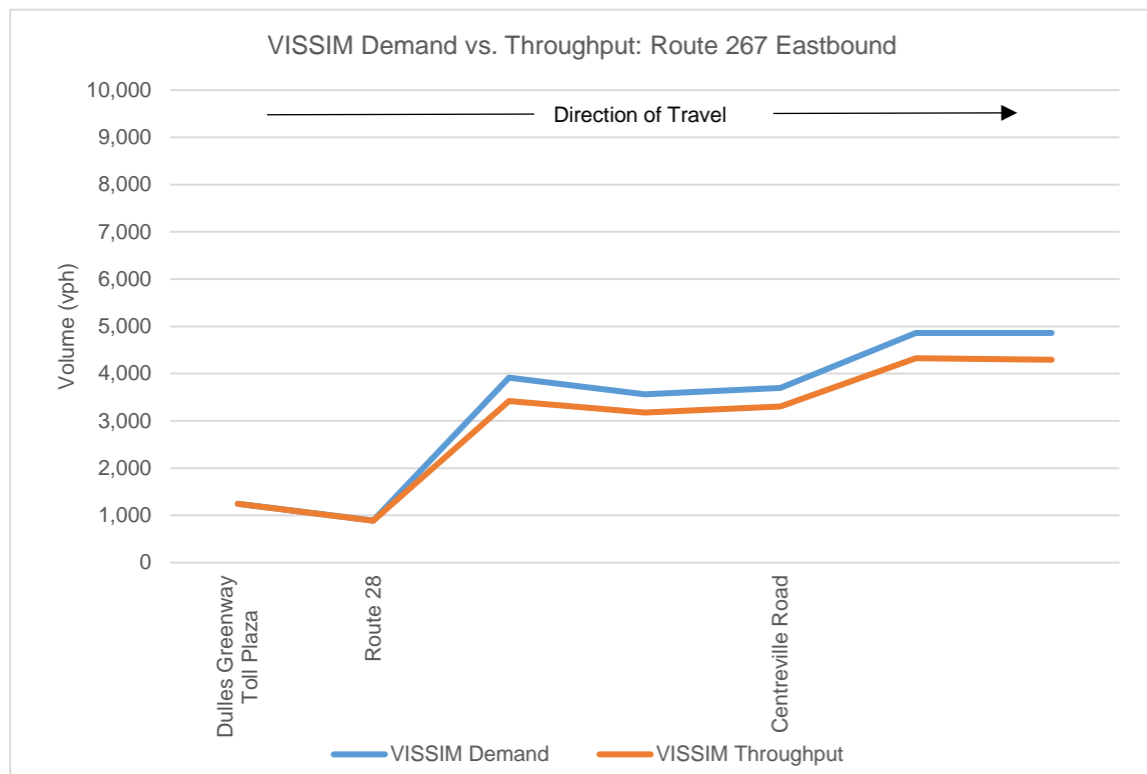
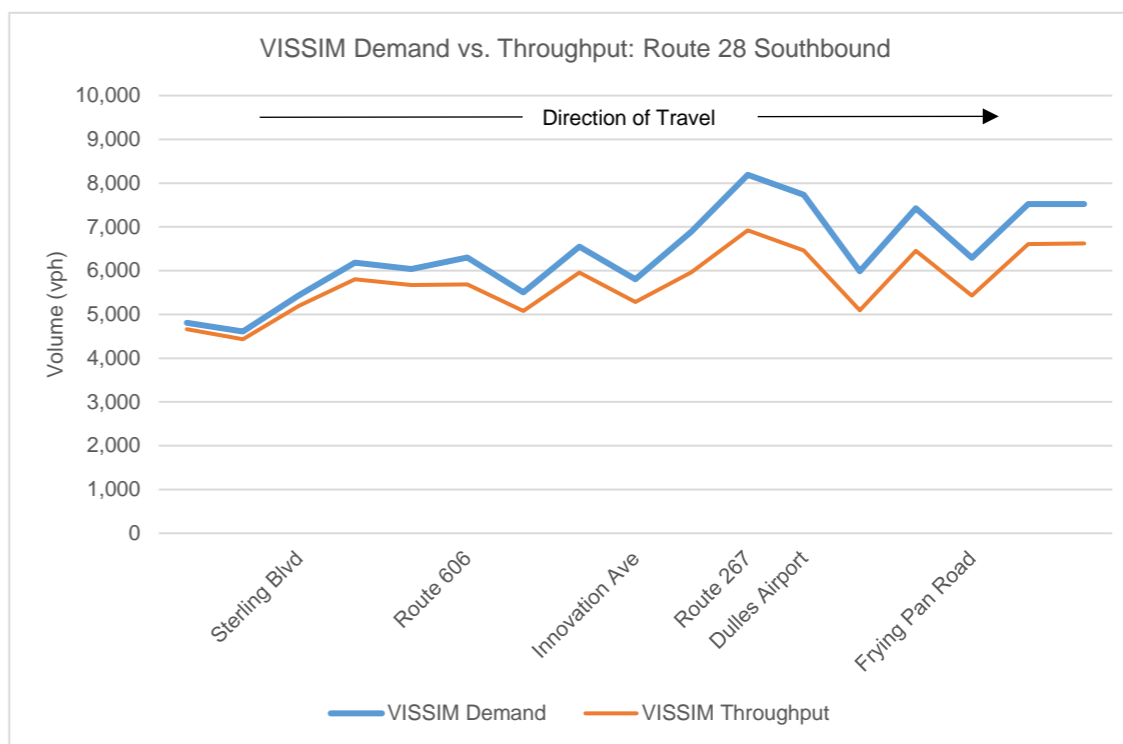
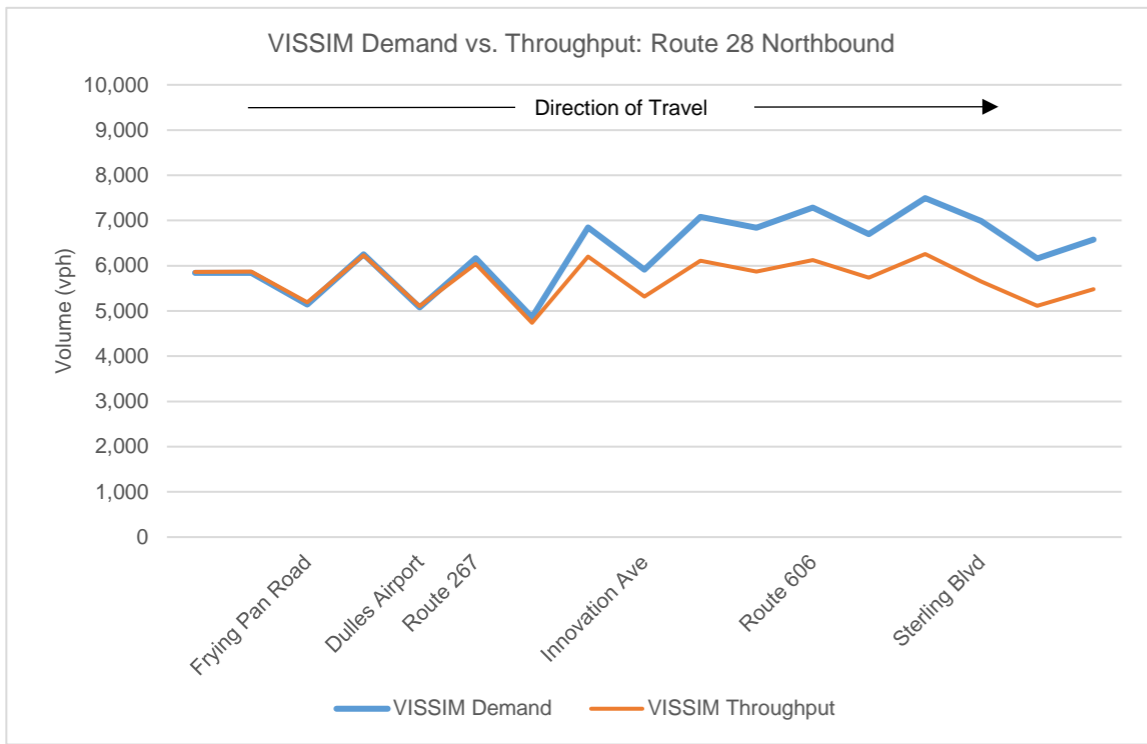
| Facility | Segment | Type | Balanced Count (vph) | VISSIM Throughput (vph) | Difference (vph) | Difference (%) | Average Speed (mph) | Average Density (vpmp) | % Demand Served |
|--|---|---------|----------------------|-------------------------|------------------|----------------|---------------------|------------------------|-----------------|
| Northbound Route 28 | Mainline south of Frying Pan Road | Basic | 5,840 | 5,862 | 22 | 0% | 55 | 26.7 | 100% |
| | Mainline south of Frying Pan Road | Diverge | 5,840 | 5,867 | 27 | 0% | 53 | 24.3 | 100% |
| | Between off-ramp to Frying Pan Road and on-ramp from Frying Pan Road | Basic | 5,145 | 5,192 | 47 | 1% | 55 | 23.5 | 101% |
| | Between on-ramp from Frying Pan Road and off-ramp to Route 267 EB/Dulles Airport | Weave | 6,255 | 6,229 | -26 | 0% | 56 | 22.3 | 100% |
| | Between off-ramp to Route 267 EB/Dulles Airport and on-ramp from Route 267 EB | Basic | 5,080 | 5,103 | 23 | 0% | 55 | 23.3 | 100% |
| | Between on-ramp from Route 267 EB and off-ramp to Route 267 WB | Weave | 6,170 | 6,041 | -129 | -2% | 44 | 31.1 | 98% |
| | Between off-ramp to Route 267 WB and on-ramp from Route 267 WB | Basic | 4,860 | 4,738 | -122 | -3% | 38 | 42.8 | 97% |
| | Between on-ramp from Route 267 WB and off-ramp to Innovation Ave | Weave | 6,845 | 6,201 | -644 | -9% | 30 | 56.7 | 91% |
| | Between off-ramp to Innovation Ave and on-ramp from Innovation Ave | Basic | 5,910 | 5,321 | -589 | -10% | 23 | 66.9 | 90% |
| | Between on-ramp from innovation Ave and off-ramp to Route 606 EB | Weave | 7,080 | 6,108 | -972 | -14% | 19 | 89.7 | 86% |
| | Between off-ramp to Route 606 EB and on-ramp from Route 606 EB | Basic | 6,840 | 5,867 | -973 | -14% | 22 | 89.4 | 86% |
| | Between on-ramp from Route 606 EB and off-ramp to Route 606 WB | Weave | 7,285 | 6,122 | -1,163 | -16% | 19 | 85.6 | 84% |
| | Between off-ramp to Route 606 WB and on-ramp from Route 606 WB | Basic | 6,700 | 5,736 | -964 | -14% | 20 | 96.8 | 86% |
| | Between on-ramp from Route 606 WB and off-ramp to Sterling Blvd EB | Weave | 7,495 | 6,259 | -1,236 | -16% | 21 | 73.5 | 84% |
| | Between off-ramp to Sterling Blvd EB and off-ramp to Sterling Blvd WB | Diverge | 6,990 | 5,650 | -1,340 | -19% | 19 | 83.0 | 81% |
| Between off-ramp to Sterling Blvd WB and on-ramp from Sterling Blvd | Basic | 6,160 | 5,114 | -1,046 | -17% | 22 | 71.3 | 83% | |
| Mainline north of Sterling Blvd | Basic | 6,580 | 5,482 | -1,098 | -17% | 22 | 67.0 | 83% | |
| Southbound Route 28 | Mainline north of Sterling Blvd | Basic | 4,810 | 4,663 | -147 | -3% | 50 | 22.9 | 97% |
| | Between off-ramp to Sterling Blvd and on-ramp from Sterling Blvd WB | Basic | 4,610 | 4,433 | -177 | -4% | 49 | 28.8 | 96% |
| | Between on-ramp from Sterling Blvd WB and on-ramp from Sterling Blvd EB | Basic | 5,435 | 5,195 | -240 | -4% | 48 | 29.0 | 96% |
| | Between on-ramp from Sterling Blvd EB and off-ramp to Route 606 WB | Weave | 6,180 | 5,804 | -376 | -6% | 39 | 37.1 | 94% |
| | Between off-ramp to Route 606 WB and on-ramp from Route 606 WB | Basic | 6,040 | 5,674 | -366 | -6% | 45 | 40.2 | 94% |
| | Between on-ramp from Route 606 WB and off-ramp to Route 606 EB | Weave | 6,300 | 5,688 | -612 | -10% | 40 | 38.1 | 90% |
| | Between off-ramp to Route 606 EB and on-ramp from Route 606 EB | Basic | 5,505 | 5,079 | -426 | -8% | 45 | 38.2 | 92% |
| | Between on-ramp from Route 606 EB and off-ramp to Innovation Ave | Weave | 6,550 | 5,955 | -595 | -9% | 40 | 40.5 | 91% |
| | Between off-ramp to Innovation Ave and on-ramp from Innovation Ave | Basic | 5,805 | 5,287 | -518 | -9% | 43 | 40.5 | 91% |
| | Between on-ramp from Innovation Ave and on-ramp from Route 267 | Basic | 6,895 | 5,967 | -928 | -13% | 40 | 41.7 | 87% |
| | Between on-ramp from Route 267 and off-ramp to Dulles Airport | Weave | 8,190 | 6,922 | -1,268 | -15% | 36 | 49.9 | 85% |
| | Between off-ramp to Dulles Airport and off-ramp to Route 267 EB | Diverge | 7,735 | 6,460 | -1,275 | -16% | 32 | 59.4 | 84% |
| | Between off-ramp to Route 267 EB and on-ramp from Route 267 EB | Basic | 5,985 | 5,095 | -890 | -15% | 55 | 22.9 | 85% |
| | Between on-ramp from Route 267 EB and off-ramp to Frying Pan Road | Weave | 7,430 | 6,453 | -977 | -13% | 52 | 25.0 | 87% |
| | Between off-ramp to Frying Pan Road and on-ramp from Frying Pan Road | Basic | 6,295 | 5,433 | -862 | -14% | 50 | 27.3 | 86% |
| Mainline south of Frying Pan Road | Merge | 7,525 | 6,604 | -921 | -12% | 39 | 43.6 | 88% | |
| Mainline south of Frying Pan Road | Basic | 7,525 | 6,620 | -905 | -12% | 54 | 30.7 | 88% | |
| Eastbound Route 267 | Mainline west of Dulles Greenway Toll Plaza | Basic | 1,245 | 1,244 | -1 | 0% | 65 | 6.4 | 100% |
| | Between Dulles Greenway Toll Plaza and mainline from Route 28/Dulles Airport | Basic | 890 | 886 | -4 | 0% | 58 | 5.1 | 100% |
| | Mainline leaving Dulles Airport near Rudder Road | Weave | 3,430 | 3,361 | -69 | -2% | 39 | 28.1 | 98% |
| | Between off-ramp to Rudder Road/Route 267 WB and off-ramp to DIAAH EB (west) | Diverge | 2,685 | 2,573 | -112 | -4% | 33 | 35.4 | 96% |
| | Between off-ramp to DIAAH EB and on-ramp from Aviation Dr | Basic | 1,675 | 1,626 | -49 | -3% | 32 | 41.7 | 97% |
| | Between on-ramp from Aviation Dr and off-ramp to Route 28 SB | Weave | 3,025 | 2,822 | -203 | -7% | 25 | 52.1 | 93% |
| | Between off-ramp to Route 28 SB and off-ramp to DIAAH EB (east) | Diverge | 1,580 | 1,431 | -149 | -9% | 27 | 49.9 | 91% |
| | Between off-ramp to DIAAH EB (east) and on-ramp from Route 28 SB | Basic | 1,110 | 1,038 | -72 | -7% | 25 | 51.1 | 93% |
| | Between on-ramp from Route 28 SB and off-ramp to Route 28 NB | Weave | 2,860 | 2,312 | -548 | -19% | 23 | 65.3 | 81% |
| | Between off-ramp to Route 28 NB and on-ramp from Route 28 NB | Basic | 1,770 | 1,359 | -411 | -23% | 54 | 12.5 | 77% |
| | Between on-ramp from Route 28 NB and DTR Toll Plaza | Basic | 2,440 | 2,031 | -409 | -17% | 55 | 9.4 | 83% |
| | Between DTR Toll Plaza and on-ramp from DIAAH EB (west) | Merge | 2,440 | 2,036 | -404 | -17% | 57 | 17.0 | 83% |
| | Between on-ramp from DIAAH EB (west) and mainline from Dulles Greenway | Basic | 3,025 | 2,617 | -408 | -13% | 56 | 14.7 | 87% |
| | Mainline between on-ramps from Dulles Greenway & Route 28/Dulles Airport/DIAAH and off-ramp to Centreville Road | Weave | 3,915 | 3,422 | -493 | -13% | 56 | 11.9 | 87% |
| | Between off-ramp to Centreville Road and on-ramp from DIAAH EB (east) | Basic | 3,560 | 3,172 | -388 | -11% | 57 | 13.7 | 89% |
| Between on-ramp from DIAAH EB (east) and on-ramp from Centreville Road | Merge | 3,695 | 3,306 | -389 | -11% | 57 | 11.1 | 89% | |
| Mainline east of Centreville Road | Merge | 4,860 | 4,325 | -535 | -11% | 56 | 17.6 | 89% | |
| Mainline east of Centreville Road | Basic | 4,860 | 4,290 | -570 | -12% | 57 | 18.9 | 88% | |

PM Freeway MOEs

| Facility | Segment | Type | Balanced Count (vph) | VISSIM Throughput (vph) | Difference (vph) | Difference (%) | Average Speed (mph) | Average Density (vpmp) | % Demand Served |
|---|---|---------|----------------------|-------------------------|------------------|----------------|---------------------|------------------------|-----------------|
| Westbound Route 267 | Mainline east of off-ramp to DIAAH WB | Diverge | 6,980 | 6,105 | -875 | -13% | 34 | 68.7 | 87% |
| | Between off-ramp to DIAAH WB and off-ramp to Centreville Road | Basic | 6,980 | 6,130 | -850 | -12% | 30 | 72.7 | 88% |
| | Between off-ramp to DIAAH WB and off-ramp to Centreville Road | Diverge | 6,980 | 6,071 | -909 | -13% | 24 | 79.3 | 87% |
| | Between off-ramp to Centreville Road and on-ramp from Centreville Road | Basic | 5,925 | 4,888 | -1,038 | -18% | 15 | 106.3 | 82% |
| | Between on-ramp from Centreville Road and off-ramp to Dulles Airport | Weave | 7,100 | 5,711 | -1,389 | -20% | 11 | 113.3 | 80% |
| | Between off-ramp to Dulles Airport and off-ramp to Route 28 NB | Diverge | 6,930 | 5,449 | -1,481 | -21% | 15 | 100.1 | 79% |
| | Between off-ramp to Route 28 NB and off-ramp to Route 28 SB | Basic | 4,945 | 3,890 | -1,055 | -21% | 50 | 29.1 | 79% |
| | Between off-ramp to Route 28 NB and off-ramp to Route 28 SB | Diverge | 4,945 | 3,869 | -1,076 | -22% | 46 | 31.9 | 78% |
| | Between off-ramp to Route 28 SB and Dulles Greenway Toll Plaza | Basic | 3,890 | 3,047 | -843 | -22% | 55 | 25.8 | 78% |
| Mainline west of Dulles Greenway Toll Plaza | Basic | 5,915 | 5,112 | -804 | -14% | 64 | 26.6 | 86% | |
| Eastbound DIAAH | Mainline leaving Dulles Airport near Rudder Road | Basic | 1,260 | 1,258 | -2 | 0% | 45 | 14.1 | 100% |
| | Between on-ramp from Route 267 EB (west) and on-ramp from Route 267 EB (east) | Merge | 2,270 | 2,251 | -19 | -1% | 43 | 22.3 | 99% |
| | Between on-ramp from Route 267 EB (east) and off-ramp to Route 267 EB (west) | Merge | 2,740 | 2,685 | -55 | -2% | 53 | 19.4 | 98% |
| | Between on-ramp from Route 267 EB (east) and off-ramp to Route 267 EB (west) | Diverge | 2,740 | 2,656 | -84 | -3% | 44 | 20.1 | 97% |
| | Between off-ramp to Route 267 EB (west) and off-ramp to Route 267 EB (east) | Basic | 2,155 | 2,112 | -43 | -2% | 56 | 18.7 | 98% |
| | Between off-ramp to Route 267 EB (west) and off-ramp to Route 267 EB (east) | Diverge | 2,155 | 2,055 | -100 | -5% | 55 | 17.5 | 95% |
| Westbound DIAAH | Mainline east of Centreville Road | Basic | 2,025 | 1,983 | -42 | -2% | 56 | 17.8 | 98% |
| | Mainline east of on-ramp from Route 267 WB | Basic | 3,240 | 3,235 | -5 | 0% | 56 | 28.8 | 100% |
| | Between on-ramp from Route 267 WB near Centreville Road and on-ramp from Route 267 WB to Dulles Airport | Merge | 3,240 | 3,231 | -9 | 0% | 56 | 27.5 | 100% |
| | Between on-ramp from Route 267 WB near Centreville Road and on-ramp from Route 267 WB to Dulles Airport | Basic | 3,240 | 3,215 | -25 | -1% | 55 | 29.3 | 99% |
| | Between on-ramp from Route 267 WB to Dulles Airport and off-ramp to Rudder Road (Rental Car Return/Economy Parking) | Weave | 3,410 | 3,325 | -85 | -2% | 55 | 20.3 | 98% |
| | Between off-ramp to Rudder Road (Rental Car Return/Economy Parking) and on-ramps from Route 28/Route 267 EB | Basic | 1,695 | 1,680 | -15 | -1% | 39 | 16.9 | 99% |
| | Mainline west of on-ramps from Route 28/Route 267 EB | Basic | 2,345 | 2,266 | -79 | -3% | 43 | 10.4 | 97% |

PM Freeway MOEs

| Facility | Segment | Type | Balanced Count (vph) | VISSIM Throughput (vph) | Difference (vph) | Difference (%) | Average Speed (mph) | Average Density (vpmp) | % Demand Served |
|--|---|------|----------------------|-------------------------|------------------|----------------|---------------------|------------------------|-----------------|
| Frying Pan Road Interchange Ramps | Route 28 NB to Frying Pan Road EB | | | 701 | 6 | 1% | 39 | 17.7 | 101% |
| | Frying Pan Road WB to Route 28 NB | | | 1,054 | -61 | -6% | 36 | 14.6 | 94% |
| | Route 28 SB to Frying Pan Road EB | | | 1,068 | -67 | -6% | 27 | 34.9 | 94% |
| | Frying Pan Road WB to Route 28 SB | | | 1,164 | -61 | -5% | 18 | 76.0 | 95% |
| Route 267 Interchange Ramps | Route 28 NB to Route 267 EB/Dulles Airport (Combined) | | 1,175 | 1,163 | -12 | -1% | 44 | 13.0 | 99% |
| | Route 28 NB to Dulles Airport | | | 497 | -8 | -2% | 39 | 6.3 | 98% |
| | Route 28 NB to Route 267 EB | | | 671 | 1 | 0% | 39 | 17.1 | 100% |
| | Route 267 EB (leaving Dulles Airport) to Route 28 NB | | | 984 | -106 | -10% | 20 | 50.4 | 90% |
| | Route 28 NB to Route 267 WB | | | 1,333 | 23 | 2% | 37 | 35.7 | 102% |
| | Route 267 WB to Route 28 NB | | | 1,565 | -420 | -21% | 29 | 62.0 | 79% |
| | Route 267 EB (Dulles Greenway) to Route 28 SB | | | 233 | -7 | -3% | 31 | 14.5 | 97% |
| | Route 267 WB to Route 28 SB | | | 803 | -252 | -24% | 17 | 56.3 | 76% |
| | Route 267 EB/WB to Route 28 SB (Combined) | | 1,295 | 1,016 | -279 | -22% | 18 | 67.5 | 78% |
| | Route 28 SB to Dulles Airport | | | 371 | -79 | -18% | 25 | 14.7 | 82% |
| Route 28 SB to Route 267 EB | | | 1,332 | -418 | -24% | 16 | 104.1 | 76% | |
| Route 267 EB (leaving Dulles Airport) to Route 28 SB | | | | 1,379 | -66 | -5% | 25 | 55.3 | 95% |
| Innovation Avenue Interchange Ramps | Route 28 NB to Innovation Ave EB | | | 867 | -68 | -7% | 30 | 28.4 | 93% |
| | Innovation Ave WB to Route 28 NB | | | 870 | -300 | -26% | 13 | 99.5 | 74% |
| | Route 28 SB to Innovation Ave EB | | | 673 | -72 | -10% | 29 | 23.4 | 90% |
| | Innovation Ave WB to Route 28 SB | | | 801 | -289 | -27% | 18 | 54.7 | 73% |
| Route 606 / Old Ox Road Interchange Ramps | Route 28 NB to Route 606 EB | | | 211 | -29 | -12% | 37 | 5.6 | 88% |
| | Route 606 EB to Route 28 NB | | | 417 | -28 | -6% | 25 | 16.6 | 94% |
| | Route 28 NB to Route 606 WB | | | 488 | -97 | -17% | 21 | 23.6 | 83% |
| | Route 606 WB to Route 28 NB | | | 583 | -207 | -26% | 34 | 17.7 | 74% |
| | Route 28 SB to Route 606 WB | | | 136 | -4 | -3% | 34 | 4.0 | 97% |
| | Route 606 WB to Route 28 SB | | | 185 | -75 | -29% | 22 | 12.8 | 71% |
| | Route 28 SB to Route 606 EB | | | 730 | -65 | -8% | 24 | 30.4 | 92% |
| Route 606 EB to Route 28 SB | | | 956 | -89 | -9% | 29 | 44.9 | 91% | |
| Sterling Blvd Interchange Ramps | Route 28 NB to Sterling Blvd EB | | | 457 | -48 | -10% | 30 | 14.8 | 90% |
| | Route 28 NB to Sterling Blvd WB | | | 651 | -179 | -22% | 18 | 49.7 | 78% |
| | Sterling Blvd to Route 28 NB | | | 415 | -5 | -1% | 31 | 13.0 | 99% |
| | Route 28 SB to Sterling Blvd | | | 189 | -11 | -5% | 47 | 3.9 | 95% |
| | Sterling Blvd WB to Route 28 SB | | | 796 | -29 | -3% | 17 | 50.5 | 97% |
| Sterling Blvd EB to Route 28 SB | | | | 722 | -23 | -3% | 26 | 34.4 | 97% |
| Route 267 / Centreville Road Interchange | Route 267 EB to Centreville Road | | | 349 | -6 | -2% | 19 | 15.7 | 98% |
| | Centreville Road to Route 267 EB | | | 1,017 | -148 | -13% | 39 | 25.6 | 87% |
| | Route 267 WB to Centreville Road | | | 927 | -128 | -12% | 28 | 32.6 | 88% |
| | Centreville Road to Route 267 WB | | | 940 | -235 | -20% | 35 | 41.0 | 80% |
| Various Dulles Airport / DIAAH Ramps | Route 267 EB to Dulles Airport | | | 115 | 5 | 4% | 49 | 2.3 | 104% |
| | Route 267 WB to Dulles Airport | | | 138 | -32 | -19% | 43 | 3.2 | 81% |
| | DIAAH WB to Rudder Road | | | 1,656 | -59 | -3% | 34 | 24.3 | 97% |
| | Ramps from Route 267 EB/Route 28 to Rudder Road | | 415 | 377 | -38 | -9% | 39 | 9.4 | 91% |
| | Ramps from Route 267 EB/Route 28 to Dulles Airport | | | 608 | -42 | -6% | 39 | 7.6 | 94% |
| | DIAAH EB (Outer Lanes) to Rudder Road | | | 735 | -10 | -1% | 25 | 28.7 | 99% |
| | Dulles Airport to Route 267 WB | | | 713 | -2 | 0% | 32 | 22.3 | 100% |
| | Aviation Blvd to Route 267 EB | | | 1,266 | -84 | -6% | 32 | 52.1 | 94% |
| | Route 267 EB to DIAAH EB (west) | | | 987 | -23 | -2% | 43 | 22.9 | 98% |
| | Route 267 EB to DIAAH EB (east) | | | 432 | -38 | -8% | 44 | 9.8 | 92% |
| DIAAH EB to Route 267 EB (west) | | | 581 | -4 | -1% | 54 | 10.7 | 99% | |
| DIAAH EB to Route 267 EB (east) | | | 133 | -2 | -1% | 55 | 2.4 | 99% | |



Arterial Intersection MOEs

PM Peak Hour (5:00 PM - 6:00 PM)

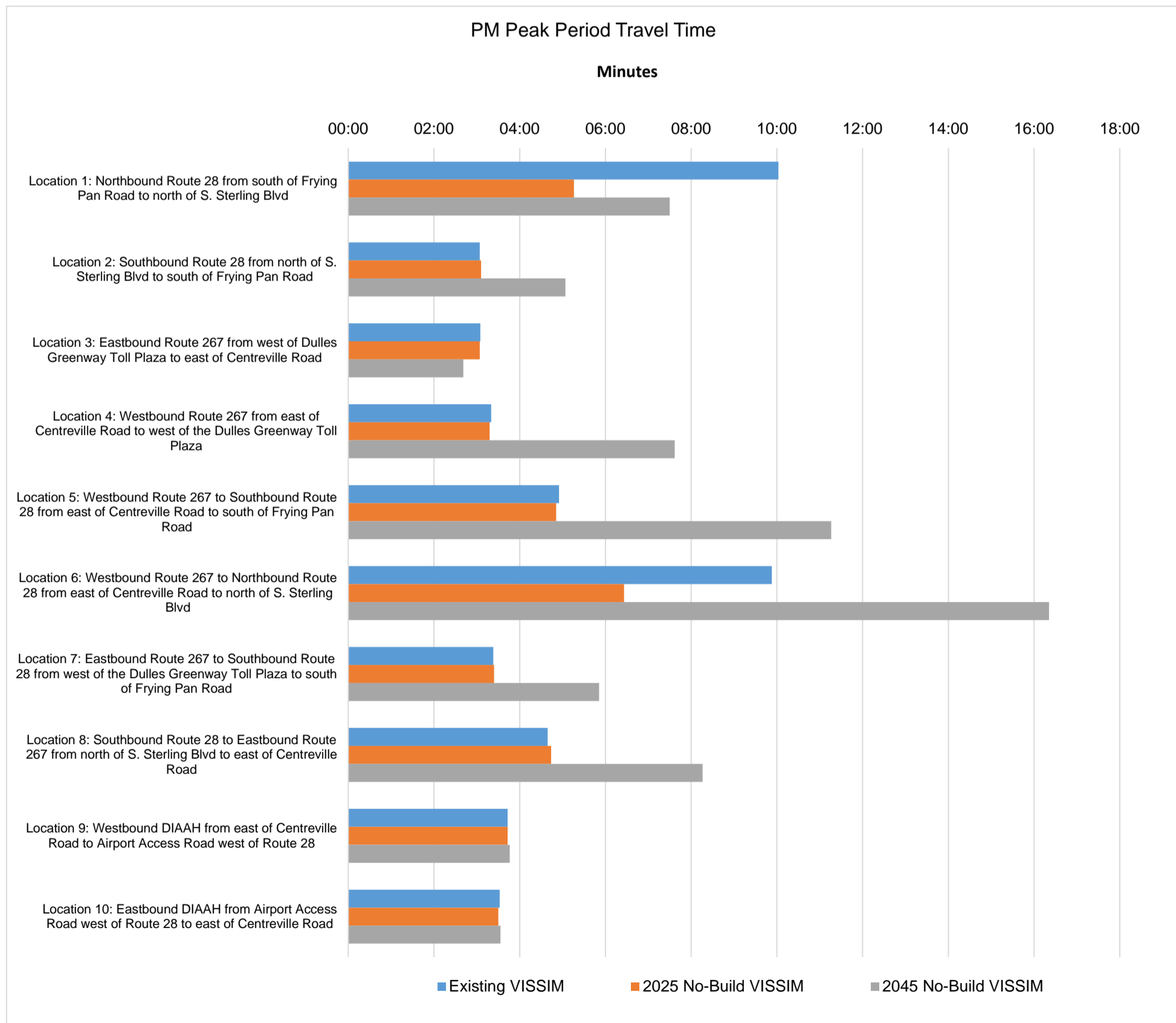
| # | Intersection | Approach | Movement | Balanced Count (vph) | | VISSIM Throughput (vph) | | Difference (vph) | | Difference (%) | | Average Delay (sec/veh) | | Average Queue Length (feet) | | Max Queue Length (feet) | |
|--------------|---|--------------|--------------|----------------------|-------|-------------------------|-------|------------------|------|----------------|------|-------------------------|-------|-----------------------------|-------|-------------------------|-------|
| | | | | | | | | | | | | | | | | | |
| 1 | Route 846 (Sterling Boulevard) and Pacific Boulevard | NB | LT | 20 | 665 | 20 | 654 | 0 | -11 | 0% | -2% | 77.5 | 34.3 | 9 | 85 | 94 | 498 |
| | | | TH | 275 | | 271 | | -4 | | -1% | | 45.2 | | 79 | | 448 | |
| | | | RT | 370 | | 363 | | -7 | | -2% | | 23.8 | | 85 | | 498 | |
| | | SB | LT | 515 | 755 | 497 | 736 | -18 | -19 | -3% | -3% | 65.6 | 47.4 | 134 | 134 | 526 | 526 |
| | | | TH | 35 | | 36 | | 1 | | 3% | | 24.0 | | 3 | | 49 | |
| | | | RT | 205 | | 203 | | -2 | | -1% | | 7.3 | | 8 | | 141 | |
| | | EB | LT | 125 | 755 | 136 | 789 | 11 | 34 | 9% | 5% | 110.5 | 69.4 | 133 | 198 | 1,011 | 1,125 |
| | | | TH | 575 | | 594 | | 19 | | 3% | | 61.3 | | 198 | | 1,089 | |
| | | | RT | 55 | | 59 | | 4 | | 7% | | 55.5 | | 177 | | 1,125 | |
| | | WB | LT | 85 | 1,070 | 73 | 889 | -12 | -181 | -14% | -17% | 75.5 | 39.4 | 33 | 97 | 156 | 419 |
| | | | TH | 635 | | 531 | | -104 | | -16% | | 51.5 | | 97 | | 419 | |
| | | | RT | 350 | | 285 | | -65 | | -19% | | 7.6 | | 7 | | 181 | |
| Intersection | | | | 3,245 | 3,068 | | | -177 | | -5% | | 48.0 | | | | | |
| 2 | Route 846 (Sterling Boulevard) and Route 28 SB Off-Ramp | SB | LT | 95 | 200 | 89 | 190 | -6 | -10 | -6% | -5% | 36.5 | 19.9 | 14 | 14 | 94 | 94 |
| | | | RT | 105 | | 101 | | -4 | | -4% | | 5.2 | | 0 | | 0 | |
| | | EB | TH | 715 | 715 | 721 | 721 | 6 | 6 | 1% | 1% | 5.6 | 5.6 | 7 | 7 | 173 | 173 |
| | | | WB | 970 | 970 | 785 | 785 | -185 | -185 | -19% | -19% | 13.0 | 13.0 | 6 | 6 | 141 | 141 |
| | | Intersection | | | | 1,885 | 1,696 | | | -189 | | -10% | | 10.6 | | | |
| 3 | Route 846 (Sterling Boulevard) and Route 28 NB Ramps | NB | RT | 505 | 505 | 457 | 457 | -48 | -48 | -10% | -10% | 69.7 | 69.7 | 0 | 0 | 35 | 35 |
| | | | EB | 15 | 815 | 15 | 813 | 0 | -2 | 0% | 0% | 40.9 | 2.2 | 3 | 3 | 50 | 50 |
| | | WB | TH | 800 | | 798 | | -2 | | 0% | | 1.5 | | 0 | | 11 | |
| | | | RT | 965 | 1,370 | 937 | 1,335 | -28 | -35 | -3% | -3% | 10.5 | 8.8 | 46 | 46 | 220 | 220 |
| | | Intersection | | | | 2,690 | 2,605 | | | -85 | | -3% | | 17.4 | | | |
| 4 | Route 846 (Sterling Boulevard) and Shaw Road | NB | LT | 275 | 720 | 263 | 709 | -12 | -11 | -4% | -2% | 83.4 | 54.6 | 193 | 193 | 755 | 755 |
| | | | TH | 45 | | 45 | | 0 | | 0% | | 74.3 | | 12 | | 229 | |
| | | | RT | 400 | | 401 | | 1 | | 0% | | 33.6 | | 109 | | 621 | |
| | | SB | LT | 20 | 130 | 20 | 128 | 0 | -2 | 0% | -2% | 54.2 | 13.5 | 6 | 6 | 70 | 106 |
| | | | TH | 20 | | 20 | | 0 | | 0% | | 0.1 | | 0 | | 7 | |
| | | | RT | 90 | | 88 | | -2 | | -2% | | 7.3 | | 6 | | 106 | |
| | | EB | U | 5 | 1,305 | 5 | 1,265 | 0 | -40 | 0% | -3% | 19.4 | 23.5 | 3 | 109 | 66 | 598 |
| | | | LT | 45 | | 40 | | -5 | | -11% | | 20.0 | | 3 | | 66 | |
| | | | TH | 1,155 | | 1,124 | | -31 | | -3% | | 25.1 | | 109 | | 598 | |
| | | WB | RT | 100 | | 96 | | -4 | | -4% | | 5.8 | | 1 | | 69 | |
| | | | LT | 190 | 1,195 | 189 | 1,179 | -1 | -16 | -1% | -1% | 28.1 | 23.2 | 30 | 102 | 483 | 604 |
| | | | TH | 995 | | 980 | | -15 | | -2% | | 22.3 | | 90 | | 572 | |
| Intersection | | | | 3,350 | 3,281 | | | -69 | | -2% | | 29.7 | | | | | |
| 5 | Route 606 (Old Ox Road) and Pacific Boulevard | NB | LT | 45 | 340 | 44 | 316 | -1 | -24 | -2% | -7% | 62.1 | 45.1 | 27 | 106 | 223 | 478 |
| | | | TH | 35 | | 34 | | -1 | | -3% | | 64.1 | | 27 | | 223 | |
| | | | RT | 260 | | 238 | | -22 | | -8% | | 39.2 | | 106 | | 478 | |
| | | SB | U | 5 | 710 | 4 | 648 | -1 | -62 | -20% | -9% | 222.7 | 189.7 | 528 | 528 | 1,028 | 1,028 |
| | | | LT | 475 | | 431 | | -44 | | -9% | | 228.5 | | 528 | | 1,028 | |
| | | | TH | 30 | | 28 | | -2 | | -7% | | 226.7 | | 528 | | 1,028 | |
| | | EB | RT | 200 | 2,185 | 185 | 2,046 | -15 | -139 | -8% | -6% | 93.2 | 82.1 | 192 | 1,083 | 817 | 2,485 |
| | | | LT | 190 | | 178 | | -12 | | -6% | | 128.3 | | 1,014 | | 2,484 | |
| | | | TH | 1,875 | | 1,759 | | -116 | | -6% | | 79.0 | | 1,083 | | 2,485 | |
| | | WB | RT | 120 | | 109 | | -11 | | -9% | | 56.7 | | 2 | | 83 | |
| | | | U | 5 | 2,645 | 4 | 2,049 | -1 | -596 | -20% | -23% | 184.9 | 136.4 | 17 | 1,536 | 96 | 2,198 |
| | | | LT | 80 | | 61 | | -19 | | -24% | | 176.0 | | 17 | | 96 | |
| Intersection | | | | 5,880 | 5,059 | | | -821 | | -14% | | 115.6 | | | | | |
| 6 | Route 606 (Old Ox Road) and Route 28 NB Off-Ramp | NB | TH | 90 | 90 | 78 | 78 | -12 | -12 | -13% | -13% | 222.4 | 222.4 | 21 | 21 | 149 | 149 |
| | | | WB | 1,925 | 1,925 | 1,772 | 1,772 | -153 | -153 | -8% | -8% | 28.1 | 28.1 | 149 | 149 | 932 | 932 |
| | | WB | TH | 2,185 | 2,185 | 1,623 | 1,623 | -562 | -562 | -26% | -26% | 30.8 | 30.8 | 135 | 135 | 730 | 730 |
| | | | Intersection | | | | 4,200 | 3,473 | | | -727 | | -17% | | 33.7 | | |

| LOS | | % of Demand Served | |
|-----|---|--------------------|------|
| E | C | 100% | 98% |
| D | C | 99% | 98% |
| C | C | 98% | 97% |
| E | D | 97% | 97% |
| C | D | 103% | 97% |
| A | D | 99% | 97% |
| F | E | 109% | 105% |
| E | E | 103% | 105% |
| E | E | 107% | 105% |
| E | D | 86% | 83% |
| D | D | 84% | 83% |
| A | D | 81% | 83% |
| D | | 95% | |
| D | B | 94% | 95% |
| A | B | 96% | 95% |
| A | A | 101% | 101% |
| B | B | 81% | 81% |
| B | | 90% | |
| E | E | 90% | 90% |
| D | A | 100% | 100% |
| A | A | 100% | 100% |
| B | A | 97% | 97% |
| A | A | 98% | 97% |
| B | | 97% | |
| F | D | 96% | 98% |
| E | D | 100% | 98% |
| C | D | 100% | 98% |
| D | B | 100% | 98% |
| A | B | 98% | 98% |
| B | B | 100% | 98% |
| B | C | 89% | 97% |
| C | C | 97% | 97% |
| A | C | 96% | 97% |
| C | C | 99% | 99% |
| C | C | 98% | 99% |
| B | C | 100% | 99% |
| C | | 98% | |
| E | D | 98% | 93% |
| E | D | 97% | 93% |
| D | D | 92% | 93% |
| F | F | 80% | 91% |
| F | F | 91% | 91% |
| F | F | 93% | 91% |
| F | F | 93% | 91% |
| F | F | 94% | 94% |
| E | F | 94% | 94% |
| E | F | 91% | 94% |
| F | F | 80% | 77% |
| F | F | 76% | 77% |
| F | F | 78% | 77% |
| F | F | 77% | 77% |
| F | | 86% | |
| F | F | 87% | 87% |
| C | C | 92% | 92% |
| C | C | 74% | 74% |
| C | | 83% | |

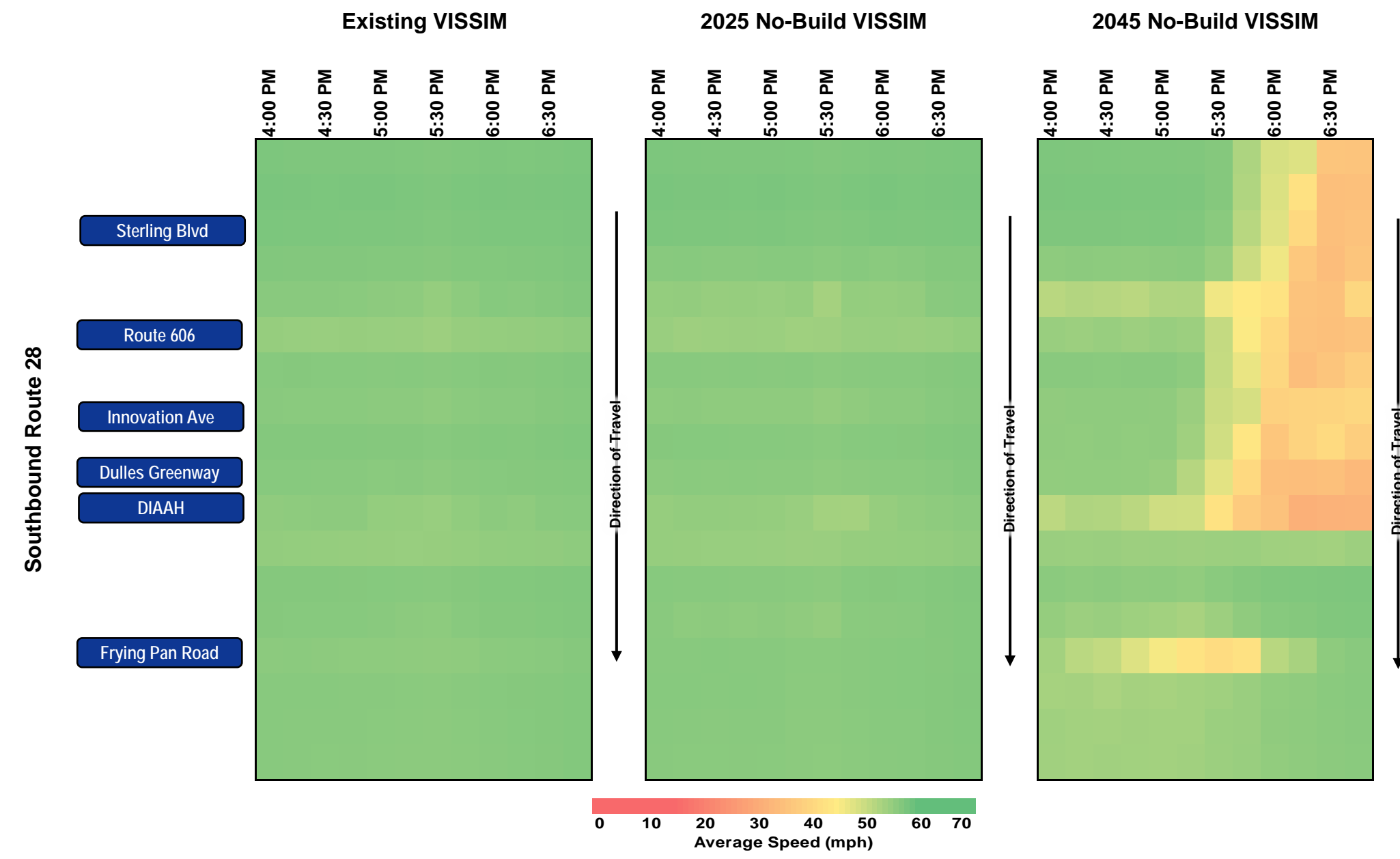
Travel Time Comparison

PM Peak Period (4:30 PM - 6:30 PM)

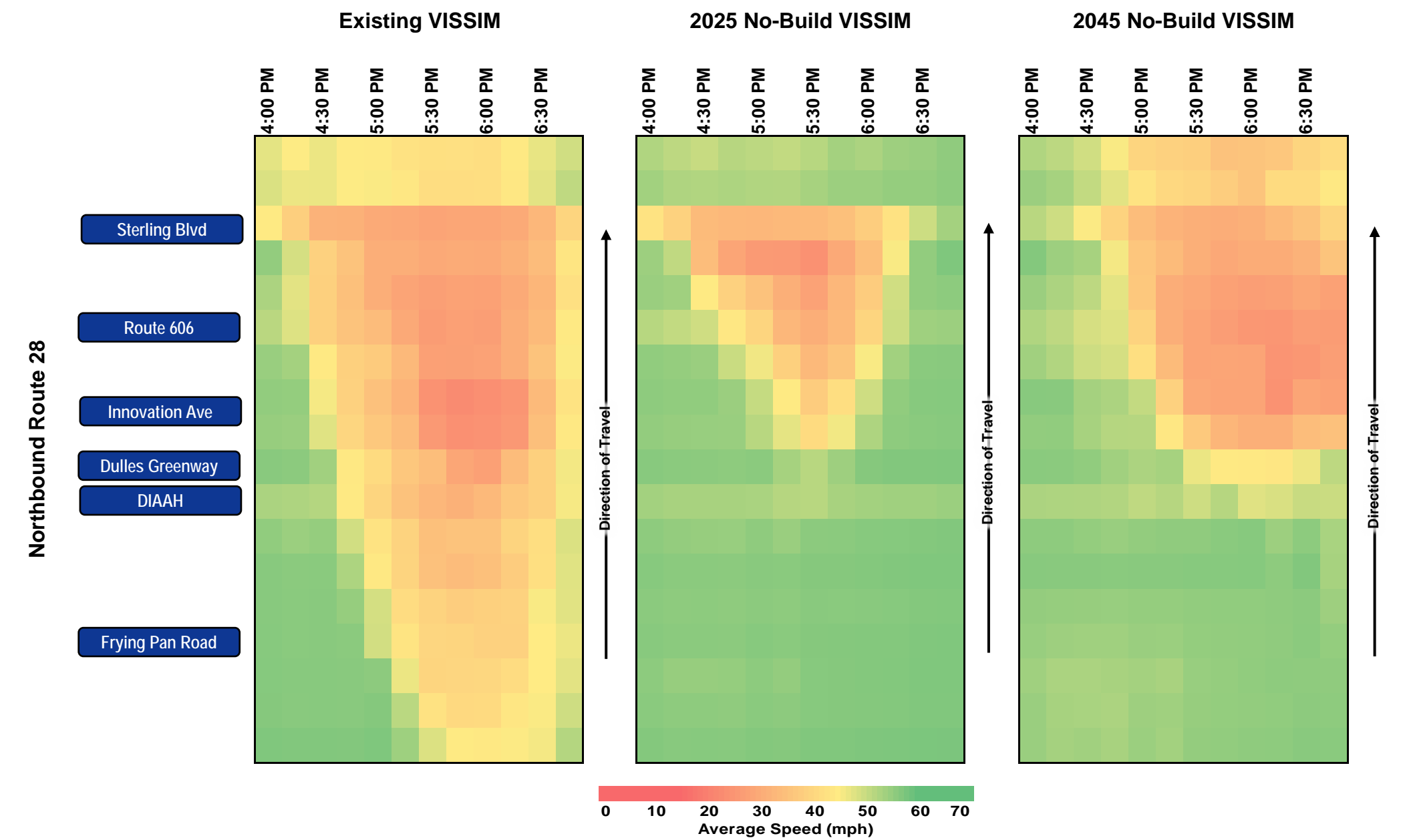
| Segment ID | Route | Peak Period Travel Time | | | | | | |
|--|-------|-------------------------|------------------------------|------------------------------|---------------------------------------|-----------------------------------|----------------------------------|------------------------------|
| | | Existing VISSIM (MM:SS) | 2025 No-Build VISSIM (MM:SS) | 2045 No-Build VISSIM (MM:SS) | Difference from 2025 No-Build (MM:SS) | Difference from 2025 No-Build (%) | Difference from Existing (MM:SS) | Difference from Existing (%) |
| Location 1: Northbound Route 28 from south of Frying Pan Road to north of S. Sterling Blvd | | 10:02 | 05:16 | 07:30 | 02:14 | 42% | -02:32 | -25% |
| Location 2: Southbound Route 28 from north of S. Sterling Blvd to south of Frying Pan Road | | 03:04 | 03:06 | 05:04 | 01:58 | 63% | 02:00 | 65% |
| Location 3: Eastbound Route 267 from west of Dulles Greenway Toll Plaza to east of Centreville Road | | 03:05 | 03:04 | 02:41 | -00:23 | -13% | -00:24 | -13% |
| Location 4: Westbound Route 267 from east of Centreville Road to west of the Dulles Greenway Toll Plaza | | 03:20 | 03:18 | 07:37 | 04:19 | 131% | 04:17 | 129% |
| Location 5: Westbound Route 267 to Southbound Route 28 from east of Centreville Road to south of Frying Pan Road | | 04:55 | 04:51 | 11:16 | 06:25 | 132% | 06:21 | 129% |
| Location 6: Westbound Route 267 to Northbound Route 28 from east of Centreville Road to north of S. Sterling Blvd | | 09:53 | 06:26 | 16:21 | 09:55 | 154% | 06:28 | 65% |
| Location 7: Eastbound Route 267 to Southbound Route 28 from west of the Dulles Greenway Toll Plaza to south of Frying Pan Road | | 03:23 | 03:24 | 05:51 | 02:27 | 72% | 02:28 | 73% |
| Location 8: Southbound Route 28 to Eastbound Route 267 from north of S. Sterling Blvd to east of Centreville Road | | 04:39 | 04:44 | 08:16 | 03:32 | 75% | 03:37 | 78% |
| Location 9: Westbound DIAAH from east of Centreville Road to Airport Access Road west of Route 28 | | 03:43 | 03:43 | 03:46 | 00:03 | 1% | 00:03 | 1% |
| Location 10: Eastbound DIAAH from Airport Access Road west of Route 28 to east of Centreville Road | | 03:32 | 03:30 | 03:33 | 00:03 | 1% | 00:01 | 0% |



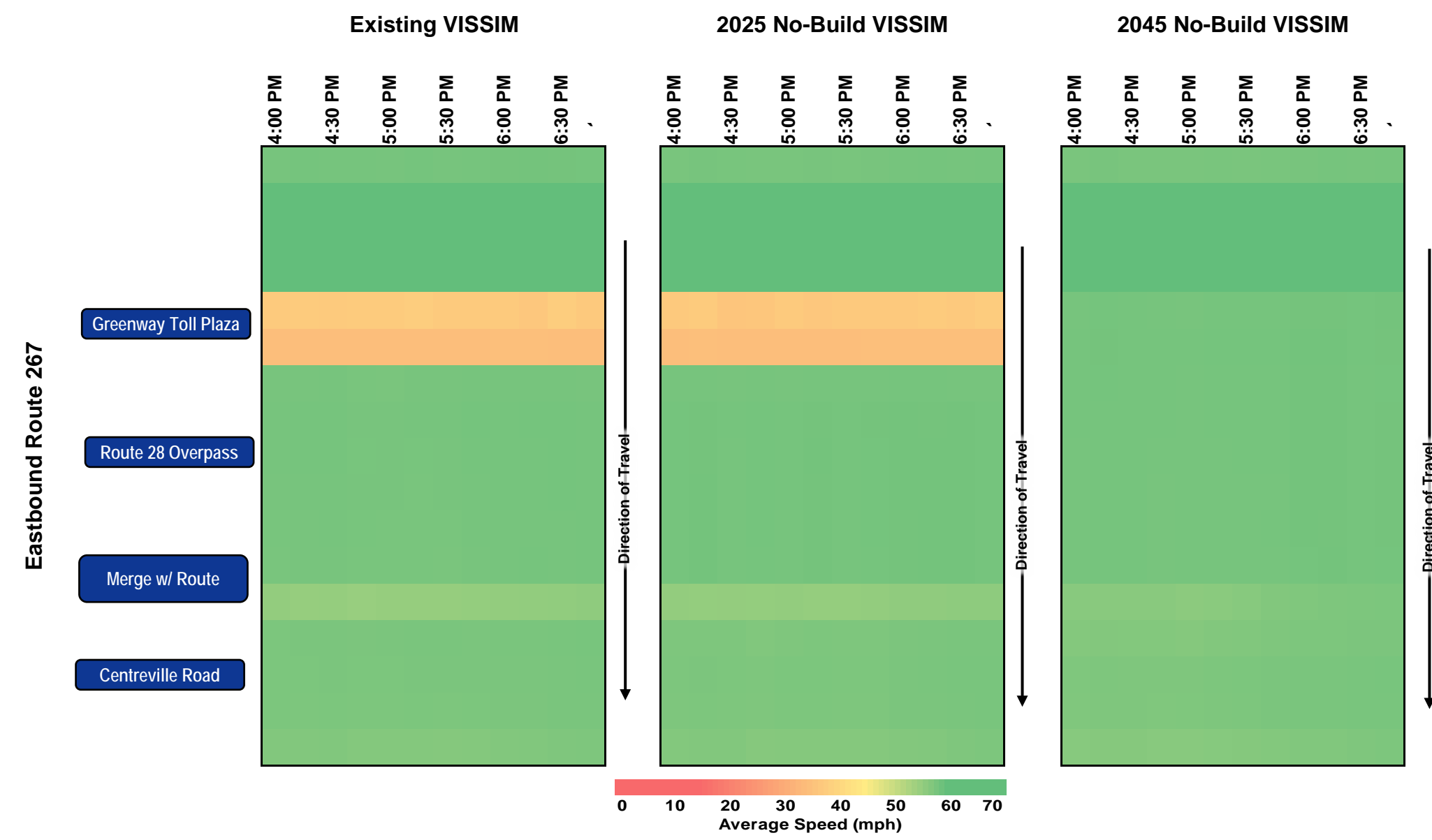
Freeway Average Speed Comparison: Route 28 SB



Freeway Average Speed Comparison: Route 28 NB



Freeway Average Speed Comparison: Route 267 (Dulles Toll Road/Dulles Greenway) EB



Freeway Average Speed Comparison: Route 267 (Dulles Toll Road/Dulles Greenway) WB

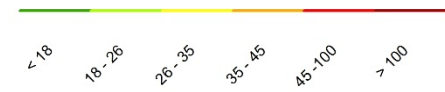


2045 No-Build PM Peak Hour Freeway and Ramp Density – Route 28 Corridor

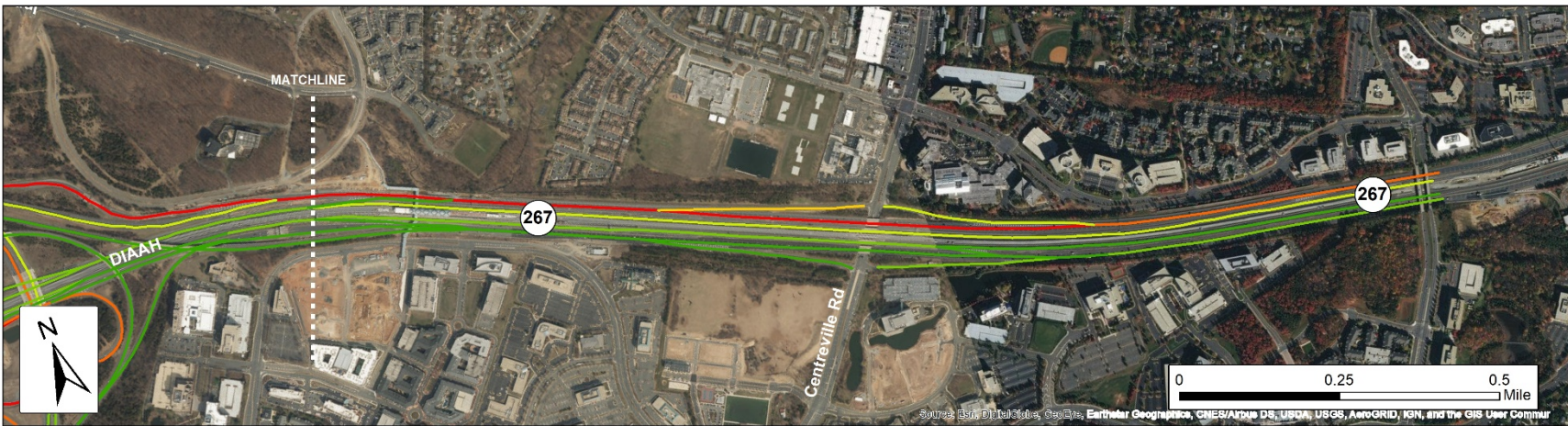
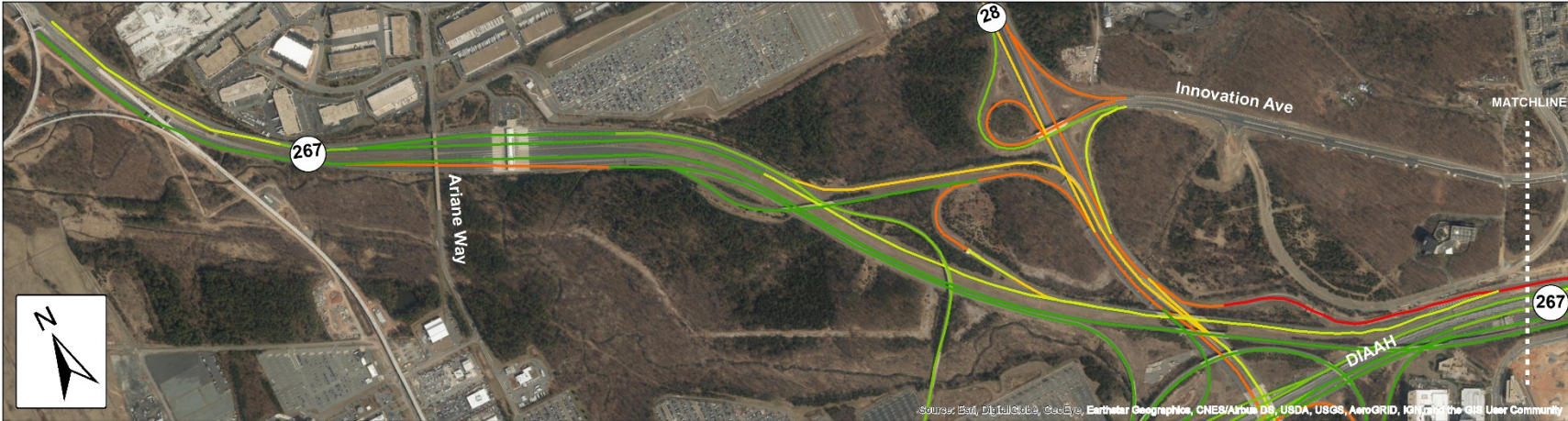


Route 28 Corridor
Mainline and Ramp Density
2045 No-Build PM

Density (vpmpl)

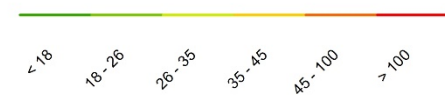


2045 No-Build PM Peak Hour Freeway and Ramp Density – Route 267 Corridor

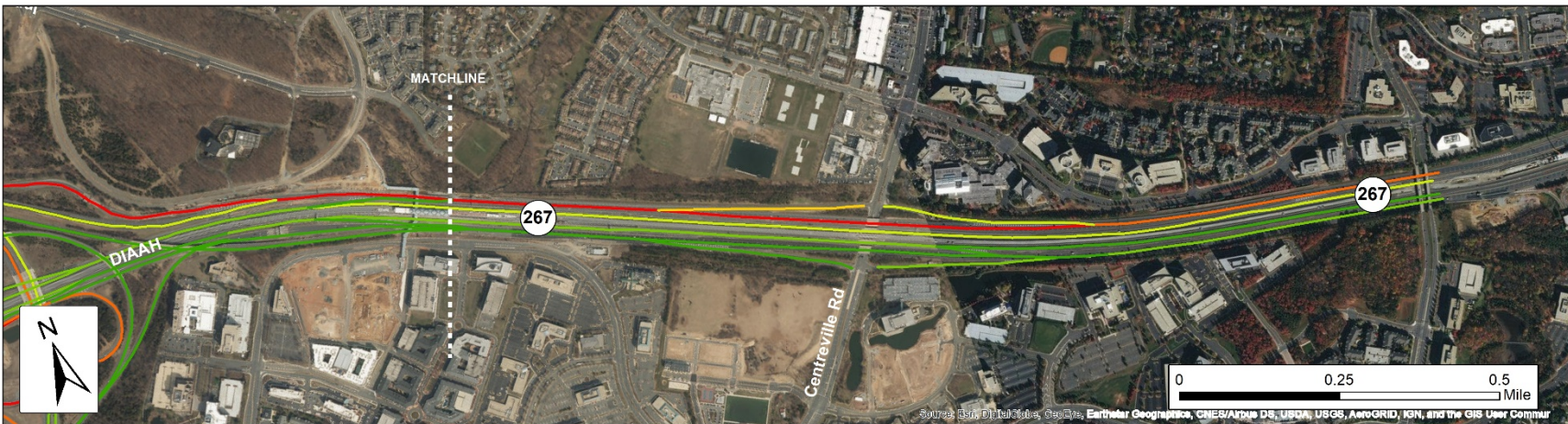
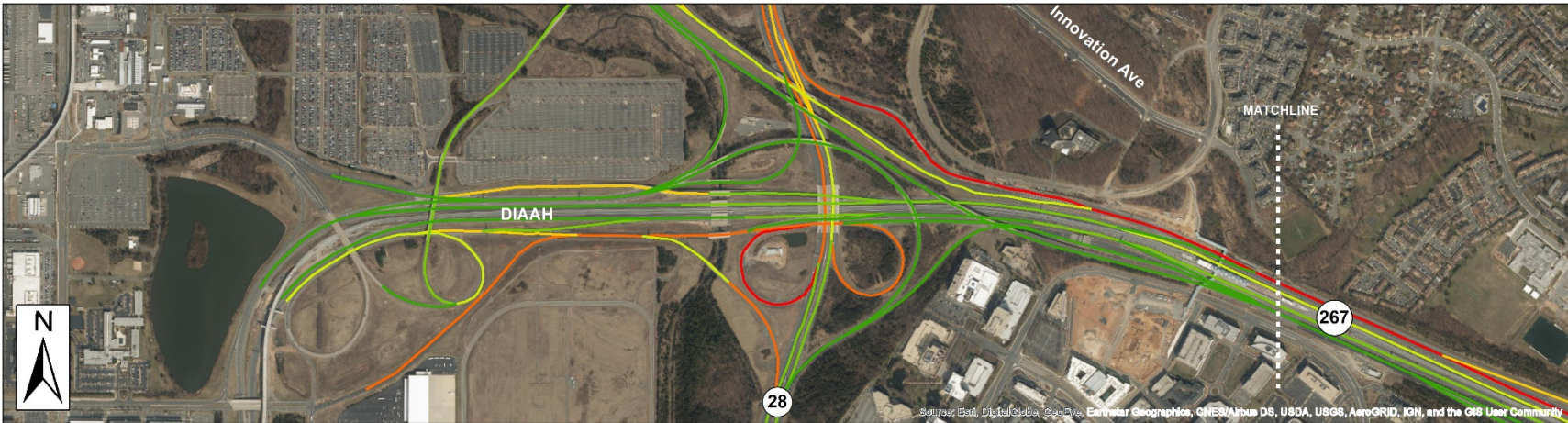


Route 267 Corridor
Mainline and Ramp Density
2045 No-Build PM

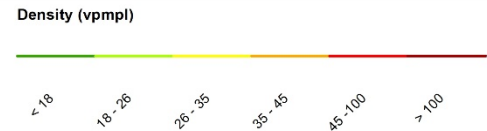
Density (vpmp)



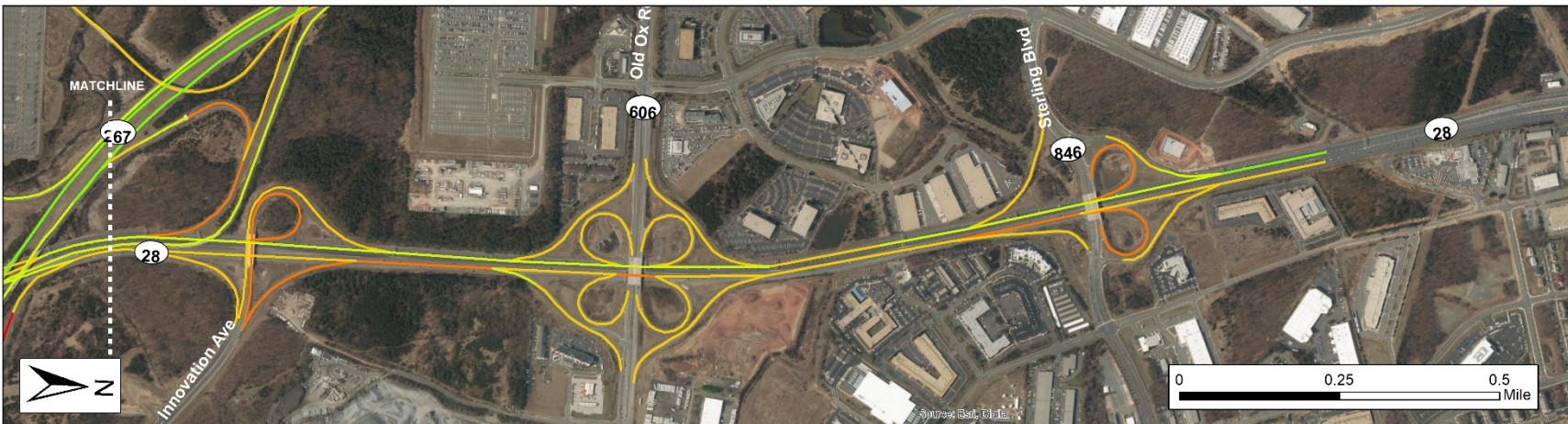
2045 No-Build PM Peak Hour Freeway and Ramp Density – DIAAH Corridor



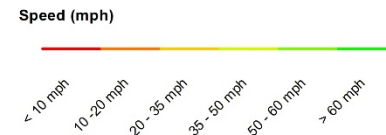
**DIAAH Corridor
Mainline and Ramp Density
2045 No-Build PM**



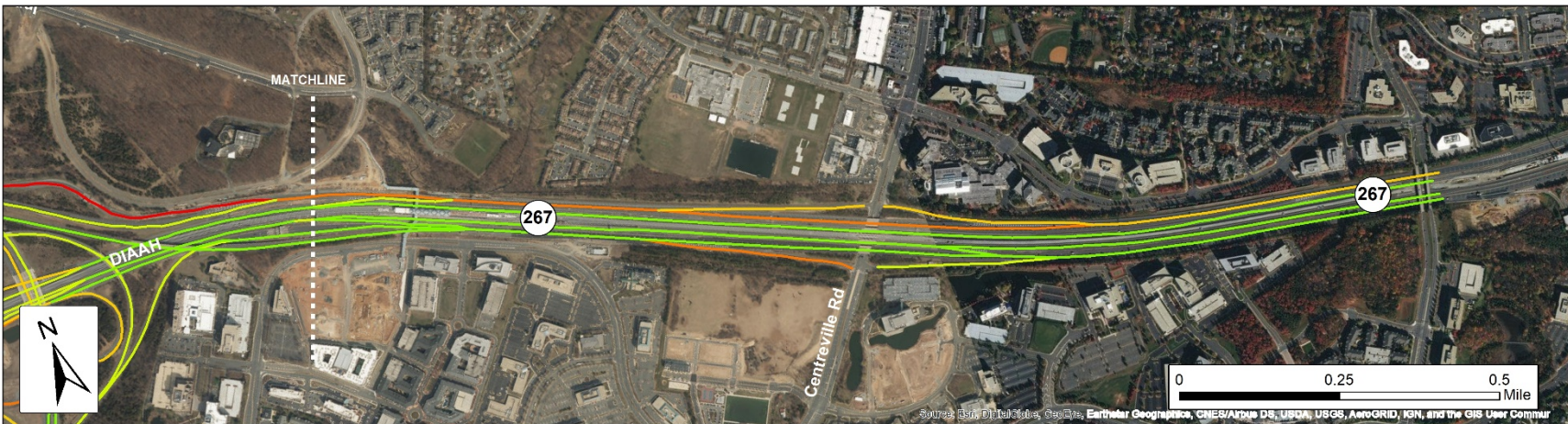
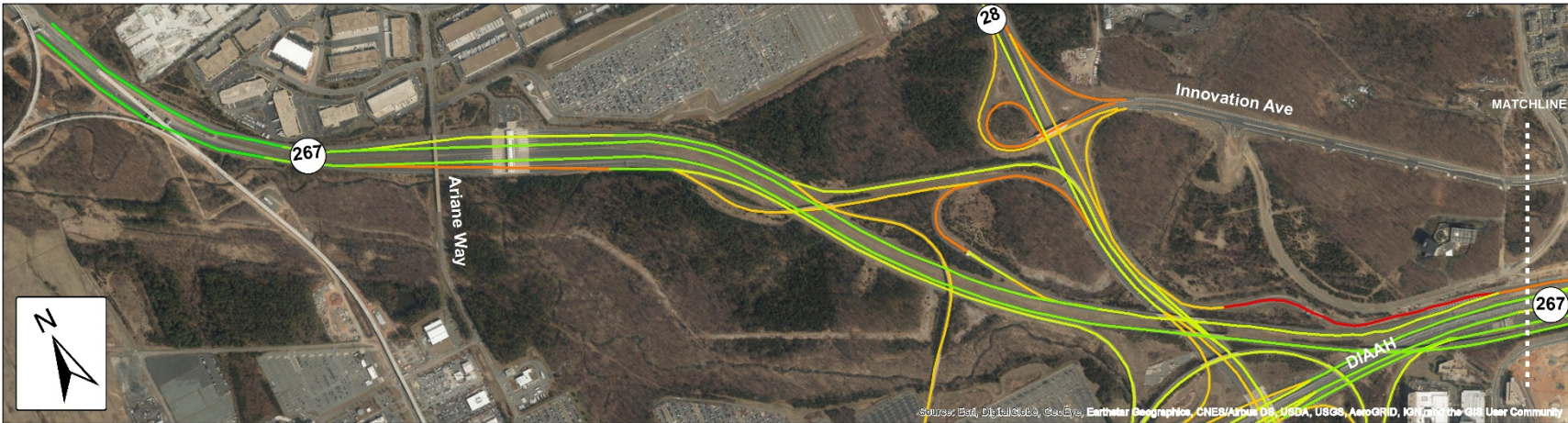
2045 No-Build PM Peak Hour Freeway and Ramp Speeds – Route 28 Corridor



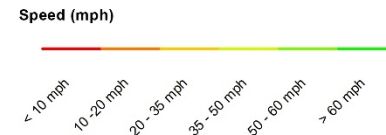
**Route 28 Corridor
Mainline and Ramp Speed
2045 No-Build PM**



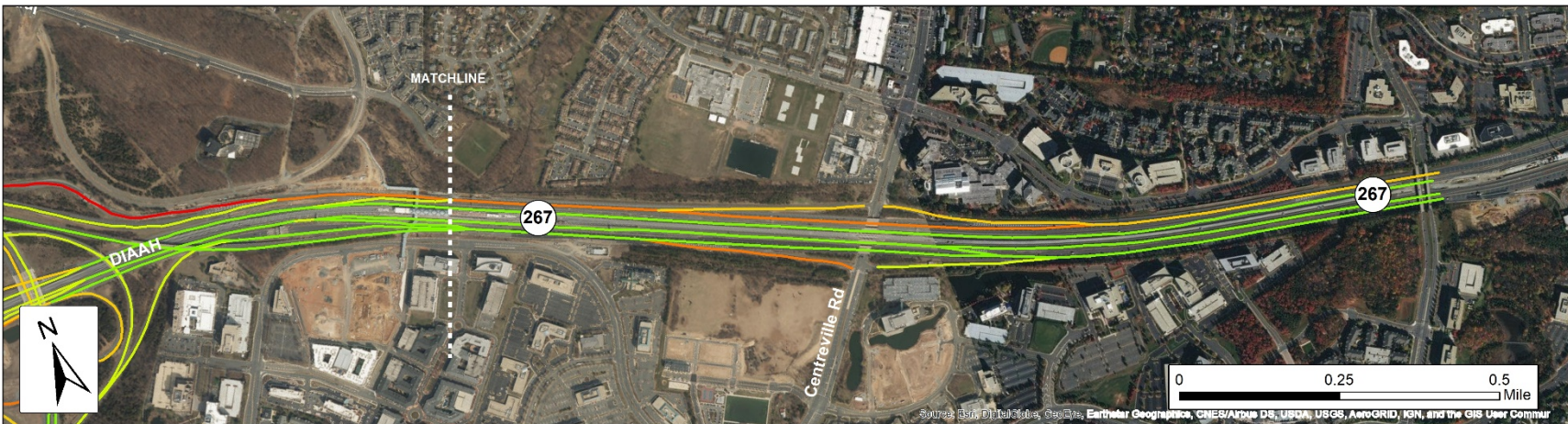
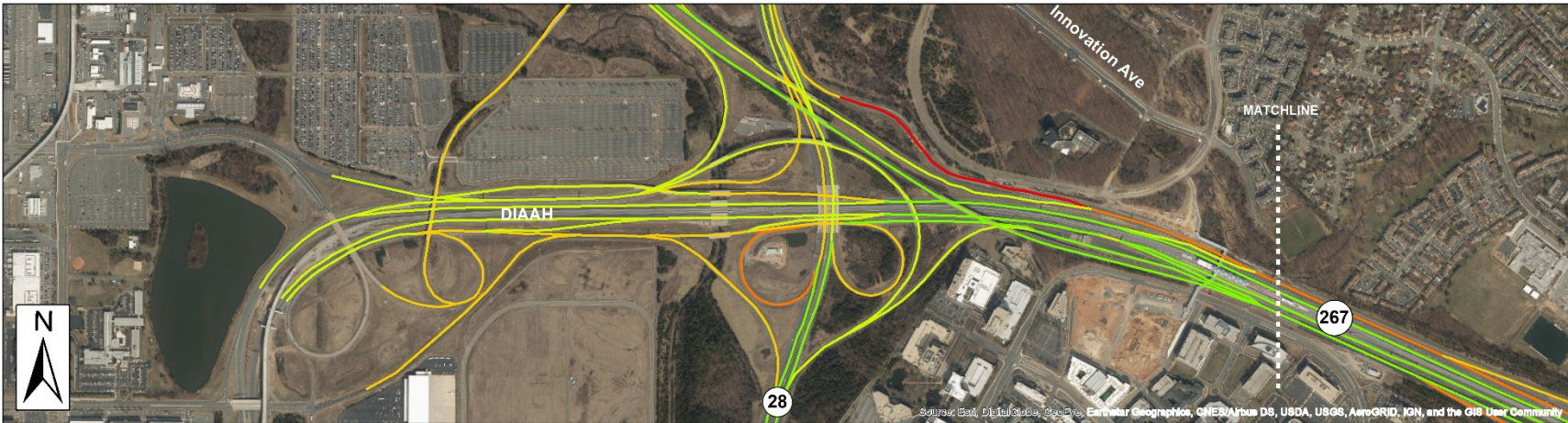
2045 No-Build PM Peak Hour Freeway and Ramp Speeds – Route 267 Corridor



**Route 267 Corridor
Mainline and Ramp Speed
2045 No-Build PM**



2045 No-Build PM Peak Hour Freeway and Ramp Speeds – DIAAH Corridor



**DIAAH Corridor
Mainline and Ramp Speed
2045 No-Build PM**

Speed (mph)

