# Appendix 7 – Conceptual Analysis

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Future Without the Proposed Action (No-Action) Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Number of Dwelling Units | Office Mechanical[2] (gsf) |
| Site LD 1 | 869 | 16 | 14,220 | 217,317 | 217,317 | - | 205,317 | 12,000 | - | - | - |
| | 869 | 58 | 5,370 | 91,212 | 91,212 | - | 85,212 | 6,000 | - | - | - |
| | 869 | 61 | 6,480 | 74,186 | 74,186 | - | 68,186 | 6,000 | - | - | - |
| | 869 | 64 | 7,400 | 89,423 | 89,423 | - | 82,423 | 7,000 | - | - | - |
| | **TOTAL** | | **33,470** | **472,138** | **472,138** | **-** | **441,138** | **31,000** | **-** | **-** | **-** |
| Site LD 2 | 869 | 25 | 2,469 | | | | | | | | |
| | 869 | 26 | 2,472 | | | | | | | | |
| | 869 | 27 | 4,937 | 132,240 | 9,878 | 122,362 | - | 9,878 | - | 123 | - |
| | **TOTAL** | | **9,878** | **132,240** | **9,878** | **122,362** | **-** | **9,878** | **-** | **123** | **-** |
| Site LD 3 | 1275 | 23 | 21,825 | 407,127 | 407,127 | - | 386,052 | 21,075 | - | - | - |
| | **TOTAL** | | **21,825** | **407,127** | **407,127** | **-** | **386,052** | **21,075** | **-** | **-** | **-** |
| Site LD 4 | 1277 | 20 | 23,025 | | | | | | | | |
| | 1277 | 27 | 10,250 | | | | | | | | |
| | 1277 | 46 | 3,350 | | | | | | | | |
| | 1277 | 52 | 6,666 | 796,554 | 727,289 | - | 683,998 | 43,291 | - | - | |
| | **TOTAL** | | **43,291** | **796,554** | **727,289** | **-** | **683,998** | **43,291** | **-** | **-** | |
| Site LD 5 | 1278 | 8 | 5,690 | 36,616 | 36,616 | - | 36,616 | - | - | - | - |
| | 1278 | 14 | 27,750 | 486,874 | 486,874 | - | 466,874 | 20,000 | - | - | - |
| | 1278 | 15 | 2,375 | 35,625 | 35,625 | - | 33,325 | 2,300 | - | - | - |
| | 1278 | 17 | 2,375 | 35,625 | 35,625 | - | 33,325 | 2,300 | - | - | - |
| | 1278 | 62 | 2,513 | | | | | | | | |
| | 1278 | 63 | 2,513 | | | | | | | | |
| | 1278 | 64 | 2,513 | 94,991 | 7,539 | 87,452 | - | 7,539 | - | 88 | - |
| | 1278 | 65 | 5,020 | 62,918 | 62,918 | - | - | - | 62,918 | - | - |
| | **TOTAL** | | **50,749** | **752,649** | **665,197** | **87,452** | **570,140** | **32,139** | **62,918** | **88** | **-** |
| Site LD 6 | 1279 | 9 | 8,133 | 110,999 | 110,999 | - | 104,999 | 6,000 | - | - | - |
| | 1279 | 17 | 13,125 | 122,600 | 122,600 | - | 50,325 | 72,275 | - | - | - |
| | 1279 | 57 | 18,800 | 380,766 | 380,766 | - | 344,482 | 36,284 | - | - | - |
| | 1279 | 63 | 4,522 | 15,023 | 15,023 | - | - | 15,023 | - | - | - |
| | 1279 | 65 | 5,020 | 79,280 | 79,280 | - | 74,280 | 5,000 | - | - | - |
| | **TOTAL** | | **49,600** | **708,668** | **708,668** | **-** | **574,086** | **134,582** | **-** | **-** | **-** |
| Site LD 7 | 1279 | 23 | 5,000 | | | | | | | | |
| | 1279 | 24 | 2,541 | | | | | | | | |
| | 1279 | 25 | 2,510 | | | | | | | | |
| | 1279 | 48 | 15,000 | 460,938 | 420,857 | - | 409,907 | 10,950 | - | - | 40,082 |
| | 1279 | 28 | 9,105 | 174,895 | 174,895 | - | - | 8,824 | 166,071 | - | - |
| | 1279 | 45 | 9,105 | 162,330 | 162,330 | - | 152,830 | 9,500 | - | - | - |
| | **TOTAL** | | **43,261** | **798,163** | **758,082** | **-** | **562,737** | **29,274** | **166,071** | **-** | **40,082** |
| Site LD 8 | 1281 | 62 | 5,020 | | | | | | | | |
| | 1281 | 64 | 2,445 | | | | | | | | |
| | 1281 | 65 | 4,083 | 145,505 | 11,548 | 133,957 | - | 11,548 | - | 134 | - |
| | **TOTAL** | | **11,548** | **145,505** | **11,548** | **133,957** | **-** | **11,548** | **-** | **134** | **-** |
| Site LD 9 | 1281 | 21 | 43,313 | 598,248 | 598,248 | - | - | - | 598,248 | - | - |
| | **TOTAL** | | **43,313** | 598,248 | 598,248 | - | - | - | 598,248 | - | - |
| Site LD 10 | 1282 | 17 | 38,150 | 698,996 | 698,996 | - | 677,674 | 21,322 | - | - | - |
| | 1282 | 64 | 8,033 | 29,000 | 29,000 | - | 16,800 | 12,200 | - | - | - |
| | **TOTAL** | | **46,183** | **727,996** | **727,996** | **-** | **694,474** | **33,522** | **-** | **-** | **-** |

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Future Without the Proposed Action (No-Action) Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Number of Dwelling Units | Office Mechanical[2] (gsf) |
| Site LD 11 | 1283 | 8 | 2,510 | | | | | | | | |
| | 1283 | 9 | 2,510 | | | | | | | | |
| | 1283 | 10 | 2,510 | | | | | | | | |
| | 1283 | 11 | 2,510 | | | | | | | | |
| | 1283 | 12 | 2,500 | | | | | | | | |
| | 1283 | 13 | 2,500 | 213,171 | 15,040 | 198,131 | - | 15,040 | - | 199 | - |
| | **TOTAL** | | **15,040** | **213,171** | **15,040** | **198,131** | **-** | **15,040** | **-** | **199** | **-** |
| Site LD 14 | 1300 | 42 | 3,314 | | | | | | | | |
| | 1300 | 44 | 3,213 | 82,240 | 6,527 | 75,713 | - | 6,527 | - | 76 | - |
| | **TOTAL** | | **6,527** | **82,240** | **6,527** | **75,713** | **-** | **6,527** | **-** | **76** | **-** |
| Site LD 15 | 1302 | 25 | 5,522 | | | | | | | | |
| | 1302 | 27 | 1,674 | | | | | | | | |
| | 1302 | 127 | 1,688 | | | | | | | | |
| | 1302 | 28 | 1,688 | | | | | | | | |
| | 1302 | 29 | 1,688 | 167,349 | 12,260 | 155,089 | - | 12,260 | - | 156 | - |
| | **TOTAL** | | **12,260** | **167,349** | **12,260** | **155,089** | **-** | **12,260** | **-** | **156** | **-** |
| Site LD 16 | 1303 | 14 | 41,170 | 427,611 | 427,611 | - | - | - | 427,611 | - | - |
| | **TOTAL** | | **41,170** | **427,611** | **427,611** | **-** | **-** | **-** | **427,611** | **-** | **-** |
| **TOTALS** | | | | **6,429,660** | **5,547,609** | **772,705** | **3,912,625** | **380,136** | **1,254,848** | **776** | **109,347** |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Future With the Proposed Action (With-Action) Scenario | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | No of Dwelling Units | Parking Spaces: New Construction | Office Mechanical[2] (gsf) | Neighborhood Retail Area (gsf) | Destination Retail Area (gsf) |
| Site LD 1 | 869 | 16 | 14,220 | | | | | | | | | | | |
| | 869 | 58 | 5,370 | | | | | | | | | | | |
| | 869 | 61 | 6,480 | | | | | | | | | | | |
| | 869 | 64 | 7,400 | 831,395 | 759,100 | - | 725,630 | 33,470 | - | - | 100 | 72,295 | 33,470 | - |
| | **TOTAL** | | **33,470** | **831,395** | **759,100** | **-** | **725,630** | **33,470** | **-** | **-** | **100** | **72,295** | **33,470** | **-** |
| Site LD 2 | 869 | 25 | 2,469 | | | | | | | | | | | |
| | 869 | 26 | 2,472 | | | | | | | | | | | |
| | 869 | 27 | 4,937 | 142,612 | 18,149 | 124,463 | - | 18,149 | - | 125 | - | - | 18,149 | - |
| | **TOTAL** | | **9,878** | **142,612** | **18,149** | **124,463** | **-** | **18,149** | **-** | **125** | **-** | **-** | **18,149** | **-** |
| Site LD 3 | 1275 | 23 | 21,825 | 445,901 | 407,127 | - | 385,302 | 21,825 | - | - | - | 38,774 | 21,825 | |
| | **TOTAL** | | **21,825** | **445,901** | **407,127** | **-** | **385,302** | **21,825** | **-** | **-** | **-** | **38,774** | **21,825** | **-** |
| Site LD 4 | 1277 | 20 | 23,025 | | | | | | | | | | | |
| | 1277 | 27 | 10,250 | | | | | | | | | | | |
| | 1277 | 46 | 3,350 | | | | | | | | | | | |
| | 1277 | 52 | 6,666 | 1,194,832 | 1,090,933 | - | 1,047,642 | 43,291 | - | - | - | 103,898 | 21,646 | 21,646 |
| | **TOTAL** | | **43,291** | **1,194,832** | **1,090,933** | **-** | **1,047,642** | **43,291** | **-** | **-** | **-** | **103,898** | **21,646** | **21,646** |
| Site LD 5 | 1278 | 8 | 5,690 | | | | | | | | | | | |
| | 1278 | 14 | 27,750 | | | | | | | | | | | |
| | 1278 | 15 | 2,375 | | | | | | | | | | | |
| | 1278 | 17 | 2,375 | | | | | | | | | | | |
| | 1278 | 62 | 2,513 | | | | | | | | | | | |
| | 1278 | 63 | 2,513 | | | | | | | | | | | |
| | 1278 | 64 | 2,513 | | | | | | | | | | | |
| | 1278 | 65 | 5,020 | 1,260,605 | 1,150,987 | - | 1,100,238 | 50,749 | - | - | 100 | 109,618 | 25,375 | 25,375 |
| | **TOTAL** | | **50,749** | **1,260,605** | **1,150,987** | **-** | **1,100,238** | **50,749** | **-** | **-** | **100** | **109,618** | **25,375** | **25,375** |
| Site LD 6 | 1279 | 9 | 8,133 | | | | | | | | | | | |
| | 1279 | 17 | 13,125 | | | | | | | | | | | |
| | 1279 | 57 | 18,800 | | | | | | | | | | | |
| | 1279 | 63 | 4,522 | | | | | | | | | | | |
| | 1279 | 65 | 5,020 | 1,232,064 | 1,124,928 | - | 1,075,328 | 49,600 | - | - | 100 | 107,136 | 24,800 | 24,800 |
| | **TOTAL** | | **49,600** | **1,232,064** | **1,124,928** | **-** | **1,075,328** | **49,600** | **-** | **-** | **100** | **107,136** | **24,800** | **24,800** |
| Site LD 7 | 1279 | 23 | 5,000 | | | | | | | | | | | |
| | 1279 | 24 | 2,541 | | | | | | | | | | | |
| | 1279 | 25 | 2,510 | | | | | | | | | | | |
| | 1279 | 48 | 15,000 | | | | | | | | | | | |
| | 1279 | 28 | 9,105 | | | | | | | | | | | |
| | 1279 | 45 | 9,105 | 1,194,004 | 1,090,177 | - | 1,046,916 | 43,261 | - | - | - | 103,826 | 21,631 | 21,631 |
| | **TOTAL** | | **43,261** | **1,194,004** | **1,090,177** | **-** | **1,046,916** | **43,261** | **-** | **-** | **-** | **103,826** | **21,631** | **21,631** |

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Future With the Proposed Action (With-Action) Scenario | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | No of Dwelling Units | Parking Spaces: New Construction | Office Mechanical[2] (gsf) | Neighborhood Retail Area (gsf) | Destination Retail Area (gsf) |
| Site LD 8 | 1281 | 62 | 5,020 | | | | | | | | | | | |
| | 1281 | 64 | 2,445 | | | | | | | | | | | |
| | 1281 | 65 | 4,083 | 157,630 | 157,630 | - | - | 11,548 | 146,082 | - | - | - | 11,548 | - |
| | TOTAL | | 11,548 | 157,630 | 157,630 | - | - | 11,548 | 146,082 | - | - | - | 11,548 | - |
| Site LD 9 | 1281 | 21 | 43,313 | 1,195,439 | 1,091,488 | - | 1,048,175 | 43,313 | - | - | - | 103,951 | 21,657 | 21,657 |
| | TOTAL | | 43,313 | 1,195,439 | 1,091,488 | - | 1,048,175 | 43,313 | - | - | - | 103,951 | 21,657 | 21,657 |
| Site LD 10 | 1282 | 17 | 38,150 | | | | | | | | | | | |
| | 1282 | 64 | 8,033 | 1,147,186 | 1,047,430 | - | 1,001,247 | 46,183 | - | - | 100 | 99,755 | 23,092 | 23,092 |
| | TOTAL | | 46,183 | 1,147,186 | 1,047,430 | - | 1,001,247 | 46,183 | - | - | 100 | 99,755 | 23,092 | 23,092 |
| Site LD 11 | 1283 | 8 | 2,510 | | | | | | | | | | | |
| | 1283 | 9 | 2,510 | | | | | | | | | | | |
| | 1283 | 10 | 2,510 | | | | | | | | | | | |
| | 1283 | 11 | 2,510 | | | | | | | | | | | |
| | 1283 | 12 | 2,500 | | | | | | | | | | | |
| | 1283 | 13 | 2,500 | 213,171 | 213,171 | - | - | 15,040 | 198,131 | - | - | - | 15,040 | - |
| | TOTAL | | 15,040 | 213,171 | 213,171 | - | - | 15,040 | 198,131 | - | - | - | 15,040 | - |
| Site LD 14 | 1300 | 42 | 3,314 | | | | | | | | | | | |
| | 1300 | 44 | 3,213 | 89,094 | 6,527 | 82,567 | - | 6,527 | - | 83 | - | - | 6,527 | |
| | TOTAL | | 6,527 | 89,094 | 6,527 | 82,567 | - | 6,527 | - | 83 | - | - | 6,527 | - |
| Site LD 15 | 1302 | 25 | 5,522 | | | | | | | | | | | |
| | 1302 | 27 | 1,674 | | | | | | | | | | | |
| | 1302 | 127 | 1,688 | | | | | | | | | | | |
| | 1302 | 28 | 1,688 | | | | | | | | | | | |
| | 1302 | 29 | 1,688 | 167,349 | 167,349 | - | - | 12,260 | 155,089 | - | - | - | 12,260 | |
| | TOTAL | | 12,260 | 167,349 | 167,349 | - | - | 12,260 | 155,089 | - | - | - | 12,260 | - |
| Site LD 16 | 1303 | 14 | 41,170 | 805,419 | 805,419 | - | - | 41,170 | 764,249 | - | - | - | 41,170 | - |
| | TOTAL | | 41,170 | 805,419 | 805,419 | - | - | 41,170 | 764,249 | - | - | - | 41,170 | - |
| **TOTALS** | | | | **10,076,700** | **9,130,416** | **207,029** | **7,430,478** | **436,386** | **1,263,552** | **208** | **400** | **739,254** | **298,188** | **138,199** |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zonin floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Increment | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Number of Dwelling Units |
| Site LD 1 | 869 | 16 | 14,220 | | | | | | | |
| | 869 | 58 | 5,370 | | | | | | | |
| | 869 | 61 | 6,480 | | | | | | | |
| | 869 | 64 | 7,400 | | | | | | | |
| | TOTAL | | 33,470 | 359,257 | 286,962 | - | 284,492 | 2,470 | - | - |
| Site LD 2 | 869 | 25 | 2,469 | | | | | | | |
| | 869 | 26 | 2,472 | | | | | | | |
| | 869 | 27 | 4,937 | | | | | | | |
| | TOTAL | | 9,878 | 10,372 | 8,271 | 2,101 | - | 8,271 | - | 2 |
| Site LD 3 | 1275 | 23 | 21,825 | | | | | | | |
| | TOTAL | | 21,825 | 38,774 | - | - | (750) | 750 | - | - |
| Site LD 4 | 1277 | 20 | 23,025 | | | | | | | |
| | 1277 | 27 | 10,250 | | | | | | | |
| | 1277 | 46 | 3,350 | | | | | | | |
| | 1277 | 52 | 6,666 | | | | | | | |
| | TOTAL | | 43,291 | 398,277 | 363,644 | - | 363,644 | - | - | - |
| Site LD 5 | 1278 | 8 | 5,690 | | | | | | | |
| | 1278 | 14 | 27,750 | | | | | | | |
| | 1278 | 15 | 2,375 | | | | | | | |
| | 1278 | 17 | 2,375 | | | | | | | |
| | 1278 | 62 | 2,513 | | | | | | | |
| | 1278 | 63 | 2,513 | | | | | | | |
| | 1278 | 64 | 2,513 | | | | | | | |
| | 1278 | 65 | 5,020 | | | | | | | |
| | TOTAL | | 50,749 | 507,956 | 485,790 | (87,452) | 530,098 | 18,610 | (62,918) | (88) |
| Site LD 6 | 1279 | 9 | 8,133 | | | | | | | |
| | 1279 | 17 | 13,125 | | | | | | | |
| | 1279 | 57 | 18,800 | | | | | | | |
| | 1279 | 63 | 4,522 | | | | | | | |
| | 1279 | 65 | 5,020 | | | | | | | |
| | TOTAL | | 49,600 | 523,396 | 416,260 | - | 501,242 | (84,982) | - | - |
| Site LD 7 | 1279 | 23 | 5,000 | | | | | | | |
| | 1279 | 24 | 2,541 | | | | | | | |
| | 1279 | 25 | 2,510 | | | | | | | |
| | 1279 | 48 | 15,000 | | | | | | | |
| | 1279 | 28 | 9,105 | | | | | | | |
| | 1279 | 45 | 9,105 | | | | | | | |
| | TOTAL | | 43,261 | 395,840 | 332,095 | - | 484,179 | 13,987 | (166,071) | - |
| Site LD 8 | 1281 | 62 | 5,020 | | | | | | | |
| | 1281 | 64 | 2,445 | | | | | | | |
| | 1281 | 65 | 4,083 | | | | | | | |
| | TOTAL | | 11,548 | 12,125 | 146,082 | (133,957) | - | - | 146,082 | (134) |
| Site LD 9 | 1281 | 21 | 43,313 | | | | | | | |
| | TOTAL | | 43,313 | 597,191 | 493,240 | - | 1,048,175 | 43,313 | (598,248) | - |
| Site LD 10 | 1282 | 17 | 38,150 | | | | | | | |
| | 1282 | 64 | 8,033 | | | | | | | |
| | TOTAL | | 46,183 | 419,190 | 319,434 | - | 306,773 | 12,661 | - | - |

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Projected Sites

| Site Data | | | | Increment | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Site | Block | Lot(s) | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Number of Dwelling Units |
| Site LD 11 | 1283 | 8 | 2,510 | | | | | | | |
| | 1283 | 9 | 2,510 | | | | | | | |
| | 1283 | 10 | 2,510 | | | | | | | |
| | 1283 | 11 | 2,510 | | | | | | | |
| | 1283 | 12 | 2,500 | | | | | | | |
| | 1283 | 13 | 2,500 | | | | | | | |
| | TOTAL | | 15,040 | - | 198,131 | (198,131) | - | - | 198,131 | (199) |
| Site LD 14 | 1300 | 42 | 3,314 | | | | | | | |
| | 1300 | 44 | 3,213 | | | | | | | |
| | TOTAL | | 6,527 | 6,853 | - | 6,853 | - | - | - | 7 |
| Site LD 15 | 1302 | 25 | 5,522 | | | | | | | |
| | 1302 | 27 | 1,674 | | | | | | | |
| | 1302 | 127 | 1,688 | | | | | | | |
| | 1302 | 28 | 1,688 | | | | | | | |
| | 1302 | 29 | 1,688 | | | | | | | |
| | TOTAL | | 12,260 | - | 155,089 | (155,089) | - | - | 155,089 | (156) |
| Site LD 16 | 1303 | 14 | 41,170 | | | | | | | |
| | TOTAL | | 41,170 | 377,808 | 377,808 | - | - | 41,170 | 336,638 | - |
| TOTALS | | | | 3,647,040 | 3,582,808 | (565,675) | 3,517,854 | 56,250 | 8,704 | (568) |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Potential Sites

| | Site Data | | | Future Without the Proposed Action (No-Action) Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Potential Sites | Block | Lot | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Num of Res Units | Office Mechanical[2] (gsf) |
| LD Potential Site 1 | 895 | 1 | 25675 | 530,900 | 530,900 | - | 488,245 | 20,525 | - | - | - |
| | **TOTAL** | | **25,675** | **530,900** | **530,900** | **-** | **488,245** | **20,525** | **-** | **-** | **-** |
| LD Potential Site 2 | 1275 | 8 | 7,406 | 79,738 | 79,738 | - | 73,188 | 6,550 | - | - | - |
| | 1275 | 11 | 2,450 | 11,951 | 11,951 | - | 11,951 | - | - | - | - |
| | 1275 | 12 | 5,100 | 57,643 | 57,643 | - | 51,292 | 6,351 | - | - | - |
| | 1275 | 14 | 4,735 | 102,079 | 102,079 | - | 102,079 | - | - | - | - |
| | 1275 | 16 | 4,750 | 36,681 | 36,681 | - | 30,111 | 6,570 | - | - | - |
| | 1275 | 59 | 9,250 | 170,230 | 170,230 | - | 164,420 | 5,810 | - | - | - |
| | 1275 | 60 | 2,479 | 7,255 | 7,255 | - | 3,855 | 3,400 | - | - | - |
| | 1275 | 61 | 4,950 | 92,939 | 92,939 | - | 89,439 | 3,500 | - | - | - |
| | 1275 | 63 | 2,469 | 9,200 | 9,200 | - | 7,200 | 2,000 | - | - | - |
| | 1275 | 64 | 6,325 | 83,247 | 83,247 | - | 72,149 | 11,098 | - | - | - |
| | **TOTAL** | | **49,914** | **650,963** | **650,963** | **-** | **605,684** | **45,279** | **-** | **-** | **-** |
| LD Potential Site 3 | 1278 | 20 | 43,313 | 874,734 | 874,734 | - | 850,729 | 24,005 | - | - | - |
| | **TOTAL** | | **43,313** | **874,734** | **874,734** | **-** | **850,729** | **24,005** | **-** | **-** | **-** |
| LD Potential Site 4 | 1281 | 9 | 2,513 | 18,933 | 18,933 | - | 14,833 | 4,100 | - | - | - |
| | 1281 | 56 | 6,025 | 84,518 | 84,518 | - | 78,589 | 5,929 | - | - | - |
| | 1281 | 59 | 6,025 | 87,016 | 87,016 | - | 77,716 | 9,300 | - | - | - |
| | 1281 | 7501 | 19,581 | 323,029 | 323,029 | - | 318,943 | - | 4,086 | - | - |
| | **TOTAL** | | **34,144** | **513,496** | **513,496** | **-** | **490,081** | **19,329** | **4,086** | **-** | **-** |
| LD Potential Site 5 | 1282 | 34 | 24970 | 444,628 | 444,628 | - | 434,628 | 10,000 | - | - | - |
| | **TOTAL** | | **24,970** | **444,628** | **444,628** | **-** | **434,628** | **10,000** | **-** | **-** | **-** |
| LD Potential Site 8 | 1295 | 17 | 12,359 | 238,274 | 238,274 | - | 228,274 | 10,000 | - | - | - |
| | 1295 | 58 | 14,812 | 246,585 | 246,585 | - | 233,287 | 13,298 | - | - | - |
| | **TOTAL** | | **27,171** | **484,859** | **484,859** | **-** | **461,561** | **23,298** | **-** | **-** | **-** |
| LD Potential Site 9 | 1296 | 1 | 24786 | 518,582 | 518,582 | - | 497,582 | 21,000 | - | - | - |
| | **TOTAL** | | **24,786** | **518,582** | **518,582** | **-** | **497,582** | **21,000** | **-** | **-** | **-** |
| LD Potential Site 11 | 1301 | 23 | 46,125 | 743,779 | 743,779 | - | 674,979 | 25,632 | - | - | - |
| | 1301 | 33 | 38,225 | 761,057 | 761,057 | - | 734,837 | 26,220 | - | - | - |
| | **TOTAL** | | **84,350** | **1,504,836** | **1,504,836** | **-** | **1,409,816** | **51,852** | **-** | **-** | **-** |
| LD Potential Site 12 | 1302 | 123 | 1,280 | 3,600 | 3,600 | - | - | 900 | 2,700 | - | - |
| | 1302 | 51 | 17,522 | 314,568 | 314,568 | - | - | 16,974 | 297,594 | - | - |
| | 1302 | 21 | 6,050 | 92,501 | 92,501 | - | - | - | 92,501 | - | - |
| | 1302 | 22 | 1,360 | 3,864 | 1,200 | 2,664 | - | 1,200 | - | 3 | - |
| | 1302 | 23 | 1,360 | 3,813 | 1,938 | 1,875 | 938 | 1,000 | - | 2 | - |
| | 1302 | 24 | 2,010 | 7,121 | 4,747 | 2,374 | 1,187 | 3,560 | - | 4 | - |
| | **TOTAL** | | **29,582** | **425,467** | **418,554** | **6,913** | **2,125** | **23,634** | **392,795** | **9** | **-** |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Potential Sites

| | Site Data | | | Future With the Proposed Action (With-Action) Scenario | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Potential Sites | Block | Lot | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | No of Dwelling Units | Parking Spaces: New Construction | Office Mechanical[2] (gsf) | Neighborhood Retail Area (gsf) | Destination Retail Area (gsf) |
| LD Potential Site 1 | 895 | 1 | 25675 | 581,462 | 530,900 | | 505,225 | 25,675 | | | | *50,562* | *25,675* | |
| | **TOTAL** | | **25,675** | **581,462** | **530,900** | - | **505,225** | **25,675** | - | - | - | ***50,562*** | ***25,675*** | - |
| LD Potential Site 2 | 1275 | 8 | 7,406 | | | | | | | | | | | |
| | 1275 | 11 | 2,450 | | | | | | | | | | | |
| | 1275 | 12 | 5,100 | | | | | | | | | | | |
| | 1275 | 14 | 4,735 | | | | | | | | | | | |
| | 1275 | 16 | 4,750 | | | | | | | | | | | |
| | 1275 | 59 | 9,250 | | | | | | | | | | | |
| | 1275 | 60 | 2,479 | | | | | | | | | | | |
| | 1275 | 61 | 4,950 | | | | | | | | | | | |
| | 1275 | 63 | 2,469 | | | | | | | | | | | |
| | 1275 | 64 | 6,325 | 1,239,864 | 1,132,050 | - | 1,082,136 | 49,914 | - | - | 100 | 107,814 | 24,957 | 24,957 |
| | **TOTAL** | | **49,914** | **1,239,864** | **1,132,050** | - | **1,082,136** | **49,914** | - | - | **100** | **107,814** | **24,957** | **24,957** |
| LD Potential Site 3 | 1278 | 20 | 43,313 | 1,195,439 | 1,091,488 | - | 1,048,175 | 43,313 | - | - | - | *103,951* | *21,657* | *21,657* |
| | **TOTAL** | | **43,313** | **1,195,439** | **1,091,488** | - | **1,048,175** | **43,313** | - | - | - | ***103,951*** | ***21,657*** | ***21,657*** |
| LD Potential Site 4 | 1281 | 9 | 2,513 | | | | | | | | | | | |
| | 1281 | 56 | 6,025 | | | | | | | | | | | |
| | 1281 | 59 | 6,025 | | | | | | | | | | | |
| | 1281 | 7501 | 19,581 | 848,137 | 774,386 | - | 740,242 | 34,144 | - | - | 100 | *73,751* | *34,144* | - |
| | **TOTAL** | | **34,144** | **848,137** | **774,386** | - | **740,242** | **34,144** | - | - | 100 | 73,751 | 34,144 | - |
| LD Potential Site 5 | 1282 | 34 | 24970 | 486,974 | 444,628 | | 419,658 | 24,970 | | | | *42,346* | *24,970* | |
| | **TOTAL** | | **24,970** | **486,974** | **444,628** | - | **419,658** | **24,970** | - | - | - | ***42,346*** | ***24,970*** | - |
| LD Potential Site 8 | 1295 | 17 | 12,359 | | | | | | | | | | | |
| | 1295 | 58 | 14,812 | 674,928 | 616,238 | - | 589,067 | 27,171 | - | - | - | *58,689* | *27,171* | - |
| | **TOTAL** | | **27,171** | **674,928** | **616,238** | - | **589,067** | **27,171** | - | - | - | **58,689** | **27,171** | - |
| LD Potential Site 9 | 1296 | 1 | 24786 | 567,971 | 518,582 | | 493,796 | 24,786 | | | | *49,389* | *24,786* | |
| | **TOTAL** | | **24,786** | **567,971** | **518,582** | - | **493,796** | **24,786** | - | - | - | ***49,389*** | ***24,786*** | - |
| LD Potential Site 11 | 1301 | 23 | 46,125 | | | | | | | | | | | |
| | 1301 | 33 | 38,225 | 1,991,324 | 1,818,166 | - | 1,733,816 | 84,350 | - | - | 100 | *173,159* | *42,175* | *42,175* |
| | **TOTAL** | | **84,350** | **1,991,324** | **1,818,166** | - | **1,733,816** | **84,350** | - | - | **100** | ***173,159*** | ***42,175*** | ***42,175*** |
| LD Potential Site 12 | 1302 | 123 | 1,280 | | | | | | | | | | | |
| | 1302 | 51 | 17,522 | | | | | | | | | | | |
| | 1302 | 21 | 6,050 | | | | | | | | | | | |
| | 1302 | 22 | 1,360 | | | | | | | | | | | |
| | 1302 | 23 | 1,360 | | | | | | | | | | | |
| | 1302 | 24 | 2,010 | 670,920 | 670,920 | - | - | 29,582 | 641,338 | - | 148 | - | *29,582* | - |
| | **TOTAL** | | **29,582** | **670,920** | **670,920** | - | - | **29,582** | **641,338** | - | **148** | - | ***29,582*** | - |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

## East Midtown RWCDS - Smaller Rezoning Area/Lesser Density Alternative - Potential Sites

| | Site Data | | | Increment | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Potential Sites | Block | Lot | Lot Area | Building Area (gsf) including Office Mechanical | Commercial Area: Office, Retail and Hotel Areas (gsf) | Residential Area (gsf) | Office Area Usable[2] (gsf) | Retail Area (gsf) | Hotel Area (gsf) | Number of Dwelling Units |
| LD Potential Site 1 | 895 | 1 | 25675 | | | | | | | |
| | TOTAL | | 25,675 | 50,562 | - | - | 16,980 | 5,150 | - | - |
| LD Potential Site 2 | 1275 | 8 | 7,406 | | | | | | | |
| | 1275 | 11 | 2,450 | | | | | | | |
| | 1275 | 12 | 5,100 | | | | | | | |
| | 1275 | 14 | 4,735 | | | | | | | |
| | 1275 | 16 | 4,750 | | | | | | | |
| | 1275 | 59 | 9,250 | | | | | | | |
| | 1275 | 60 | 2,479 | | | | | | | |
| | 1275 | 61 | 4,950 | | | | | | | |
| | 1275 | 63 | 2,469 | | | | | | | |
| | 1275 | 64 | 6,325 | | | | | | | |
| | TOTAL | | 49,914 | 588,901 | 481,087 | - | 476,452 | 4,635 | - | - |
| LD Potential Site 3 | 1278 | 20 | 43,313 | | | | | | | |
| | TOTAL | | 43,313 | 320,705 | 216,754 | - | 197,446 | 19,308 | - | - |
| LD Potential Site 4 | 1281 | 9 | 2,513 | | | | | | | |
| | 1281 | 56 | 6,025 | | | | | | | |
| | 1281 | 59 | 6,025 | | | | | | | |
| | 1281 | 7501 | 19,581 | | | | | | | |
| | TOTAL | | 34,144 | 334,641 | 260,890 | - | 250,161 | 14,815 | (4,086) | - |
| LD Potential Site 5 | 1282 | 34 | 24970 | | | | | | | |
| | TOTAL | | 24,970 | 42,346 | - | - | (14,970) | 14,970 | - | - |
| LD Potential Site 8 | 1295 | 17 | 12,359 | | | | | | | |
| | 1295 | 58 | 14,812 | | | | | | | |
| | TOTAL | | 27,171 | 190,069 | 131,379 | - | 127,506 | 3,873 | - | - |
| LD Potential Site 9 | 1296 | 1 | 24786 | | | | | | | |
| | TOTAL | | 24,786 | 49,389 | - | - | (3,786) | 3,786 | - | - |
| LD Potential Site 11 | 1301 | 23 | 46,125 | | | | | | | |
| | 1301 | 33 | 38,225 | | | | | | | |
| | TOTAL | | 84,350 | 486,488 | 313,330 | - | 324,000 | 32,498 | - | - |
| LD Potential Site 12 | 1302 | 123 | 1,280 | | | | | | | |
| | 1302 | 51 | 17,522 | | | | | | | |
| | 1302 | 21 | 6,050 | | | | | | | |
| | 1302 | 22 | 1,360 | | | | | | | |
| | 1302 | 23 | 1,360 | | | | | | | |
| | 1302 | 24 | 2,010 | | | | | | | |
| | TOTAL | | 29,582 | 245,453 | 252,366 | (6,913) | (2,125) | 5,948 | 248,543 | (9) |

Notes

1) For residential buildings and hotels, per standard practice, the building gross square footage is derived from zoning floor area plus five percent mechanical space.

2) For large high-end office buildings, as the result of the Proposed Action it is assumed that these buildings would utilize a much larger allocation of mechanical space than found in typical office use; therefore the total mechanical space are set at fifteen percent over their zoning floor area. The environmental density analyses are based on the values shown in OfficeArea (usable) column.

**TABLE 1: SPECIAL PERMIT SCENARIO: ADEQUACY OF OPEN SPACE RESOURCES**

| | Total Population | Open Space Acreage | | | Open Space Ratios Per 1,000 People | | | CEQR Open Space Ratio Benchmark | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Passive | Active | Total | Passive | Active | Total | Passive | Active |
| Non-Residents | 571,629 | 41.01 | 40.80 | 0.21 | N/A | 0.071 | N/A | N/A | 0.15 | N/A |
| Combined Non-Residents and Residents | 638,421 | | | | N/A | 0.064 | N/A | N/A | 0.187[(1)] | N/A |

(1) Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acre of passive open space per 1,000 residents and 0.15 acre of passive open space per 1,000 non-residents.

**TABLE 2: 2033 FUTURE WITH THE SPECIAL PERMIT SCENARIO: PASSIVE OPEN SPACE RATIOS SUMMARY**

| Ratio | CEQR Open Space Ratio Benchmark | Open Space Ratios Per 1,000 People | | | | Percent Change from No-Action to With-Action | |
|---|---|---|---|---|---|---|---|
| | | Proposed Action | | Special Permit Scenario | | Proposed Action | Special Permit Scenario |
| | | No-Action | With-Action | No-Action | With-Action | | |
| Non-Residents | 0.15 | 0.073 | 0.072 | 0.073 | 0.071 | -1.37% | -2.74% |
| Combined Non-Residents and Residents | Weighted[(1)] 0.188/0.187 | 0.065 | 0.064 | 0.065 | 0.064 | -1.54% | -1.54% |

(1) Based on a target open space ratio established by creating a weighted average of the amount of open space necessary to meet the CEQR benchmark of 0.5 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 non-residents. Since this benchmark depends on the proportion of non-residents and residents in the study area's population, it is different for each analysis condition. Each of these ratios is listed in this table.

**TABLE 3: SPECIAL PERMIT SCENARIO WATER CONSUMPTION AND WASTEWATER GENERATION**

| | Future Without the Proposed Action | | | Future Under the Special Permit Scenario | | | Incremental Changes Under the Special Permit Scenario | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | Area (sf) | Domestic Water/ Wastewater Generation (gpd) | A/C (gpd) | Area (sf) | Domestic Water/ Wastewater Generation (gpd) | A/C (gpd) | Area (sf) | Domestic Water/ Wastewater Generation (gpd) | A/C (gpd) |
| Residential | 772,705 (776 DU) | 123,384 | 0 | 207,029 (208 DU) | 33,072 | 0 | -565,675 (-568 DU) | -90,312 | 0 |
| Commercial—Retail | 529,328 | 127,039 | 89,986 | 648,990 | 155,758 | 110,328 | 119,662 | 28,719 | 20,343 |
| Commercial—Office | 6,519,633 | 651,963 | 1,108,338 | 10,956,004 | 1,095,600 | 1,862,521 | 4,436,371 | 443,637 | 754,183 |
| Hotel | 2,010,947 (3,094 rooms) | 742,560 | 341,861 | 2,134,234 (3,285 rooms) | 788,400 | 362,820 | 123,286 (190 rooms) | 45,600 | 20,959 |
| Water Consumption Subtotals | | 1,644,946 | 1,540,185 | | 2,072,830 | 2,335,669 | | 427,644 | 795,485 |
| Sewage Generation Subtotal | | 1,644,946 | | | 2,072,830 | | | 427,644 | |
| Total Water Consumption | | 3,185,131 | | | 4,408,499 | | | 1,223,129 | |
| Total Wastewater Generation | | 1,644,946 | | | 2,072,830 | | | 427,644 | |

**Notes:**
DU = dwelling unit

**TABLE 4: SPECIAL PERMIT SCENARIO SOLID WASTE GENERATION ON PROJECTED DEVELOPMENT SITES**

| Use | Area (gsf) | Population[1] | Solid Waste Generation Rate (lbs/wk)[2] | Solid Waste Generation (lbs/wk)[1] |
|---|---|---|---|---|
| Office | 10,956,004 | 43,824 employees | 13 per employee | 569,712 (284.9 tons/wk) |
| General Retail[3] | 648,990 | 1,947 employees | 79 per employee | 153,813 (76.9 tons/wk) |
| Hotel | 2,134,234 (3,285 rooms) | 1,230 employees | 75 per employee | 92,250 (46.1 tons/wk) |
| Residential | 207,029 (208 rooms) | 208 households | 41 per household | 8,528 (4.3 tons/wk) |
| Parking | 140,200 | N/A | N/A | 0 |
| | | | **Total Solid Waste Generation** | 824,303 (412.2 tons/wk) |
| | | | **Solid Waste Handled by Private Carters** | 815,775 (407.9 tons/wk) |
| | | | **Solid Waste Handled by DSNY** | 8,528 (4.3 tons/wk) |

**Notes:**
[1] Assumes 1 employee per 250 gsf of office, 3 employees per 1,000 gsf of retail, and 1 employee per 2.67 hotel rooms.
[2] Rates based on Table 14-1 of the *CEQR Technical Manual.*
[3] For consistency purposes, the general retail solid waste generation rate is used for existing, No-Action, and With-Action conditions.

**TABLE 5: SPECIAL PERMIT SCENARIO: ESTIMATED ANNUAL ENERGY CONSUMPTION ON PROJECTED DEVELOPMENT SITES**

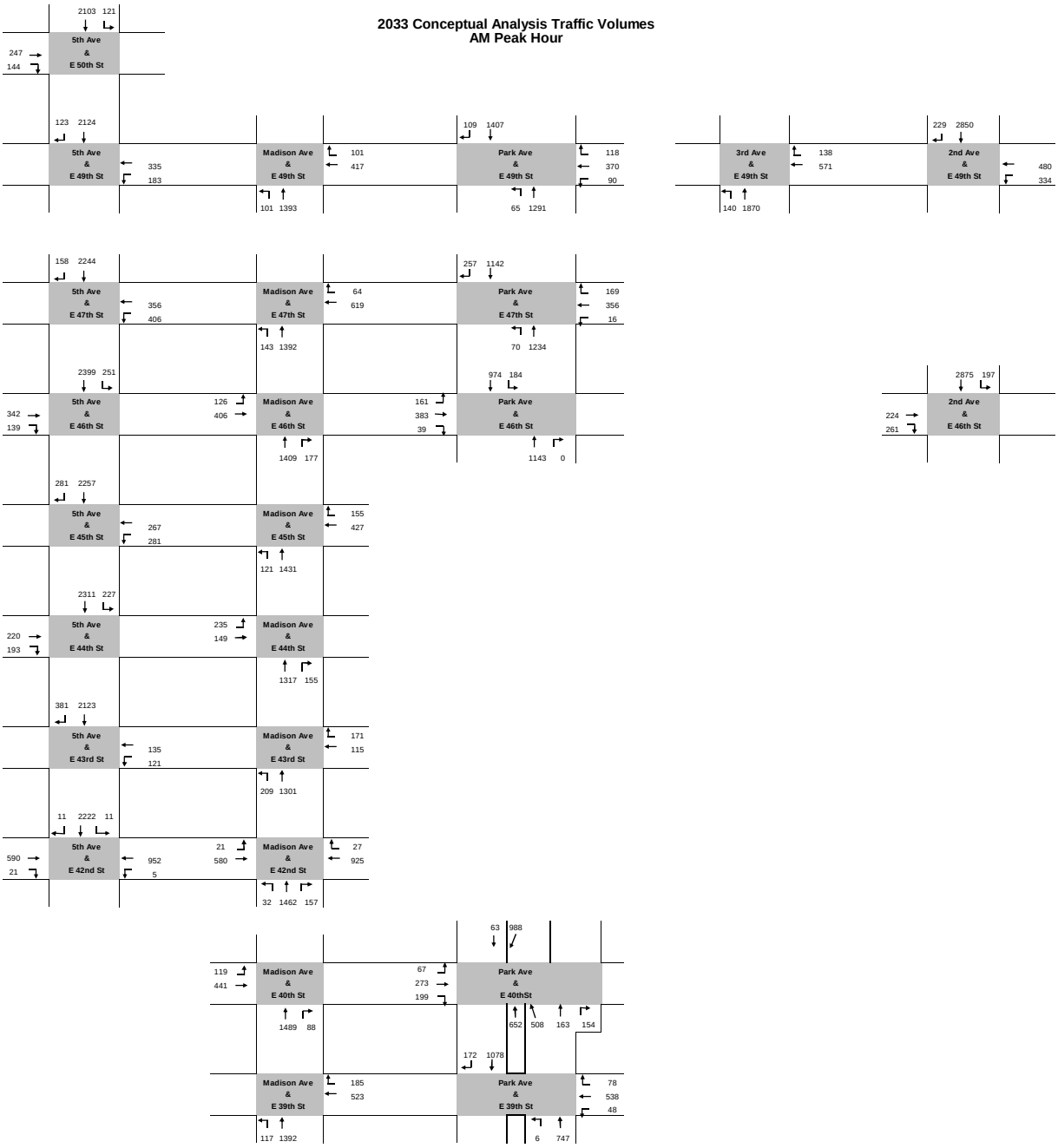
| Building Type (Use) | Rate of Consumption (Thousand BTU (MBTU)/ sq. ft)[1] | No-Action Condition | | Special Permit Scenario | | Energy Use Increment (million BTUs) |
|---|---|---|---|---|---|---|
| | | Floor Area (sq. ft)[2] | Annual Energy Consumption (million BTUs) | Floor Area (sq. ft)[2] | Annual Energy Consumption (million BTUs) | |
| Office | 216.3 | 6,519,633 | 1,410,197 | 10,956,004 | 2,369,784 | 959,587 |
| Retail | 216.3 | 529,328 | 114,494 | 648,990 | 140,377 | 25,883 |
| Hotel | 216.3 | 2,010,947 | 434,968 | 2,134,234 | 461,635 | 26,667 |
| Residential | 126.7 | 772,705 | 97,902 | 207,029 | 26,231 | -71,671 |
| Parking | 216.3 | 29,400 | 6,359 | 140,200 | 30,325 | 23,966 |
| **Total Energy Consumption** | | | **2,063,920** | | **3,028,352** | **964,432** |

**Notes:**

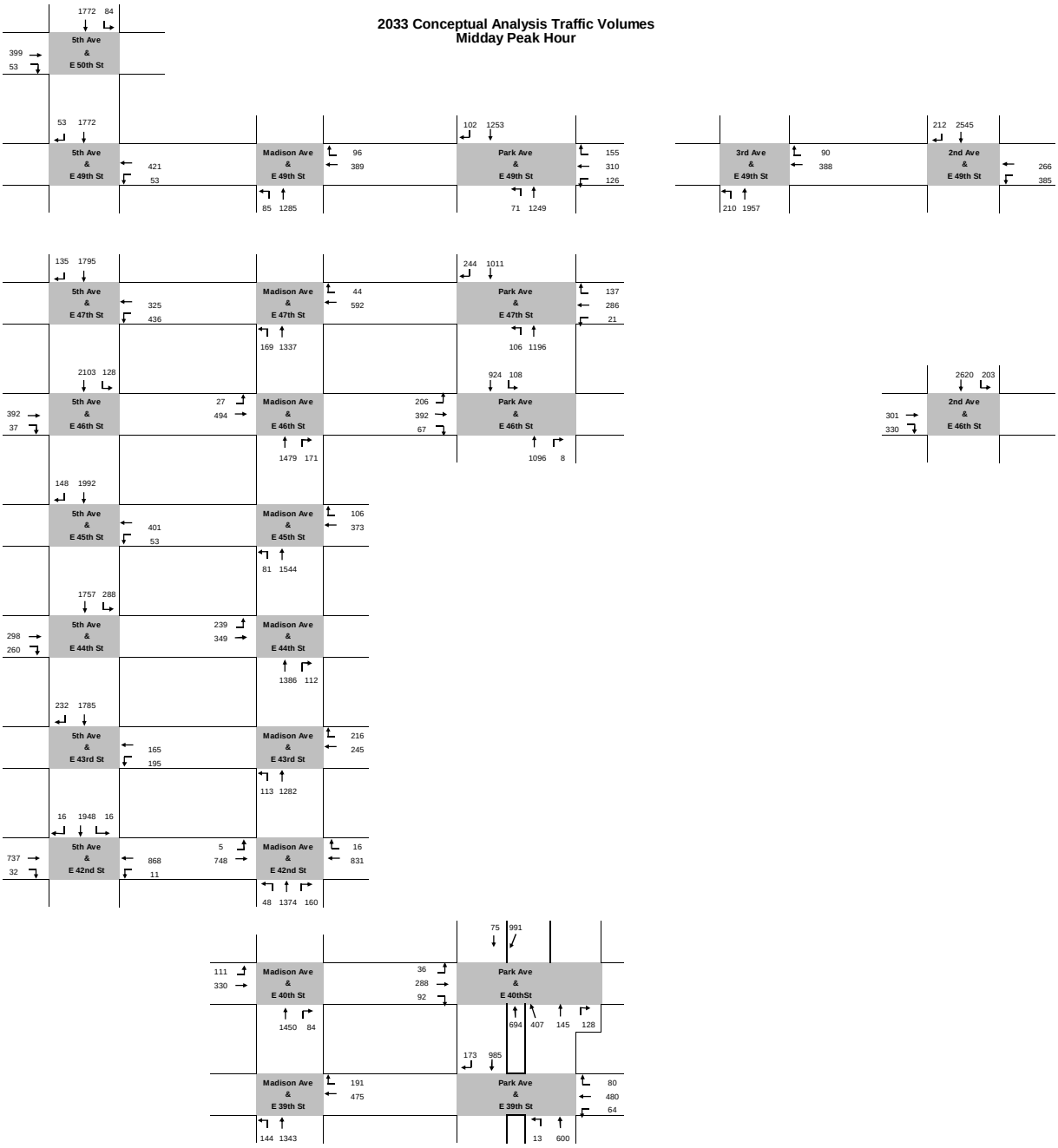
1. Based on rates provided in the *CEQR Technical Manual*, Table 15-1.
2. RWCDS Totals for all projected development sites (refer to Table 1-X in Chapter 1, "Project Description")

MBTUs = Thousand BTUs

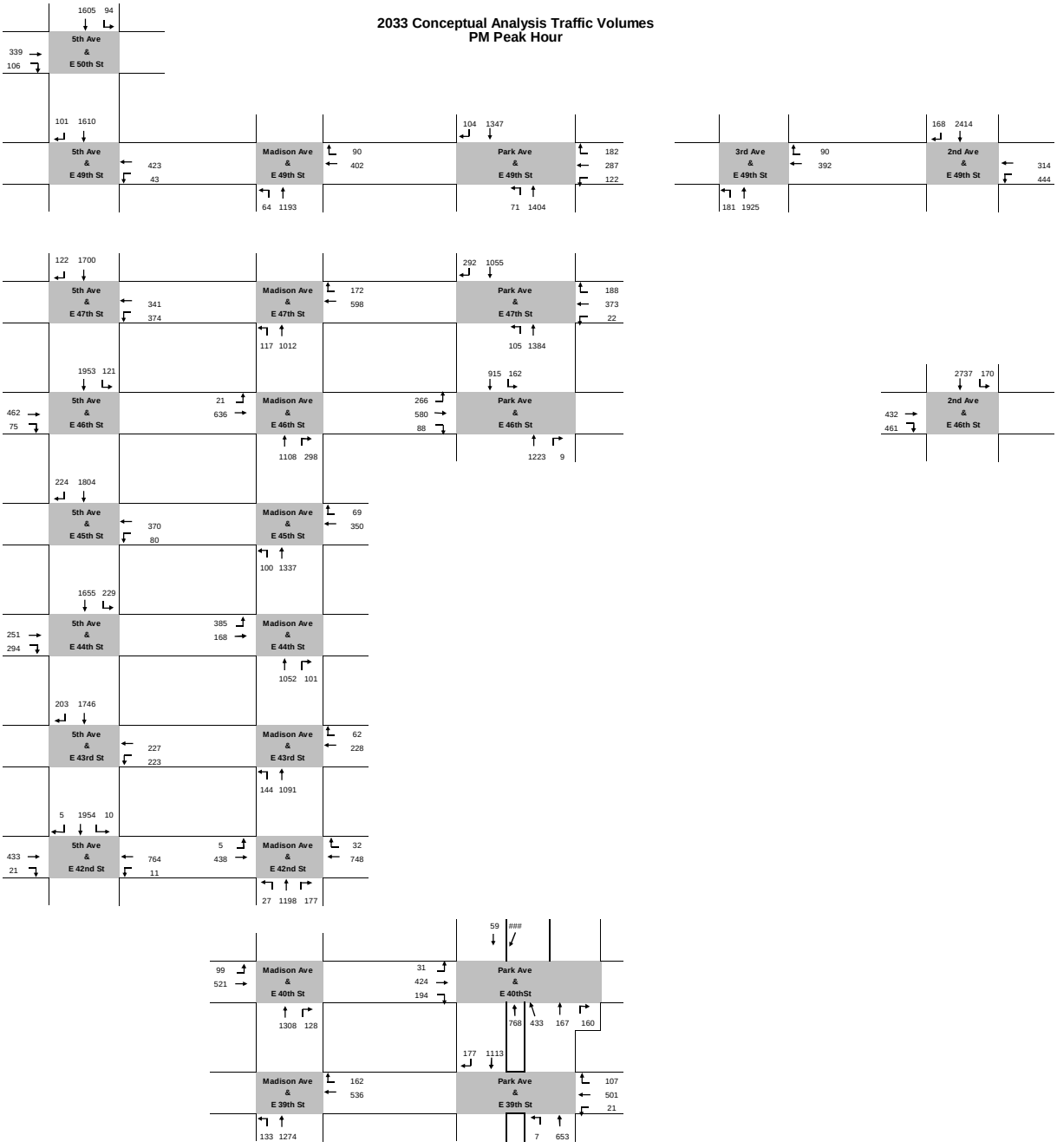
**2033 Conceptual Analysis Traffic Volumes**
**AM Peak Hour**



**2033 Conceptual Analysis Traffic Volumes**
**Midday Peak Hour**



**2033 Conceptual Analysis Traffic Volumes**
**PM Peak Hour**



Level of Service Table - 2033 Special Permit Scenario (AM Peak Hour)

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Second Avenue @ East 46th Street | EB | T | 0.43 | 28.2 | C | T | 0.49 | 29.4 | C | | | | |
| | | R | 1.16 | 138.6 | F | R | 1.16 | 140.2 | F | | | | |
| | SB | LT | 0.91 | 14.5 | B | LT | 0.93 | 15.6 | B | | | | |
| | INTERSECTION | | | 24.6 | C | | | 25.6 | C | | | | |
| Second Avenue @ East 49th Street | WB | L | 1.14 | 126.4 | F | L | 1.19 | 146.2 | F | L | 1.13 | 122.2 | F |
| | | T | 0.53 | 30.0 | C | T | 0.62 | 31.8 | C | T | 0.59 | 30.5 | C |
| | SB | T | 0.89 | 17.5 | B | T | 0.91 | 18.4 | B | T | 0.93 | 20.7 | C |
| | | R | 0.50 | 13.3 | B | R | 0.53 | 14.1 | B | R | 0.54 | 15.1 | B |
| | INTERSECTION | | | 27.9 | C | | | 30.8 | C | | | 30.3 | C |
| Third Avenue @ East 49th Street | WB | T | 0.75 | 24.6 | C | T | 0.87 | 33.1 | C | | | | |
| | | R | 0.61 | 44.7 | D | R | 0.61 | 44.7 | D | | | | |
| | NB | LT | 0.90 | 30.5 | C | LT | 0.93 | 33.1 | C | | | | |
| | INTERSECTION | | | 30.1 | C | | | 33.7 | C | | | | |
| Park Avenue @ West 39th Street | WB | LTR | 1.18 | 127.1 | F | LTR | 1.37 | 204.3 | F | LTR | 0.71 | 26.3 | C |
| | NB | L†† | - | 41.0 | D | L†† | - | 41.1 | D | L†† | - | 41.6 | D |
| | | LT | 0.54 | 16.9 | B | LT | 0.55 | 17.0 | B | LT | 0.55 | 17.0 | B |
| | SB | TR | 0.96 | 37.8 | D | TR | 0.97 | 39.9 | D | TR | 0.97 | 39.9 | D |
| | INTERSECTION | | | 51.6 | D | | | 74.3 | E | | | 30.1 | C |
| Park Avenue @ West 40th Street | EB | LT | 0.74 | 35.8 | D | LT | 0.81 | 41.0 | D | | | | |
| | | R | 0.74 | 42.0 | D | R | 0.78 | 45.7 | D | | | | |
| | NB | T (Tunnel Exit) | 0.84 | 27.6 | C | T (Tunnel Exit) | 0.84 | 27.7 | C | | | | |
| | | T (SR onto Viaduct) | 0.60 | 17.6 | B | T (SR onto Viaduct) | 0.62 | 18.0 | B | | | | |
| | | TR | 0.52 | 16.7 | B | TR | 0.52 | 16.7 | B | | | | |
| | SB | T | 0.08 | 10.5 | B | T | 0.08 | 10.4 | B | | | | |
| | | T (Viaduct Exit) | 1.14 | 95.5 | F | T (Viaduct Exit) | 1.14 | 95.9 | F | | | | |
| | INTERSECTION | | | 48.4 | D | | | 49.2 | D | | | | |
| Park Avenue @ West 46th Street | EB | LT | 0.46 | 19.5 | B | LT | 0.53 | 20.6 | C | | | | |
| | | R | 0.09 | 15.4 | B | R | 0.09 | 15.5 | B | | | | |
| | NB | TR | 0.80 | 26.1 | C | TR | 0.80 | 26.1 | C | | | | |
| | SB | L†† | - | 42.5 | D | L†† | - | 42.5 | D | | | | |
| | | T | 0.78 | 25.9 | C | T | 0.79 | 26.6 | C | | | | |
| | INTERSECTION | | | 25.9 | C | | | 26.1 | C | | | | |
| Park Avenue @ West 47th Street | WB | LT | 0.67 | 27.7 | C | LT | 0.75 | 31.5 | C | | | | |
| | | R | 0.54 | 26.2 | C | R | 0.60 | 28.6 | C | | | | |
| | NB | L†† | - | 37.7 | D | L†† | 0.00 | 39.0 | D | | | | |
| | | T | 0.98 | 44.1 | D | T | 0.99 | 46.0 | D | | | | |
| | SB | TR | 0.84 | 26.6 | C | TR | 0.85 | 27.1 | C | | | | |
| | INTERSECTION | | | 33.7 | C | | | 35.1 | D | | | | |
| Park Avenue @ West 49th Street | WB | LT | 0.90 | 50.0 | D | LT | 1.10 | 98.0 | F | LT | 1.10 | 98.0 | F |
| | | R | 0.34 | 21.5 | C | R | 0.39 | 22.6 | C | R | 0.39 | 22.6 | C |
| | NB | L†† | - | 37.5 | D | L†† | - | 37.9 | D | L†† | - | 38.9 | D |
| | | T | 0.96 | 39.2 | D | T | 0.98 | 42.2 | D | T | 0.98 | 42.2 | D |
| | SB | TR | 0.81 | 24.0 | C | TR | 0.83 | 24.7 | C | TR | 0.83 | 24.7 | C |
| | INTERSECTION | | | 33.0 | C | | | 41.2 | D | | | 41.2 | D |
| Madison Avenue @ East 39th Street | WB | T | 0.98 | 60.4 | E | T | 1.03 | 73.8 | E | T | 0.95 | 52.0 | D |
| | | R | 0.81 | 71.9 | E | R | 1.20 | 174.4 | F | R | 0.89 | 73.4 | E |
| | NB | LT | 0.90 | 24.5 | C | LT | 0.94 | 28.1 | C | L | 0.36 | 16.8 | B |
| | | | | | | | | | | T | 0.87 | 25.6 | C |
| | INTERSECTION | | | 36.0 | D | | | 51.1 | D | | | 35.3 | D |
| Madison Avenue @ East 40th Street | EB | L | 0.62 | 52.2 | D | L | 0.74 | 61.3 | E | L | 0.68 | 54.6 | D |
| | | T | 0.87 | 43.7 | D | T | 0.93 | 52.7 | D | T | 0.91 | 47.4 | D |
| | NB | TR | 0.90 | 24.5 | C | TR | 0.97 | 33.0 | C | TR | 0.99 | 38.7 | D |
| | INTERSECTION | | | 29.9 | C | | | 38.7 | D | | | 41.4 | D |
| Madison Avenue @ East 42nd Street | EB | LT | 0.75 | 29.9 | C | LT | 0.76 | 30.4 | C | LT | 0.76 | 30.4 | C |
| | WB | T | 0.93 | 41.5 | D | T | 0.95 | 44.4 | D | T | 0.95 | 44.4 | D |
| | | R | 0.14 | 19.3 | B | R | 0.14 | 19.3 | B | R | 0.14 | 19.3 | B |
| | NB | LT | 1.17 | 104.4 | F | LT | 1.31 | 161.3 | F | LT | 0.89 | 22.6 | C |
| | | R | 0.41 | 14.0 | B | R | 0.42 | 14.3 | B | R | 0.42 | 14.3 | B |
| | INTERSECTION | | | 65.5 | E | | | 94.6 | F | | | 29.9 | C |
| Madison Avenue @ East 43rd Street | WB | T | 0.46 | 23.4 | C | T | 0.24 | 19.7 | B | T | 0.25 | 21.2 | C |
| | | R | 0.62 | 32.3 | C | R | 0.66 | 34.4 | C | R | 0.70 | 39.0 | D |
| | NB | L | 0.49 | 17.7 | B | L | 0.93 | 58.5 | E | L | 0.86 | 43.6 | D |
| | | T | 1.02 | 48.5 | D | T | 1.08 | 66.7 | E | T | 1.03 | 49.4 | D |
| | INTERSECTION | | | 41.6 | D | | | 59.6 | E | | | 45.9 | D |

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Madison Avenue @ East 44th Street | EB | LT | 0.80 | 40.9 | D | LT | 1.32 | 194.6 | F | L | 0.98 | 77.9 | E |
| | | | | | | | | | | T | 0.33 | 21.2 | C |
| | NB | T | 1.15 | 93.8 | F | T | 1.17 | 104.6 | F | T | 1.17 | 104.6 | F |
| | | R | 1.02 | 107.6 | F | R | 1.81 | 427.7 | F | R | 1.81 | 427.7 | F |
| | INTERSECTION | | | 85.8 | F | | | 150.2 | F | | | 121.5 | F |
| Madison Avenue @ East 45th Street | WB | TR | 0.68 | 27.1 | C | TR | 0.74 | 29.3 | C | TR | 0.84 | 38.3 | D |
| | NB | L | 0.22 | 10.8 | B | L | 0.28 | 11.5 | B | L | 0.25 | 8.7 | A |
| | | T | 1.05 | 57.8 | E | T | 1.16 | 98.7 | F | T | 1.07 | 58.1 | E |
| | INTERSECTION | | | 46.7 | D | | | 74.8 | E | | | 49.9 | D |
| Madison Avenue @ East 46th Street | EB | LT | 1.09 | 96.6 | F | LT | 1.26 | 162.2 | F | LT | 0.69 | 30.3 | C |
| | NB | T | 1.17 | 103.4 | F | T | 1.28 | 148.3 | F | T | 1.17 | 100.4 | F |
| | | R | 0.41 | 14.3 | B | R | 0.55 | 18.3 | B | R | 0.49 | 13.3 | B |
| | INTERSECTION | | | 95.3 | F | | | 141.0 | F | | | 75.5 | E |
| Madison Avenue @ East 47th Street | WB | T | 0.80 | 35.7 | D | T | 1.27 | 162.1 | F | T | 0.65 | 26.5 | C |
| | | R | 0.46 | 42.3 | D | R | 0.35 | 38.8 | D | R | 0.44 | 45.3 | D |
| | NB | L | 0.53 | 22.2 | C | L | 0.74 | 36.9 | D | L | 0.37 | 12.5 | B |
| | | T | 1.15 | 94.7 | F | T | 1.23 | 128.9 | F | T | 1.15 | 92.7 | F |
| | INTERSECTION | | | 76.0 | E | | | 129.7 | F | | | 67.7 | E |
| Madison Avenue @ East 49th Street | WB | TR | 0.54 | 23.5 | C | TR | 0.58 | 24.5 | C | TR | 0.63 | 27.0 | C |
| | NB | L | 0.23 | 11.0 | B | L | 0.23 | 11.0 | B | L | 0.22 | 9.6 | A |
| | | T | 1.08 | 66.7 | E | T | 1.12 | 83.8 | F | T | 1.09 | 66.8 | E |
| | INTERSECTION | | | 53.2 | D | | | 65.0 | E | | | 53.7 | D |
| Fifth Avenue @ 42nd Street | EB | T | 0.64 | 25.5 | C | T | 0.64 | 25.6 | C | T | 0.64 | 25.6 | C |
| | | R | 0.17 | 20.6 | C | R | 0.17 | 20.6 | C | R | 0.17 | 20.6 | C |
| | WB | LT | 1.01 | 58.6 | E | LT | 1.03 | 64.1 | E | LT | 1.03 | 64.1 | E |
| | SB | LT | 1.16 | 96.3 | F | LT | 1.20 | 113.3 | F | LT | 1.20 | 113.3 | F |
| | | R | 0.05 | 9.3 | A | R | 0.05 | 9.3 | A | R | 0.05 | 9.3 | A |
| | INTERSECTION | | | 74.9 | E | | | 86.6 | F | | | 86.6 | F |
| Fifth Avenue @ 43rd Street | WB | L | 0.60 | 30.5 | C | L | 0.42 | 24.4 | C | L | 0.42 | 24.4 | C |
| | | T | 0.35 | 21.3 | C | T | 0.28 | 20.2 | C | T | 0.28 | 20.2 | C |
| | SB | T | 1.08 | 61.3 | E | T | 1.15 | 89.4 | F | T | 1.15 | 89.4 | F |
| | | R | 1.36 | 204.7 | F | R | 1.72 | 364.5 | F | R | 1.72 | 364.5 | F |
| | INTERSECTION | | | 73.1 | E | | | 121.1 | F | | | 121.1 | F |
| Fifth Avenue @ 44th Street | EB | T | 0.33 | 21.1 | C | T | 0.49 | 24.3 | C | T | 0.49 | 24.3 | C |
| | | R | 0.63 | 31.3 | C | R | 0.67 | 34.1 | C | R | 0.67 | 34.1 | C |
| | SB | LT | 1.27 | 143.4 | F | LT | 1.48 | 238.9 | F | LT | 1.48 | 238.9 | F |
| | INTERSECTION | | | 128.3 | F | | | 209.5 | F | | | 209.5 | F |
| Fifth Avenue @ 45th Street | WB | LT | 0.62 | 25.3 | C | LT | 0.71 | 28.6 | C | LT | 0.81 | 36.7 | D |
| | SB | T | 1.11 | 74.4 | E | T | 1.21 | 117.2 | F | T | 1.11 | 72.0 | E |
| | | R | 0.46 | 14.9 | B | R | 0.74 | 25.5 | C | R | 0.67 | 18.1 | B |
| | INTERSECTION | | | 61.3 | E | | | 93.1 | F | | | 60.8 | E |
| Fifth Avenue @ 46th Street | EB | TR | 1.21 | 144.0 | F | TR | 1.30 | 180.5 | F | TR | 0.63 | 26.0 | C |
| | SB | LT | 1.27 | 140.9 | F | LT | 1.51 | 253.5 | F | LT | 1.47 | 233.2 | F |
| | INTERSECTION | | | 141.4 | F | | | 242.3 | F | | | 201.4 | F |
| Fifth Avenue @ 47th Street | WB | L | 0.73 | 52.9 | D | L | 1.78 | 404.5 | F | L | 1.78 | 404.5 | F |
| | | T | 0.65 | 26.3 | C | T | 0.70 | 28.4 | C | T | 0.70 | 28.4 | C |
| | SB | T | 1.23 | 128.4 | F | T | 1.31 | 165.9 | F | T | 1.31 | 165.9 | F |
| | | R | 0.78 | 41.7 | D | R | 0.78 | 41.7 | D | R | 0.78 | 41.7 | D |
| | INTERSECTION | | | 106.6 | F | | | 174.8 | F | | | 174.8 | F |
| Fifth Avenue @ 49th Street | WB | LT | 0.46 | 21.9 | C | LT | 0.52 | 22.9 | C | LT | 0.56 | 25.0 | C |
| | SB | T | 1.07 | 59.7 | E | T | 1.13 | 80.9 | F | T | 1.08 | 60.1 | E |
| | | R | 0.37 | 13.5 | B | R | 0.37 | 13.5 | B | R | 0.35 | 11.8 | B |
| | INTERSECTION | | | 50.8 | D | | | 67.0 | E | | | 51.4 | D |
| Fifth Avenue @ 50th Street | EB | TR | 0.44 | 21.8 | C | TR | 0.46 | 22.1 | C | TR | 0.48 | 23.9 | C |
| | SB | LT | 1.15 | 89.5 | F | LT | 1.20 | 113.2 | F | LT | 1.15 | 89.6 | F |
| | INTERSECTION | | | 79.3 | E | | | 99.6 | F | | | 79.8 | E |

Notes:

††To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left turn; and (2) delay from waiting at the red light after the left turn

Shading denotes locations with no significant adverse impacts.

Source: Parsons Brinckerhoff, Inc. 2013

Level of Service Table - 2033 Special Permit Scenario (Midday Peak Hour)

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Second Avenue @ East 46th Street | EB | T | 0.57 | 31.6 | C | T | 0.66 | 34.3 | C | T | 0.61 | 31.1 | C |
| | | R | 1.17 | 141.4 | F | R | 1.26 | 176.0 | F | R | 1.17 | 136.2 | F |
| | SB | LT | 0.80 | 10.5 | B | LT | 0.81 | 10.7 | B | LT | 0.84 | 13.1 | B |
| | INTERSECTION | | | 23.8 | C | | | 28.2 | C | | | 26.1 | C |
| Second Avenue @ East 49th Street | WB | LT | 1.03 | 77.0 | E | LT | 1.08 | 91.3 | F | LT | 1.03 | 75.8 | E |
| | | | | | | | | | | | | | |
| | SB | TR | 0.87 | 16.7 | B | TR | 0.90 | 17.7 | B | TR | 0.91 | 19.7 | B |
| | | | | | | | | | | | | | |
| | INTERSECTION | | | 28.0 | C | | | 31.8 | C | | | 30.4 | C |
| Third Avenue @ East 49th Street | WB | T | 0.54 | 17.8 | B | T | 0.59 | 19.2 | B | | | | |
| | | R | 0.42 | 37.7 | D | R | 0.42 | 37.7 | D | | | | |
| | NB | LT | 0.94 | 34.0 | C | LT | 0.97 | 38.6 | D | | | | |
| | INTERSECTION | | | 31.9 | C | | | 35.7 | D | | | | |
| Park Avenue @ West 39th Street | WB | LTR | 1.30 | 177.5 | F | LTR | 1.36 | 200.5 | F | LTR | 0.70 | 27.5 | C |
| | NB | L†† | - | 39.6 | D | L†† | - | 39.6 | D | L†† | - | 39.6 | D |
| | | LT | 0.44 | 15.4 | B | LT | 0.44 | 15.4 | B | LT | 0.44 | 15.4 | B |
| | SB | TR | 0.88 | 28.4 | C | TR | 0.90 | 30.4 | C | TR | 0.90 | 30.4 | C |
| | INTERSECTION | | | 62.9 | E | | | 70.7 | E | | | 25.9 | C |
| Park Avenue @ West 40th Street | EB | LT | 0.68 | 32.4 | C | LT | 0.74 | 35.8 | D | LT | 0.77 | 38.3 | D |
| | | R | 0.31 | 24.1 | C | R | 0.37 | 25.5 | C | R | 0.38 | 26.7 | C |
| | NB | T (Tunnel Exit) | 0.88 | 31.8 | C | T (Tunnel Exit) | 0.88 | 31.8 | C | T (Tunnel Exit) | 0.87 | 29.2 | C |
| | | T (SR onto Viaduct) | 0.50 | 15.4 | B | T (SR onto Viaduct) | 0.50 | 15.4 | B | T (SR onto Viaduct) | 0.49 | 14.6 | B |
| | | TR | 0.44 | 15.0 | B | TR | 0.44 | 15.0 | B | TR | 0.43 | 14.2 | B |
| | SB | T | 0.08 | 10.4 | B | T | 0.08 | 10.4 | B | T | 0.08 | 9.9 | A |
| | | T (Viaduct Exit) | 1.13 | 90.8 | F | T (Viaduct Exit) | 1.14 | 97.2 | F | T (Viaduct Exit) | 1.12 | 87.4 | F |
| | INTERSECTION | | | 47.7 | D | | | 50.2 | D | | | 46.3 | D |
| Park Avenue @ West 46th Street | EB | LT | 0.48 | 19.8 | B | LT | 0.59 | 21.7 | C | | | | |
| | | R | 0.19 | 16.9 | B | R | 0.21 | 17.3 | B | | | | |
| | NB | TR | 0.77 | 25.0 | C | TR | 0.77 | 25.2 | C | | | | |
| | SB | L†† | - | 39.2 | D | L†† | - | 39.6 | D | | | | |
| | | T | 0.74 | 24.5 | C | T | 0.75 | 24.7 | C | | | | |
| | INTERSECTION | | | 24.2 | C | | | 24.7 | C | | | | |
| Park Avenue @ West 47th Street | WB | LT | 0.52 | 23.0 | C | LT | 0.62 | 26.0 | C | | | | |
| | | R | 0.38 | 21.6 | C | R | 0.50 | 25.1 | C | | | | |
| | NB | L†† | - | 38.8 | D | L†† | - | 39.4 | D | | | | |
| | | T | 0.93 | 36.7 | D | T | 0.96 | 39.9 | D | | | | |
| | SB | TR | 0.75 | 23.4 | C | TR | 0.76 | 23.7 | C | | | | |
| | INTERSECTION | | | 29.2 | C | | | 31.0 | C | | | | |
| Park Avenue @ West 49th Street | WB | LT | 0.96 | 59.5 | E | LT | 1.04 | 81.6 | F | LT | 1.04 | 81.6 | F |
| | | R | 0.42 | 23.2 | C | R | 0.39 | 22.6 | C | R | 0.39 | 22.6 | C |
| | NB | L†† | - | 37.9 | D | L†† | - | 37.9 | D | L†† | - | 37.9 | D |
| | | T | 0.91 | 32.5 | C | T | 0.95 | 36.6 | D | T | 0.95 | 36.6 | D |
| | SB | TR | 0.73 | 21.2 | C | TR | 0.74 | 21.4 | C | TR | 0.74 | 21.4 | C |
| | INTERSECTION | | | 30.9 | C | | | 24.8 | C | | | 35.7 | D |
| Madison Avenue @ East 39th Street | WB | T | 0.85 | 39.7 | D | T | 0.88 | 43.2 | D | T | 0.89 | 42.9 | D |
| | | R | 1.05 | 121.9 | F | R | 1.18 | 162.4 | F | R | 1.06 | 119.4 | F |
| | NB | LT | 0.86 | 21.6 | C | LT | 0.88 | 22.6 | C | L | 0.46 | 17.2 | B |
| | | | | | | | | | | T | 0.73 | 17.5 | B |
| | INTERSECTION | | | 33.8 | C | | | 39.6 | D | | | 32.1 | C |
| Madison Avenue @ East 40th Street | EB | L | 0.55 | 46.7 | D | L | 0.60 | 49.0 | D | | | | |
| | | T | 0.59 | 26.2 | C | T | 0.67 | 29.0 | C | | | | |
| | NB | TR | 0.84 | 20.2 | C | TR | 0.86 | 21.5 | C | | | | |
| | INTERSECTION | | | 22.6 | C | | | 24.3 | C | | | | |
| Madison Avenue @ East 42nd Street | EB | LT | 0.85 | 35.0 | C | LT | 0.86 | 35.2 | D | LT | 0.86 | 35.3 | D |
| | WB | T | 0.84 | 33.2 | C | T | 0.85 | 34.0 | C | T | 0.85 | 34.0 | C |
| | | R | 0.08 | 18.0 | B | R | 0.08 | 18.1 | B | R | 0.08 | 18.1 | B |
| | NB | LT | 1.10 | 74.5 | E | LT | 1.15 | 94.0 | F | LT | 0.78 | 17.4 | B |
| | | R | 0.41 | 13.9 | B | R | 0.43 | 14.5 | B | R | 0.43 | 14.5 | B |
| | INTERSECTION | | | 50.7 | D | | | 60.1 | E | | | 25.9 | C |
| Madison Avenue @ East 43rd Street | WB | T | 0.54 | 25.4 | C | T | 0.53 | 25.1 | C | T | 0.53 | 25.1 | C |
| | | R | 0.72 | 37.6 | D | R | 0.81 | 46.8 | D | R | 0.81 | 46.8 | D |
| | NB | L | 0.43 | 17.0 | B | L | 0.71 | 35.6 | D | L | 0.71 | 35.6 | D |
| | | T | 0.97 | 34.8 | C | T | 1.00 | 41.6 | D | T | 1.00 | 41.6 | D |
| | INTERSECTION | | | 32.8 | C | | | 39.5 | D | | | 39.6 | D |

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Madison Avenue @ East 44th Street | EB | LT | 0.97 | 64.5 | E | LT | 1.66 | 336.0 | F | L | 1.02 | 92.1 | F |
| | | | | | | | | | | T | 0.86 | 46.6 | D |
| | NB | T | 1.08 | 65.5 | E | T | 1.13 | 86.5 | F | T | 1.04 | 49.0 | D |
| | | R | 0.83 | 51.9 | D | R | 1.15 | 150.4 | F | R | 0.89 | 66.5 | E |
| | INTERSECTION | | | 64.3 | E | | | 160.2 | F | | | 54.5 | D |
| Madison Avenue @ East 45th Street | WB | TR | 0.53 | 23.4 | C | TR | 0.57 | 24.3 | C | TR | 0.64 | 28.4 | C |
| | NB | L | 0.18 | 10.4 | B | L | 0.21 | 10.8 | B | L | 0.19 | 8.3 | A |
| | | T | 1.02 | 47.0 | D | T | 1.18 | 106.5 | F | T | 1.10 | 68.2 | E |
| | INTERSECTION | | | 39.8 | D | | | 84.1 | F | | | 56.8 | E |
| Madison Avenue @ East 46th Street | EB | LT | 0.91 | 48.8 | D | LT | 1.08 | 91.1 | F | LT | 0.58 | 26.1 | C |
| | NB | T | 1.14 | 90.5 | F | T | 1.23 | 127.8 | F | T | 1.15 | 92.8 | F |
| | | R | 0.20 | 10.9 | B | R | 0.28 | 11.2 | B | R | 0.27 | 9.1 | A |
| | INTERSECTION | | | 77.9 | E | | | 109.8 | F | | | 70.2 | E |
| Madison Avenue @ East 47th Street | WB | T | 0.92 | 48.7 | D | T | 1.22 | 143.9 | F | T | 0.58 | 22.8 | C |
| | | R | 0.22 | 35.8 | D | R | 0.24 | 36.4 | D | R | 0.24 | 36.2 | D |
| | NB | L | 0.52 | 24.9 | C | L | 1.82 | 428.0 | F | L | 0.56 | 20.4 | C |
| | | T | 1.06 | 62.1 | E | T | 1.07 | 65.5 | E | T | 1.07 | 65.5 | E |
| | INTERSECTION | | | 56.9 | E | | | 115.2 | F | | | 49.6 | D |
| Madison Avenue @ East 49th Street | WB | TR | 0.51 | 22.9 | C | TR | 0.46 | 21.9 | C | | | | |
| | NB | L | 0.22 | 11.0 | B | L | 0.22 | 11.0 | B | | | | |
| | | T | 0.96 | 33.0 | C | T | 0.99 | 38.7 | D | | | | |
| | INTERSECTION | | | 29.4 | C | | | 33.1 | C | | | | |
| Fifth Avenue @ 42nd Street | EB | T | 0.73 | 27.8 | C | T | 0.73 | 27.9 | C | | | | |
| | | R | 0.24 | 22.6 | C | R | 0.24 | 22.6 | C | | | | |
| | WB | LT | 1.00 | 57.5 | E | LT | 1.01 | 60.9 | E | | | | |
| | SB | LT | 0.98 | 32.4 | C | LT | 1.00 | 37.8 | D | | | | |
| | | R | 0.06 | 9.2 | A | R | 0.06 | 9.2 | A | | | | |
| | INTERSECTION | | | 37.4 | D | | | 41.1 | D | | | | |
| Fifth Avenue @ 43rd Street | WB | L | 0.62 | 30.4 | C | L | 0.61 | 30.2 | C | L | 0.71 | 39.6 | D |
| | | T | 0.29 | 20.3 | C | T | 0.34 | 21.2 | C | T | 0.38 | 24.7 | C |
| | SB | T | 0.88 | 21.4 | C | T | 0.91 | 23.4 | C | T | 0.84 | 15.8 | B |
| | | R | 1.33 | 199.2 | F | R | 1.64 | 337.0 | F | R | 1.30 | 181.6 | F |
| | INTERSECTION | | | 39.8 | D | | | 54.4 | D | | | 34.5 | C |
| Fifth Avenue @ 44th Street | EB | T | 0.55 | 25.5 | C | T | 0.61 | 27.3 | C | T | 0.61 | 27.3 | C |
| | | R | 0.90 | 56.3 | E | R | 0.95 | 68.6 | E | R | 0.95 | 68.6 | E |
| | SB | LT | 1.00 | 37.0 | D | LT | 1.22 | 119.5 | F | LT | 1.22 | 119.5 | F |
| | INTERSECTION | | | 37.9 | D | | | 103.8 | F | | | 103.8 | F |
| Fifth Avenue @ 45th Street | WB | LT | 0.44 | 21.6 | C | LT | 0.47 | 22.2 | C | LT | 0.49 | 23.1 | C |
| | SB | T | 0.91 | 23.5 | C | T | 1.03 | 45.5 | D | T | 1.01 | 38.2 | D |
| | | R | 0.32 | 12.6 | B | R | 0.44 | 14.9 | B | R | 0.42 | 13.8 | B |
| | INTERSECTION | | | 22.6 | C | | | 39.7 | D | | | 34.2 | C |
| Fifth Avenue @ 46th Street | EB | TR | 0.86 | 43.4 | D | TR | 0.97 | 62.4 | E | TR | 0.47 | 22.2 | C |
| | SB | LT | 1.04 | 49.7 | D | LT | 1.21 | 117.2 | F | LT | 1.19 | 106.0 | F |
| | INTERSECTION | | | 48.7 | D | | | 108.3 | F | | | 92.5 | F |
| Fifth Avenue @ 47th Street | WB | L | 0.93 | 79.0 | E | L | 1.87 | 445.7 | F | L | 1.87 | 445.7 | F |
| | | T | 0.61 | 24.8 | C | T | 0.66 | 26.5 | C | T | 0.66 | 26.5 | C |
| | SB | T | 0.98 | 36.6 | D | T | 1.02 | 47.2 | D | T | 1.02 | 47.2 | D |
| | | R | 1.16 | 152.5 | F | R | 1.16 | 152.5 | F | R | 1.16 | 152.5 | F |
| | INTERSECTION | | | 45.6 | D | | | 114.6 | F | | | 114.6 | F |
| Fifth Avenue @ 49th Street | WB | LT | 0.43 | 21.4 | C | LT | 0.44 | 21.6 | C | | | | |
| | SB | T | 0.88 | 21.4 | C | T | 0.91 | 23.6 | C | | | | |
| | | R | 0.20 | 11.3 | B | R | 0.20 | 11.3 | B | | | | |
| | INTERSECTION | | | 21.2 | C | | | 22.9 | C | | | | |
| Fifth Avenue @ 50th Street | EB | TR | 0.46 | 22.0 | C | TR | 0.48 | 22.3 | C | | | | |
| | SB | LT | 0.94 | 26.4 | C | LT | 0.97 | 31.2 | C | | | | |
| | INTERSECTION | | | 25.6 | C | | | 29.4 | C | | | | |

Note:

††To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left turn; and (2) delay from waiting at the red light after the left turn

Shading denotes locations with no significant adverse impacts.

Source: Parsons Brinckerhoff, Inc. 2013

Level of Service Table - 2033 Special Permit Scenario (PM Peak Hour)

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Second Avenue @ East 46th Street | EB | T | 0.71 | 36.8 | D | T | 0.94 | 59.9 | E | T | 0.82 | 40.0 | D |
| | | R | 1.23 | 157.7 | F | R | 1.41 | 230.8 | F | R | 1.22 | 147.8 | F |
| | SB | LT | 0.80 | 10.5 | B | LT | 0.82 | 10.9 | B | LT | 0.88 | 16.2 | B |
| | INTERSECTION | | | 29.0 | C | | | 42.4 | D | | | 34.4 | C |
| Second Avenue @ East 49th Street | WB | L | 1.18 | 135.9 | F | L | 1.21 | 150.1 | F | L | 1.17 | 131.2 | F |
| | | T | 0.41 | 28.0 | C | T | 0.42 | 28.2 | C | T | 0.40 | 27.2 | C |
| | SB | T | 0.71 | 12.5 | B | T | 0.72 | 12.7 | B | T | 0.74 | 13.7 | B |
| | | R | 0.35 | 10.8 | B | R | 0.40 | 11.5 | B | R | 0.41 | 12.4 | B |
| | INTERSECTION | | | 30.2 | C | | | 32.3 | C | | | 30.5 | C |
| Third Avenue @ East 49th Street | WB | T | 0.60 | 19.5 | B | T | 0.64 | 20.9 | C | | | | |
| | | R | 0.40 | 37.0 | D | R | 0.40 | 37.0 | D | | | | |
| | NB | LT | 0.72 | 23.5 | C | LT | 0.74 | 24.0 | C | | | | |
| | INTERSECTION | | | 23.4 | C | | | 24.0 | C | | | | |
| Park Avenue @ West 39th Street | WB | LTR | 1.18 | 124.6 | F | LTR | 1.21 | 139.1 | F | LTR | 0.65 | 25.0 | C |
| | NB | L†† | - | 40.0 | D | L†† | - | 39.9 | D | L†† | - | 39.7 | D |
| | | LT | 0.47 | 15.9 | B | LT | 0.47 | 15.8 | B | LT | 0.46 | 15.1 | B |
| | SB | TR | 0.93 | 33.9 | C | TR | 1.01 | 50.9 | D | TR | 0.99 | 44.3 | D |
| | INTERSECTION | | | 51.5 | D | | | 63.4 | E | | | 32.1 | C |
| Park Avenue @ West 40th Street | EB | LT | 0.81 | 39.8 | D | LT | 0.97 | 62.6 | E | LT | 0.97 | 62.6 | E |
| | | R | 0.53 | 29.9 | C | R | 0.72 | 40.1 | D | R | 0.72 | 40.1 | D |
| | NB | T (Tunnel Exit) | 0.98 | 46.7 | D | T (Tunnel Exit) | 0.98 | 46.7 | D | T (Tunnel Exit) | 0.98 | 46.7 | D |
| | | T (SR onto Viaduct) | 0.53 | 16.1 | B | T (SR onto Viaduct) | 0.53 | 16.0 | B | T (SR onto Viaduct) | 0.53 | 16.0 | B |
| | | TR | 0.55 | 17.5 | B | TR | 0.56 | 17.5 | B | TR | 0.56 | 17.5 | B |
| | SB | T | 0.06 | 10.3 | B | T | 0.06 | 10.3 | B | T | 0.06 | 10.3 | B |
| | | T (Viaduct Exit) | 1.14 | 96.3 | F | T (Viaduct Exit) | 1.20 | 118.9 | F | T (Viaduct Exit) | 1.20 | 118.9 | F |
| | INTERSECTION | | | 52.9 | D | | | 63.8 | E | | | 63.8 | E |
| Park Avenue @ West 46th Street | EB | LT | 0.58 | 21.5 | C | LT | 0.81 | 28.5 | C | | | | |
| | | R | 0.26 | 18.4 | B | R | 0.32 | 19.6 | B | | | | |
| | NB | TR | 0.85 | 28.3 | C | TR | 0.86 | 29.4 | C | | | | |
| | SB | L†† | - | 40.9 | D | L†† | - | 41.3 | D | | | | |
| | | T | 0.74 | 24.5 | C | T | 0.74 | 24.5 | C | | | | |
| | INTERSECTION | | | 26.1 | C | | | 28.1 | C | | | | |
| Park Avenue @ West 47th Street | WB | LT | 0.64 | 26.2 | C | LT | 0.74 | 30.5 | C | LT | 0.78 | 34.7 | C |
| | | R | 0.52 | 25.0 | C | R | 0.61 | 28.7 | C | R | 0.65 | 32.3 | C |
| | NB | L†† | - | 38.0 | D | L†† | - | 39.0 | D | L†† | - | 39.1 | D |
| | | T | 1.04 | 59.7 | E | T | 1.09 | 79.3 | E | T | 1.04 | 59.8 | E |
| | SB | TR | 0.82 | 25.7 | C | TR | 0.82 | 26.0 | C | TR | 0.78 | 23.1 | C |
| | INTERSECTION | | | 39.9 | D | | | 48.6 | D | | | 40.3 | D |
| Park Avenue @ West 49th Street | WB | LT | 0.92 | 51.4 | D | LT | 0.97 | 61.4 | E | LT | 0.97 | 61.4 | E |
| | | R | 0.50 | 25.3 | C | R | 0.55 | 26.9 | C | R | 0.55 | 26.9 | C |
| | NB | L†† | - | 37.7 | D | L†† | - | 37.9 | D | L†† | - | 37.9 | D |
| | | T | 1.00 | 47.9 | D | T | 1.05 | 62.5 | E | T | 1.05 | 62.5 | E |
| | SB | TR | 0.77 | 22.3 | C | TR | 0.78 | 22.6 | C | TR | 0.78 | 22.6 | C |
| | INTERSECTION | | | 36.2 | D | | | 43.6 | D | | | 43.6 | D |
| Madison Avenue @ East 39th Street | WB | T | 0.91 | 46.0 | D | T | 0.98 | 59.3 | E | T | 0.93 | 47.2 | D |
| | | R | 0.81 | 68.0 | E | R | 0.94 | 91.9 | F | R | 0.74 | 54.5 | D |
| | NB | LT | 0.60 | 14.1 | B | LT | 0.61 | 14.3 | B | L | 0.36 | 15.9 | B |
| | | | | | | | | | | T | 0.77 | 20.4 | C |
| | INTERSECTION | | | 25.7 | C | | | 31.8 | C | | | 29.5 | C |
| Madison Avenue @ East 40th Street | EB | L | 0.45 | 42.2 | D | L | 0.51 | 44.2 | D | L | 0.39 | 36.1 | D |
| | | T | 0.78 | 34.4 | C | T | 1.01 | 69.5 | E | T | 0.91 | 44.0 | D |
| | NB | TR | 0.63 | 14.6 | B | TR | 0.66 | 15.1 | B | TR | 0.73 | 19.6 | B |
| | INTERSECTION | | | 20.2 | C | | | 30.3 | C | | | 26.6 | C |
| Madison Avenue @ East 42nd Street | EB | LT | 0.48 | 22.3 | C | LT | 0.48 | 22.3 | C | | | | |
| | WB | T | 0.75 | 28.8 | C | T | 0.76 | 29.3 | C | | | | |
| | | R | 0.16 | 19.5 | B | R | 0.16 | 19.5 | B | | | | |
| | NB | LT | 0.92 | 27.7 | C | LT | 0.97 | 35.4 | D | | | | |
| | | R | 0.53 | 17.5 | B | R | 0.55 | 18.1 | B | | | | |
| | INTERSECTION | | | 26.3 | C | | | 30.1 | C | | | | |
| Madison Avenue @ East 43rd Street | WB | T | 0.37 | 21.7 | C | T | 0.47 | 23.5 | C | | | | |
| | | R | 0.27 | 21.2 | C | R | 0.24 | 20.6 | C | | | | |
| | NB | L | 0.61 | 23.7 | C | L | 0.77 | 38.4 | D | | | | |
| | | T | 0.85 | 22.4 | C | T | 0.90 | 25.8 | C | | | | |
| | INTERSECTION | | | 22.4 | C | | | 26.4 | C | | | | |

| | | 2033 No-Action | | | | Special Permit Scenario | | | | Special Permit Scenario w/ Mitigation | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Signalized Intersection | Approach | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS | Movt. | V/C Ratio | Delay Sec/Veh | LOS |
| Madison Avenue @ East 44th Street | EB | LT | 1.11 | 110.0 | F | LT | 1.97 | 474.3 | F | L | 1.48 | 261.3 | F |
| | | | | | | | | | | T | 0.38 | 22.0 | C |
| | NB | T | 0.84 | 21.5 | C | T | 0.87 | 23.3 | C | T | 0.87 | 23.3 | C |
| | | R | 1.53 | 320.7 | F | R | 1.66 | 376.8 | F | R | 1.66 | 376.8 | F |
| | INTERSECTION | | | 62.0 | E | | | 190.4 | F | | | 97.8 | F |
| Madison Avenue @ East 45th Street | WB | TR | 0.46 | 22.1 | C | TR | 0.46 | 22.1 | C | TR | 0.49 | 24.0 | C |
| | NB | L | 0.20 | 10.6 | B | L | 0.23 | 11.0 | B | L | 0.22 | 9.6 | A |
| | | T | 0.92 | 27.4 | C | T | 1.06 | 60.8 | E | T | 1.02 | 44.6 | D |
| | INTERSECTION | | | 25.2 | C | | | 49.4 | D | | | 38.0 | D |
| Madison Avenue @ East 46th Street | EB | LT | 0.88 | 44.0 | D | LT | 1.30 | 176.4 | F | LT | 0.62 | 24.7 | C |
| | NB | T | 0.89 | 25.2 | C | T | 0.91 | 26.4 | C | T | 0.83 | 20.5 | C |
| | | R | 0.80 | 46.6 | D | R | 1.86 | 430.4 | F | R | 1.75 | 383.9 | F |
| | INTERSECTION | | | 31.8 | C | | | 132.6 | F | | | 74.4 | E |
| Madison Avenue @ East 47th Street | WB | T | 0.78 | 34.3 | C | T | 1.21 | 138.7 | F | T | 0.53 | 19.9 | B |
| | | R | 0.58 | 46.8 | D | R | 0.88 | 74.7 | E | R | 0.71 | 49.6 | D |
| | NB | L | 0.51 | 22.9 | C | L | 0.74 | 40.6 | D | L | 0.38 | 17.4 | B |
| | | T | 0.89 | 26.6 | C | T | 0.87 | 25.7 | C | T | 0.94 | 35.7 | D |
| | INTERSECTION | | | 29.7 | C | | | 66.6 | E | | | 30.9 | C |
| Madison Avenue @ East 49th Street | WB | TR | 0.49 | 22.5 | C | TR | 0.47 | 24.5 | C | | | | |
| | NB | L | 0.16 | 10.3 | B | L | 0.15 | 7.7 | A | | | | |
| | | T | 0.90 | 26.2 | C | T | 0.89 | 21.3 | C | | | | |
| | INTERSECTION | | | 24.6 | C | | | 21.7 | C | | | | |
| Fifth Avenue @ 42nd Street | EB | T | 0.43 | 21.5 | C | T | 0.44 | 21.6 | C | T | 0.45 | 22.4 | C |
| | | R | 0.16 | 20.5 | C | R | 0.16 | 20.5 | C | R | 0.17 | 21.3 | C |
| | WB | LT | 0.84 | 33.5 | C | LT | 0.85 | 34.4 | C | LT | 0.87 | 37.2 | D |
| | SB | LT | 0.99 | 34.7 | C | LT | 1.04 | 48.3 | D | LT | 1.02 | 40.6 | D |
| | | R | 0.03 | 9.1 | A | R | 0.03 | 9.1 | A | R | 0.03 | 8.5 | A |
| | INTERSECTION | | | 32.4 | C | | | 41.1 | D | | | 37.1 | D |
| Fifth Avenue @ 43rd Street | WB | L | 0.59 | 30.0 | C | L | 0.79 | 42.7 | D | | | | |
| | | T | 0.29 | 20.3 | C | T | 0.45 | 23.1 | C | | | | |
| | SB | T | 0.91 | 23.6 | C | T | 0.93 | 25.9 | C | | | | |
| | | R | 1.33 | 200.7 | F | R | 1.32 | 198.2 | F | | | | |
| | INTERSECTION | | | 40.1 | D | | | 41.8 | D | | | | |
| Fifth Avenue @ 44th Street | EB | T | 0.44 | 23.0 | C | T | 0.52 | 24.7 | C | T | 0.52 | 24.7 | C |
| | | R | 1.10 | 109.8 | F | R | 1.17 | 138.7 | F | R | 1.17 | 138.7 | F |
| | SB | LT | 1.01 | 40.6 | D | LT | 1.14 | 87.6 | F | LT | 1.14 | 87.6 | F |
| | INTERSECTION | | | 47.7 | D | | | 87.3 | F | | | 87.3 | F |
| Fifth Avenue @ 45th Street | WB | LT | 0.46 | 21.9 | C | LT | 0.46 | 22.0 | C | | | | |
| | SB | T | 0.90 | 22.8 | C | T | 0.97 | 31.8 | C | | | | |
| | | R | 0.38 | 14.1 | B | R | 0.74 | 28.2 | C | | | | |
| | INTERSECTION | | | 22.2 | C | | | 29.7 | C | | | | |
| Fifth Avenue @ 46th Street | EB | TR | 1.00 | 68.8 | E | TR | 1.21 | 139.4 | F | TR | 0.58 | 24.3 | C |
| | SB | LT | 1.00 | 37.0 | D | LT | 1.17 | 100.9 | F | LT | 1.15 | 90.2 | F |
| | INTERSECTION | | | 43.3 | D | | | 108.8 | F | | | 76.6 | E |
| Fifth Avenue @ 47th Street | WB | L | 0.76 | 56.0 | E | L | 1.64 | 344.3 | F | L | 1.64 | 344.3 | F |
| | | T | 0.57 | 23.4 | C | T | 0.64 | 25.7 | C | T | 0.64 | 25.7 | C |
| | SB | T | 0.96 | 33.7 | C | T | 1.01 | 45.2 | D | T | 1.01 | 45.2 | D |
| | | R | 1.05 | 115.6 | F | R | 1.07 | 121.5 | F | R | 1.07 | 121.5 | F |
| | INTERSECTION | | | 38.6 | D | | | 90.3 | F | | | 90.3 | F |
| Fifth Avenue @ 49th Street | WB | LT | 0.40 | 20.9 | C | LT | 0.43 | 21.4 | C | | | | |
| | SB | T | 0.84 | 19.5 | B | T | 0.87 | 20.8 | C | | | | |
| | | R | 0.42 | 16.1 | B | R | 0.42 | 16.1 | B | | | | |
| | INTERSECTION | | | 19.7 | B | | | 20.7 | C | | | | |
| Fifth Avenue @ 50th Street | EB | TR | 0.47 | 22.3 | C | TR | 0.51 | 22.9 | C | | | | |
| | SB | LT | 0.90 | 22.9 | C | LT | 0.93 | 25.2 | C | | | | |
| | INTERSECTION | | | 22.8 | C | | | 24.7 | C | | | | |

Note:

††To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left turn; and (2) delay from waiting at the red light after the left turn

Shading denotes locations with no significant adverse impacts.

Source: Parsons Brinckerhoff, Inc. 2013

## Weekday Hourly Net Parking Accumulation for Special Permit Scenario

| Time Period | Land Use | | | | Total |
|---|---|---|---|---|---|
| | Office | Residential | Destination Retail | Hotel | |
| 12:00 AM - 1:00 AM | 0 | -119 | 0 | 12 | -107 |
| 1:00 AM - 2:00 AM | 0 | -119 | 0 | 12 | -107 |
| 2:00 AM - 3:00 AM | 0 | -119 | 0 | 12 | -107 |
| 3:00 AM - 4:00 AM | 0 | -119 | 0 | 12 | -107 |
| 4:00 AM - 5:00 AM | 0 | -119 | 0 | 12 | -107 |
| 5:00 AM - 6:00 AM | 0 | -119 | 0 | 12 | -107 |
| 6:00 AM - 7:00 AM | 0 | -118 | 0 | 11 | -107 |
| 7:00 AM - 8:00 AM | 35 | -111 | 0 | 8 | -68 |
| 8:00 AM - 9:00 AM | 469 | -94 | 0 | 6 | 381 |
| 9:00 AM - 10:00 AM | 804 | -85 | 0 | 5 | 724 |
| 10:00 AM - 11:00 AM | 774 | -82 | 5 | 4 | 701 |
| 11:00 AM - 12:00 PM | 756 | -82 | 9 | 4 | 687 |
| 12:00 PM - 1:00 PM | 748 | -82 | 11 | 5 | 682 |
| 1:00 PM - 2:00 PM | 776 | -82 | 12 | 5 | 711 |
| 2:00 PM - 3:00 PM | 837 | -82 | 12 | 4 | 771 |
| 3:00 PM - 4:00 PM | 832 | -85 | 11 | 3 | 761 |
| 4:00 PM - 5:00 PM | 587 | -93 | 11 | 4 | 509 |
| 5:00 PM - 6:00 PM | 95 | -104 | 10 | 9 | 10 |
| 6:00 PM - 7:00 PM | 24 | -114 | 10 | 10 | -70 |
| 7:00 PM - 8:00 PM | 2 | -120 | 12 | 11 | -95 |
| 8:00 PM - 9:00 PM | 0 | -123 | 9 | 12 | -102 |
| 9:00 PM - 10:00 PM | 0 | -119 | 0 | 12 | -107 |
| 10:00 PM - 11:00 PM | 0 | -119 | 0 | 12 | -107 |
| 11:00 PM 12:00 AM | 0 | -119 | 0 | 12 | -107 |

**Note:** Midday peak period is noon to 2:00 p.m.

**Source:** Parsons Brinckerhoff, Inc., 2013

**Special Permit Scenario Subway Stair Analysis**
**at the Fifth Avenue (7) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Stairway** | **Width (ft.)** | **Effective Width (ft.)** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** |
| | | | | **Down** | **Up** | | | | | **Down** | **Up** | **Down** | **Up** | | | | |
| AM | S1 | 12.33 | 11.08 | 48 | 773 | 0.8 | 0.9 | 0.68 | B | 2 | 351 | 50 | 1124 | 0.8 | 1.0 | 0.88 | C |
| | M1/M2 | 11.33 | 10.08 | 48 | 773 | 0.8 | 0.9 | 0.75 | C | 2 | 351 | 50 | 1124 | 0.8 | 1.0 | 0.96 | C |
| | P2 | 8.25 | 7.00 | 16 | 171 | 0.75 | 0.9 | 0.26 | A | 1 | 62 | 17 | 233 | 0.75 | 0.9 | 0.35 | A |
| | P3 | 8.00 | 6.75 | 22 | 164 | 0.75 | 0.9 | 0.26 | A | 1 | 61 | 23 | 225 | 0.75 | 0.9 | 0.35 | A |
| PM | S1 | 12.33 | 10.08 | 605 | 194 | 0.8 | 0.9 | 0.62 | B | 404 | 7 | 1009 | 201 | 0.8 | 0.9 | 0.93 | C |
| | M1/M2 | 11.33 | 10.08 | 605 | 194 | 0.8 | 0.9 | 0.62 | B | 404 | 7 | 1009 | 201 | 0.8 | 0.9 | 0.93 | C |
| | P2 | 8.25 | 7.00 | 147 | 122 | 0.75 | 0.9 | 0.33 | A | 70 | 2 | 217 | 124 | 0.75 | 0.9 | 0.40 | A |
| | P3 | 8.00 | 6.75 | 174 | 82 | 0.75 | 0.9 | 0.31 | A | 71 | 2 | 245 | 84 | 0.75 | 0.9 | 0.39 | A |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Decreases in demand from Existing to No-Action reflect changes in subway ridership patterns due to completion of the Second Avenue subway and other MTA capital improvements.

**Special Permit Scenario Subway Fare Array Analysis**
**at the Fifth Avenue (7) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Period | Fare Array | Control Element | Quantity | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | 15-Minute Pedestrian Volumes | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS |
| | | | | In | Out | | | | | In | Out | In | Out | | | | |
| AM | R501 | Two-way Turnstile | 8 | 48 | 773 | 0.8 | 0.9 | 0.22 | A | 2 | 351 | 50 | 1124 | 0.8 | 1.0 | 0.29 | A |
| PM | R501 | Two-way Turnstile | 8 | 605 | 194 | 0.8 | 0.9 | 0.25 | A | 404 | 7 | 1009 | 201 | 0.8 | 0.9 | 0.39 | A |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Decreases in demand from Existing to No-Action reflect changes in subway ridership patterns due to completion of the Second Avenue subway and other MTA capital improvements.

**Special Permit Scenario Subway Stair Analysis**
**at the 42nd Street - Bryant Park (B,D,F,M) Station**

| | | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Period | Fare Control Area | Stairway | Width (ft.) | Effective Width (ft.) | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | 15-Minute Pedestrian Volumes | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | WIT (in.) | WIT for Significant Impact (in.) |
| | | | | | Down | Up | | | | | Down | Up | Down | Up | | | | | | |
| AM | N504 | S5 | 4.92 | 3.92 | 51 | 825 | 0.9 | 0.9 | 1.83 | F | 1 | 23 | 52 | 848 | 0.9 | 0.9 | 1.88 | F | 1.29 | 2 |
| | | M6 | 8.50 | 7.50 | 51 | 825 | 0.9 | 0.9 | 0.96 | C | 1 | 23 | 52 | 848 | 0.9 | 0.9 | 0.98 | C | - | - |
| | | S6 | 5.00 | 4.00 | 16 | 414 | 0.9 | 1.0 | 0.79 | C | 0 | 0 | 16 | 414 | 0.9 | 1.0 | 0.79 | C | - | - |
| | | M7/M8 | 8.50 | 7.50 | 16 | 414 | 0.9 | 1.0 | 0.42 | A | 0 | 0 | 16 | 414 | 0.9 | 1.0 | 0.42 | A | - | - |
| | | P1 | 6.75 | 5.75 | 17 | 337 | 0.75 | 1.0 | 0.54 | B | 0 | 4 | 17 | 341 | 0.75 | 1.0 | 0.55 | B | - | - |
| | | P2 | 6.75 | 5.75 | 19 | 582 | 0.75 | 1.0 | 0.92 | C | 0 | 7 | 19 | 589 | 0.75 | 1.0 | 0.93 | C | - | - |
| | | P3 | 6.67 | 5.67 | 21 | 512 | 0.75 | 1.0 | 0.83 | C | 1 | 5 | 22 | 517 | 0.75 | 1.0 | 0.84 | C | - | - |
| | | P4 | 6.67 | 5.67 | 39 | 578 | 0.75 | 0.9 | 1.06 | D | 0 | 8 | 39 | 586 | 0.75 | 0.9 | 1.07 | D | 0.88 | 8 |
| | N502 | MB20 | 10.00 | 8.75 | 21 | 707 | 0.9 | 1.0 | 0.61 | B | 0 | 21 | 21 | 728 | 0.9 | 1.0 | 0.63 | B | - | - |
| | | P13 | 10.00 | 8.75 | 27 | 387 | 0.75 | 0.9 | 0.46 | B | 0 | 8 | 27 | 395 | 0.75 | 0.9 | 0.47 | B | - | - |
| | | P14 | 10.00 | 8.75 | 24 | 856 | 0.75 | 1.0 | 0.89 | C | 0 | 13 | 24 | 869 | 0.75 | 1.0 | 0.90 | C | - | - |
| PM | N504 | S5 | 4.92 | 3.92 | 793 | 107 | 0.9 | 0.9 | 1.72 | F | 27 | 2 | 820 | 109 | 0.9 | 0.9 | 1.78 | F | 1.51 | 2 |
| | | M6 | 8.50 | 7.50 | 793 | 107 | 0.9 | 0.9 | 0.90 | C | 27 | 2 | 820 | 109 | 0.9 | 0.9 | 0.93 | C | - | - |
| | | S6 | 5.00 | 4.00 | 242 | 68 | 0.9 | 0.9 | 0.59 | B | 0 | 0 | 242 | 68 | 0.9 | 0.9 | 0.59 | B | - | - |
| | | M7/M8 | 8.50 | 7.50 | 242 | 68 | 0.9 | 0.9 | 0.31 | A | 0 | 0 | 242 | 68 | 0.9 | 0.9 | 0.31 | A | - | - |
| | | P1 | 6.75 | 5.75 | 274 | 158 | 0.75 | 0.9 | 0.62 | B | 7 | 0 | 281 | 158 | 0.75 | 0.9 | 0.63 | B | - | - |
| | | P2 | 6.75 | 5.75 | 157 | 43 | 0.75 | 0.9 | 0.28 | A | 3 | 0 | 160 | 43 | 0.75 | 0.9 | 0.28 | A | - | - |
| | | P3 | 6.67 | 5.67 | 592 | 142 | 0.75 | 0.9 | 1.02 | D | 11 | 1 | 603 | 143 | 0.75 | 0.9 | 1.04 | D | 1.11 | 8 |
| | | P4 | 6.67 | 5.67 | 457 | 71 | 0.75 | 0.9 | 0.72 | C | 7 | 1 | 464 | 72 | 0.75 | 0.9 | 0.73 | C | - | - |
| | N502 | MB20 | 10.00 | 8.75 | 595 | 70 | 0.9 | 0.9 | 0.57 | B | 22 | -1 | 617 | 69 | 0.9 | 0.9 | 0.59 | B | - | - |
| | | P13 | 10.00 | 8.75 | 672 | 66 | 0.75 | 0.9 | 0.64 | B | 14 | -1 | 686 | 66 | 0.75 | 0.9 | 0.66 | B | - | - |
| | | P14 | 10.00 | 8.75 | 342 | 111 | 0.75 | 0.9 | 0.41 | A | 9 | -1 | 351 | 110 | 0.75 | 0.9 | 0.42 | A | - | - |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Fare Array Analysis**
**at the 42nd Street - Bryant Park (B,D,F,M) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Fare Array** | **Control Element** | **Quantity** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** |
| | | | | **In** | **Out** | | | | | **In** | **Out** | **In** | **Out** | | | | |
| AM | N502 | Two-way Turnstile | 5 | 56 | 1327 | 0.9 | 1.0 | 0.33 | A | 0 | 21 | 56 | 1348 | 0.9 | 1.0 | 0.33 | A |
| | | High Entry/Exit Turnstile | 1 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 2 | | | | | | | | | | | | | | |
| | N504 | Two-way Turnstile | 6 | 65 | 2581 | 0.9 | 1.0 | 0.54 | B | 1 | 23 | 66 | 2604 | 0.9 | 1.0 | 0.55 | B |
| | | High Entry/Exit Turnstile | 3 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 0 | | | | | | | | | | | | | | |
| PM | N502 | Two-way Turnstile | 5 | 977 | 190 | 0.9 | 0.9 | 0.51 | B | 22 | -1 | 999 | 189 | 0.9 | 0.9 | 0.52 | B |
| | | High Entry/Exit Turnstile | 1 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 2 | | | | | | | | | | | | | | |
| | N504 | Two-way Turnstile | 6 | 2006 | 189 | 0.9 | 0.9 | 0.72 | C | 27 | 2 | 2033 | 191 | 0.9 | 0.9 | 0.73 | C |
| | | High Entry/Exit Turnstile | 3 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 0 | | | | | | | | | | | | | | |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines

**Special Permit Scenario Subway Stair Analysis**
**at the 47-50th Street - Rockefeller Center (B,D,F,M) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Period | Stairway | Width (ft.) | Effective Width (ft.) | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | 15-Minute Pedestrian Volumes | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | WIT (in.) | WIT for Significant Impact (in.) |
| | | | | Down | Up | | | | | Down | Up | Down | Up | | | | | | |
| AM | S1 | 5.00 | 4.00 | 24 | 568 | 0.9 | 1.0 | 1.09 | D | -1 | 41 | 23 | 609 | 0.9 | 1.0 | 1.17 | D | 3.24 | 7 |
| | S6 | 5.00 | 4.00 | 21 | 371 | 0.9 | 0.9 | 0.80 | C | 1 | 66 | 22 | 437 | 0.9 | 1.0 | 0.85 | C | - | - |
| | M1 | 12.00 | 10.75 | 45 | 939 | 0.9 | 1.0 | 0.67 | B | 0 | 107 | 45 | 1046 | 0.9 | 1.0 | 0.75 | C | - | - |
| | S3 | 4.33 | 3.33 | 18 | 593 | 0.9 | 1.0 | 1.35 | E | 0 | 2 | 18 | 595 | 0.9 | 1.0 | 1.36 | E | 0.13 | 5 |
| | M3 | 11.92 | 10.67 | 18 | 593 | 0.9 | 1.0 | 0.42 | A | 0 | 2 | 18 | 595 | 0.9 | 1.0 | 0.42 | A | - | - |
| | P1 | 6.67 | 5.67 | 14 | 1483 | 0.75 | 1.0 | 2.34 | F | 1 | 45 | 15 | 1528 | 0.75 | 1.0 | 2.41 | F | 2.09* | 2 |
| | P2 | 6.67 | 5.67 | 303 | 994 | 0.75 | 0.9 | 2.13 | F | -1 | 13 | 303 | 1007 | 0.75 | 0.9 | 2.15 | F | 0.68 | 2 |
| | P3 | 8.83 | 7.58 | 13 | 1258 | 0.75 | 1.0 | 1.49 | E | 1 | 38 | 14 | 1296 | 0.75 | 1.0 | 1.53 | E | 2.79 | 3 |
| | P4 | 8.83 | 7.58 | 449 | 789 | 0.75 | 0.9 | 1.47 | E | -1 | 13 | 449 | 802 | 0.75 | 0.9 | 1.48 | E | 0.96 | 4 |
| PM | S1 | 5.00 | 4.00 | 635 | 31 | 0.9 | 1.0 | 1.12 | D | 47 | -1 | 682 | 30 | 0.9 | 1.0 | 1.19 | D | 3.32 | 7 |
| | S6 | 5.00 | 4.00 | 363 | 23 | 0.9 | 0.9 | 0.72 | C | 77 | 2 | 440 | 25 | 0.9 | 0.9 | 0.87 | C | - | - |
| | M1 | 12.00 | 10.75 | 999 | 54 | 0.9 | 0.9 | 0.73 | C | 123 | 0 | 1122 | 54 | 0.9 | 1.0 | 0.73 | C | - | - |
| | S3 | 4.33 | 3.33 | 518 | 46 | 0.9 | 0.9 | 1.26 | D | 2 | 3 | 520 | 49 | 0.9 | 0.9 | 1.28 | D | 0.35 | 6 |
| | M3 | 11.92 | 10.67 | 518 | 46 | 0.9 | 0.9 | 0.40 | A | 2 | 3 | 520 | 49 | 0.9 | 0.9 | 0.40 | A | - | - |
| | P1 | 6.67 | 5.67 | 841 | 90 | 0.75 | 0.9 | 1.26 | D | 14 | -1 | 855 | 90 | 0.75 | 0.9 | 1.27 | D | 1.02 | 6 |
| | P2 | 6.67 | 5.67 | 1046 | 98 | 0.75 | 0.9 | 1.54 | E | 26 | 2 | 1072 | 100 | 0.75 | 0.9 | 1.58 | E | 1.66 | 3 |
| | P3 | 8.83 | 7.58 | 851 | 155 | 0.75 | 0.9 | 1.03 | D | 16 | -1 | 867 | 155 | 0.75 | 0.9 | 1.05 | D | 1.45 | 5 |
| | P4 | 8.83 | 7.58 | 463 | 147 | 0.75 | 0.9 | 0.64 | B | 59 | 1 | 522 | 148 | 0.75 | 0.9 | 0.70 | C | - | - |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
* Denotes a significant adverse impact based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Fare Array Analysis**
**at the 47-50th Street - Rockefeller Center (B,D,F,M) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Fare Array** | **Control Element** | **Quantity** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** |
| | | | | **In** | **Out** | | | | | **In** | **Out** | **In** | **Out** | | | | |
| AM | N501 | Two-way Turnstile | 8 | 53 | 2584 | 0.9 | 1.0 | 0.40 | A | 0 | 109 | 53 | 2693 | 0.9 | 1.0 | 0.42 | A |
| | | High Entry/Exit Turnstile | 2 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 2 | | | | | | | | | | | | | | |
| PM | N501 | Two-way Turnstile | 8 | 1703 | 132 | 0.9 | 0.9 | 0.51 | B | 125 | 3 | 1828 | 135 | 0.9 | 0.9 | 0.55 | B |
| | | High Entry/Exit Turnstile | 2 | | | | | | | | | | | | | | |
| | | High Exit Turnstile | 2 | | | | | | | | | | | | | | |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Stair Analysis**
**at the 51st Street (6) Station**

| | | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Fare Control Area** | **Stairway** | **Width (ft.)** | **Effective Width (ft.)** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **WIT (in.)** | **WIT for Significant Impact (in.)** |
| | | | | | **Down** | **Up** | | | | | **Down** | **Up** | **Down** | **Up** | | | | | | |
| AM | R243 | S2 | 5.17 | 4.17 | 32 | 286 | 0.75 | 0.9 | 0.73 | C | 7 | 8 | 39 | 294 | 0.75 | 0.9 | 0.77 | C | - | - |
| | | S5 | 4.08 | 3.08 | 17 | 202 | 0.75 | 0.9 | 0.69 | B | 0 | 0 | 17 | 202 | 0.75 | 0.9 | 0.69 | B | - | - |
| | | M2 | 9.83 | 8.58 | 49 | 489 | 0.75 | 0.9 | 0.60 | B | 7 | 8 | 56 | 497 | 0.75 | 0.9 | 0.62 | B | - | - |
| | R242A | O1/O2 | 10.00 | 8.75 | 73 | 790 | 0.75 | 0.9 | 0.95 | C | 4 | 14 | 77 | 804 | 0.75 | 0.9 | 0.97 | C | - | - |
| | | M7 | 21.33 | 18.83 | 71 | 777 | 0.75 | 0.9 | 0.44 | A | 4 | 14 | 75 | 791 | 0.75 | 0.9 | 0.44 | A | - | - |
| | | P3 | 18.08 | 15.58 | 71 | 777 | 0.75 | 0.9 | 0.53 | B | 4 | 14 | 75 | 791 | 0.75 | 0.9 | 0.54 | B | - | - |
| | N305A | U1 | 4.17 | 3.17 | 910 | 45 | 0.75 | 1.0 | 2.65 | F | 0 | 0 | 910 | 45 | 0.75 | 1.0 | 2.65 | F | 0.00 | 2 |
| | | O4 | 10.00 | 9.00 | 1246 | 242 | 0.75 | 0.9 | 1.29 | D | 0 | 0 | 1246 | 242 | 0.75 | 0.9 | 1.29 | D | 0.00 | 5 |
| PM | R243 | S2 | 5.17 | 4.17 | 284 | 121 | 0.75 | 0.9 | 0.79 | C | 18 | 9 | 302 | 130 | 0.75 | 0.9 | 0.85 | C | - | - |
| | | S5 | 4.08 | 3.08 | 112 | 84 | 0.75 | 0.9 | 0.54 | B | 0 | 0 | 112 | 84 | 0.75 | 0.9 | 0.54 | B | - | - |
| | | M2 | 9.83 | 8.58 | 394 | 205 | 0.75 | 0.9 | 0.58 | B | 18 | 9 | 412 | 214 | 0.75 | 0.9 | 0.60 | B | - | - |
| | R242A | O1/O2 | 10.00 | 8.75 | 235 | 90 | 0.75 | 0.9 | 0.30 | A | 11 | 14 | 246 | 104 | 0.75 | 0.9 | 0.33 | A | - | - |
| | | M7 | 21.33 | 18.83 | 231 | 85 | 0.75 | 0.9 | 0.14 | A | 11 | 14 | 242 | 99 | 0.75 | 0.9 | 0.15 | A | - | - |
| | | P3 | 18.08 | 15.58 | 231 | 85 | 0.75 | 0.9 | 0.16 | A | 11 | 14 | 242 | 99 | 0.75 | 0.9 | 0.18 | A | - | - |
| | N305A | U1 | 4.17 | 3.17 | 759 | 4 | 0.75 | 1.0 | 2.14 | F | 0 | 0 | 759 | 4 | 0.75 | 1.0 | 2.14 | F | 0.00 | 2 |
| | | O4 | 10.00 | 9.00 | 472 | 160 | 0.75 | 0.9 | 0.56 | B | 0 | 0 | 472 | 160 | 0.75 | 0.9 | 0.56 | B | - | - |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Decreases in demand from Existing to No-Action reflect changes in subway ridership patterns due to completion of the Second Avenue subway and other MTA capital improvements.

**Special Permit Scenario Subway Fare Array Analysis at the 51st Street (6) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Period | Fare Array | Control Element | Quantity | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | 15-Minute Pedestrian Volumes | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS |
| | | | | In | Out | | | | | In | Out | In | Out | | | | |
| AM | R242A | Two-way Turnstile | 5 | 71 | 777 | 0.75 | 0.9 | 0.39 | A | 4 | 14 | 75 | 791 | 0.75 | 0.9 | 0.40 | A |
| | R243 | Two-way Turnstile | 9 | 38 | 922 | 0.75 | 1.0 | 0.22 | A | 7 | 8 | 45 | 930 | 0.75 | 1.0 | 0.23 | A |
| PM | R242A | Two-way Turnstile | 5 | 231 | 85 | 0.75 | 0.9 | 0.16 | A | 11 | 14 | 242 | 99 | 0.75 | 0.9 | 0.17 | A |
| | R243 | Two-way Turnstile | 9 | 654 | 372 | 0.75 | 0.9 | 0.29 | A | 18 | 9 | 672 | 381 | 0.75 | 0.9 | 0.29 | A |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Passageway Analysis at the 51st Street (6) Station**

| Passageway | Peak Period | Width (ft.) | Effective Width (ft.) | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | 15-Minute Pedestrian Volumes | | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS |
| | | | | NB | SB | | | | | NB | SB | NB | SB | | | | |
| To/From Lex Ave-53rd St | AM | 15.25 | 13.3 | 507 | 485 | 0.75 | 0.9 | 0.43 | A | 0 | 0 | 507 | 485 | 0.75 | 0.9 | 0.43 | A |
| | PM | 15.25 | 13.3 | 659 | 498 | 0.75 | 0.9 | 0.51 | B | 0 | 0 | 659 | 498 | 0.75 | 0.9 | 0.51 | B |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Decreases in demand from Existing to No-Action reflect changes in subway ridership patterns due to completion of the Second Avenue subway and other MTA capital improvements.

**Special Permit Scenario Subway Escalator Analysis**
**at the 51st Street (6) Station**

| | | | | | No-Action | | | | S.P.S. Increment | Special Permit Scenario | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Escalator** | **Width (in.)** | **Feet Per Minute** | **Guideline Capacity** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **V/C Ratio Increase** |
| AM | E233 (UP) | 40 | 90 | 945 | 725 | 0.8 | 0.96 | C | 0 | 725 | 0.8 | 0.96 | C | - |
| | E252 (UP) | 40 | 90 | 945 | 1278 | 0.8 | 1.69 | F | 0 | 1278 | 0.8 | 1.69 | F | 0.000 |
| PM | E233 (UP) | 40 | 90 | 945 | 554 | 0.8 | 0.73 | C | 0 | 554 | 0.8 | 0.73 | C | - |
| | E252 (UP) | 40 | 90 | 945 | 441 | 0.8 | 0.58 | B | 0 | 441 | 0.8 | 0.58 | B | - |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Decreases in demand from Existing to No-Action reflect changes in subway ridership patterns due to completion of the Second Avenue subway and other MTA capital improvements.

**Special Permit Scenario Subway Stair Analysis**
**at the Lexington Avenue - 53rd Street (E,M) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Stairway** | **Width (ft.)** | **Effective Width (ft.)** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** |
| | | | | **Down** | **Up** | | | | | **Down** | **Up** | **Down** | **Up** | | | | |
| AM | O7 | 48.8 | 46.33 | 87 | 641 | 0.9 | 0.9 | 0.13 | A | 0 | 2 | 87 | 643 | 0.9 | 0.9 | 0.13 | A |
| | P7 | 3.7 | 2.67 | 30 | 49 | 0.75 | 0.9 | 0.26 | A | 3 | 1 | 33 | 50 | 0.75 | 0.9 | 0.28 | A |
| PM | O7 | 48.8 | 46.33 | 721 | 219 | 0.9 | 0.9 | 0.15 | A | 3 | 0 | 724 | 219 | 0.9 | 0.9 | 0.15 | A |
| | P7 | 3.7 | 2.67 | 98 | 20 | 0.75 | 0.9 | 0.35 | A | 8 | 1 | 106 | 21 | 0.75 | 0.9 | 0.37 | A |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Fare Array Analysis**
**at the Lexington Ave - 53rd St Street (E,M) Station**

| | | | | No-Action | | | | | | S.P.S. Increment | | Special Permit Scenario | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Fare Array** | **Control Element** | **Quantity** | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | | **15-Minute Pedestrian Volumes** | | **Surging Factor** | **Friction Factor** | **V/C Ratio** | **LOS** |
| | | | | **In** | **Out** | | | | | **In** | **Out** | **In** | **Out** | | | | |
| AM | N305 | Two-way Turnstile | 11 | 83 | 1310 | 0.8 | 0.9 | 0.28 | A | 11 | 18 | 94 | 1328 | 0.8 | 0.9 | 0.28 | A |
| PM | N305 | Two-way Turnstile | 11 | 622 | 126 | 0.8 | 0.9 | 0.17 | A | 25 | 21 | 647 | 147 | 0.8 | 0.9 | 0.18 | A |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario Subway Escalator Analysis**
**at the Lexington Ave - 53rd St Street (E,M) Station**

| | | | | | No-Action | | | | S.P.S. Increment | Special Permit Scenario | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Escalator** | **Width (in.)** | **Feet Per Minute** | **Guideline Capacity** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **15-Minute Pedestrian Volumes** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **V/C Ratio Increase** |
| AM | E243 (UP) | 40 | 90 | 945 | 1043 | 0.75 | 1.47 | E | 7 | 1050 | 0.75 | 1.48 | E * | 0.010 |
| | E244 (UP) | 40 | 90 | 945 | 1016 | 0.75 | 1.43 | E | 7 | 1023 | 0.75 | 1.44 | E * | 0.010 |
| | E254X (UP) | 24 | 90 | 480 | 516 | 0.75 | 1.43 | E | 4 | 520 | 0.75 | 1.44 | E * | 0.011 |
| | E269 (DN) | 40 | 90 | 945 | 910 | 0.95 | 1.01 | D | 8 | 918 | 0.95 | 1.02 | D | 0.009 |
| PM | E243 (UP) | 40 | 90 | 945 | 642 | 0.75 | 0.91 | C | 20 | 662 | 0.75 | 0.93 | C | - |
| | E244 (DN) | 40 | 90 | 945 | 1196 | 0.95 | 1.33 | E | 8 | 1204 | 0.95 | 1.34 | E | 0.009 |
| | E254X (DN) | 24 | 90 | 480 | 197 | 1.00 | 0.41 | A | 3 | 200 | 1.00 | 0.42 | A | - |
| | E269 (DN) | 40 | 90 | 945 | 1336 | 0.95 | 1.49 | E | 8 | 1344 | 0.95 | 1.50 | E | 0.009 |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
* Denotes a significant adverse impact based on 2012 CEQR Technical Manual guidelines.

**Special Permit Scenario with Improvements Stair Analysis**
**at the 51st Street (6) Subway Station**

| | | | With-Action | | | | | | | | Special Permit Scenario w/ Improvements | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Period | Fare Control Area | Stairway | Width (ft.) | Effective Width (ft.) | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS | Width (ft.) | Effective Width (ft.) | 15-Minute Pedestrian Volumes | | Surging Factor | Friction Factor | V/C Ratio | LOS |
| | | | | | Down | Up | | | | | | | Down | Up | | | | |
| AM | N305A | U1 | 4.17 | 3.17 | 910 | 45 | 0.75 | 1.0 | 2.65 | F | 15.00 | 13.50 | 910 | 1323 | 0.75 | 0.9 | 1.39 | E |
| PM | N305A | U1 | 4.17 | 3.17 | 759 | 4 | 0.75 | 1.0 | 2.14 | F | 15.00 | 13.50 | 759 | 445 | 0.75 | 0.9 | 0.80 | C |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
Due the removal of Escalator E252 as part of the With-Action with Improvements, 'Up' volumes on stair U1 accommodate the With-Action volumes on E252.

**Special Permit Scenario with Improvements Subway Escalator Analysis**
**at the Lexington Ave - 53rd St Street (E,M) Station**

| | | | | | No-Action | | | | S.P.S. Increment | | | Special Permit Scenario w/ Improvements | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Peak Period** | **Escalator** | **Width (in.)** | **Feet Per Minute** | **Guideline Capacity** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **Reallocated Volumes** | **New Demand** | **Total Increment** | **Width (in.)** | **Feet Per Minute** | **Guideline Capacity** | **15-Minute Pedestrian Volumes** | **Surging Factor** | **V/C Ratio** | **LOS** | **V/C Ratio Increase** |
| AM | E243 (UP) | 40 | 90 | 945 | 1043 | 0.75 | 1.47 | E | -193 | 6 | -187 | 40 | 100 | 1050 | 856 | 0.75 | 1.09 | D | -0.385 |
| | E244 (UP) | 40 | 90 | 945 | 1016 | 0.75 | 1.43 | E | -166 | 6 | -160 | 40 | 100 | 1050 | 856 | 0.75 | 1.09 | D | -0.347 |
| | E254X (UP) | 24 | 90 | 480 | 516 | 0.75 | 1.43 | E | 334 | 6 | 340 | 40 | 100 | 1050 | 856 | 0.75 | 1.09 | D | -0.347 |
| | E269 (DN) | 40 | 90 | 945 | 910 | 0.95 | 1.01 | D | - | 8 | 8 | 40 | 100 | 1050 | 918 | 0.95 | 0.92 | C | - |
| PM | E243 (UP) | 40 | 90 | 945 | 642 | 0.75 | 0.91 | C | -321 | 10 | -311 | 40 | 100 | 1050 | 331 | 0.75 | 0.42 | A | - |
| | E244 (DN) | 40 | 90 | 945 | 1196 | 0.95 | 1.33 | E | 99 | 10 | 109 | 40 | 100 | 1050 | 1305 | 0.95 | 1.31 | D | -0.024 |
| | E254X (UP)* | 24 | 90 | 480 | 197 | 1.00 | 0.41 | A | 124 | 10 | 134 | 40 | 100 | 1050 | 331 | 0.75 | 0.42 | A | - |
| | E269 (DN) | 40 | 90 | 945 | 1336 | 0.95 | 1.49 | E | 99 | 9 | 108 | 40 | 100 | 1050 | 1444 | 0.95 | 1.45 | E | -0.041 |

**Notes:**
Methodology based on 2012 CEQR Technical Manual guidelines.
* During the PM peak period in the No-Action condition, Escalator 254X operates in the down direction.

# Future With the Special Permit Scenario Local Bus Conditions

| Peak Hour (1) | Route | Peak Direction | Maximum Load Point | Peak Hour Buses (2) | No-Action Available Capacity (3) | Special Permit Scenario Increment | Available Capacity w/Special Permit | |
|---|---|---|---|---|---|---|---|---|
| AM | M1 | NB | Madison Ave & E 58 St | 4 | 72 | 1 | 71 | |
| | | SB | 5 Ave & W 72 St | 4 | 73 | 16 | 57 | |
| | | SB LTD | 5 Ave & W 72 St | 7 | 75 | 33 | 42 | |
| | M4 | NB | W 32 St & 7 Ave | 10 | 175 | 3 | 172 | |
| | | SB | 5 Ave & W 72 St | 6 | 54 | 2 | 52 | |
| | | SB LTD | Central Park N & 5 Ave | 6 | 40 | 38 | 2 | |
| | M42 | EB | W 42 St & Broadway | 41 | 28 | 106 | -78 | * |
| | | WB | W 42 St & Broadway | 17 | 49 | 5 | 44 | |
| PM | M1 | NB | Madison Ave & E 72 St | 6 | 94 | 43 | 51 | |
| | | SB | 5 Ave & W 72 St | 9 | 102 | 4 | 98 | |
| | | NB LTD | Madison Ave & E 58 St | 6 | 71 | 34 | 37 | |
| | M4 | NB | Madison Ave & E 57 St | 6 | 62 | 52 | 10 | |
| | | SB | 5 Ave & W 72 St | 8 | 83 | 5 | 78 | |
| | | NB LTD | Madison Ave & E 96 St | 6 | 50 | 45 | 5 | |
| | M42 | EB | W 42 St & Broadway | 16 | 7 | 7 | 0 | |
| | | WB | E 42 St & Lexington Ave | 35 | 6 | 71 | -65 | * |

**Notes:**

(1) Peak hours: weekday 8:00-9:00 AM and 5:00-6:00 PM.

(2) Assumes service levels adjusted to address capacity shortfalls in the No-Action condition.

(3) Available capacity based on MTA NYCT loading guidelines of 54 passengers per standard bus.

* Denotes a significant adverse impact based on current NYC Transit guidelines.

**SPECIAL PERMIT SCENARIO SIDEWALK CONDITIONS**

| Location | | Total Width (feet) | Effective Width (feet) | Special Permit Scenario Volume Increment | | | Flow Rate (PMF) | | | Average Flow Level of Service | | | Platoon-Adjusted Level of Service | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AM | MD | PM | AM | MD | PM | AM | MD | PM | AM | MD | PM |
| (S10) East 45th Street Vanderbilt Ave to Madison Ave | North | 15.0 | 10.5 | 205 | 209 | 240 | 4.1 | 3.9 | 3.6 | A | A | A | C | C | C |
| (S13) East 42nd Street Vanderbilt Ave to Madison Ave | North | 22.5 | 10.0 | 175 | 196 | 206 | 8.9 | 6.7 | 11.8 | C | B | D | D | D | E |

**SPECIAL PERMIT SCENARIO CORNER CONDITIONS**

| Intersection | Corner | Avg. Pedestrian Space (SFP) | | | Level of Service | | |
|---|---|---|---|---|---|---|---|
| | | AM | MD | PM | AM | MD | PM |
| (15) Madison Ave @ East 45th St. | NE | 29.5 | 23.8 | 25.3 | C | D | C |
| (18) Madison Ave @ East 42nd St. | NE | 25.2 | 44.8 | 25.8 | C | B | C |
| (25) Fifth Ave @ East 42nd St. | SW | 34.7 | 80.2 | 45.9 | C | A | B |