

**Appendix K    HGV Demand Changes**

**AM HGVs Demand Changes**

|    | 1  | 2  | 3  | 4  | 5  | 6   | 7 | 8   | 9   | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19  | 20  | 21  | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|----|----|----|----|----|-----|---|-----|-----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 0  | 57 | 0  | 42 | 0  | -3  | 0 | 0   | 0   | 0  | 1  | -5 | 1  | -3 | -3 | -1 | -2 | -2 | -6  | 1   | 0   | 0  | -1 | -4 | -7 | 0  | 4  | 0  | 0  | -1 | 0  | 3  | 0  |
| 2  | 74 | 5  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 1  | 0  | -1 | 0  | -1 | -1 | -1 | -1 | -1 | -3  | -2  | 1   | 0  | 0  | -1 | -3 | 0  | 0  | 2  | -1 | 0  | 0  | 0  |    |
| 3  | 1  | 6  | 0  | 1  | 0  | 1   | 0 | 2   | 0   | 0  | 1  | 0  | 1  | 3  | 0  | 0  | 1  | 0  | 3   | 1   | 1   | 1  | 0  | 0  | 1  | 8  | 0  | 0  | 3  | 0  | 4  | 0  |    |
| 4  | 14 | -7 | 0  | 0  | 0  | -1  | 0 | 0   | 0   | 1  | 1  | 0  | 0  | 1  | 0  | 0  | 1  | 1  | 1   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 3  | 0  | 0  |    |
| 5  | 0  | 0  | 0  | 0  | 0  | 5   | 0 | 1   | 4   | 0  | 1  | 0  | 0  | 1  | 0  | 1  | 0  | 2  | 2   | 3   | 0   | 4  | 4  | 0  | 0  | 1  | 2  | 0  | 0  | 0  | 0  | 0  |    |
| 6  | -4 | 0  | -1 | -1 | 8  | -16 | 0 | 7   | 1   | 0  | 0  | -1 | 1  | 2  | 0  | 0  | -1 | 0  | 0   | -1  | 1   | 0  | 0  | -1 | 0  | 2  | 7  | 0  | -1 | 0  | -2 | 2  | 0  |
| 7  | -1 | 0  | 0  | 0  | 0  | 0   | 0 | 1   | 2   | 0  | 0  | 0  | -1 | 2  | -1 | -1 | 0  | -1 | -4  | -11 | 1   | 1  | -1 | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -2 |
| 8  | -1 | 0  | 0  | 0  | 0  | 3   | 0 | 6   | -18 | 0  | 0  | 1  | 2  | 4  | 0  | 3  | -4 | 0  | 0   | -27 | 3   | 1  | -5 | 12 | 1  | 6  | 15 | 0  | 0  | 0  | 0  | 0  |    |
| 9  | 0  | 0  | 0  | 0  | 1  | 0   | 1 | -14 | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -2 | 0  | -2  | -7  | -2  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  |    |
| 10 | 0  | 0  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 0  | 42 | 17 | 0  | -1 | -1 | 0  | -1 | -1 | -1  | -1  | -1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |
| 11 | 1  | 0  | 0  | 0  | 0  | -1  | 0 | 0   | 0   | 15 | 0  | 3  | 0  | -4 | -4 | 1  | 3  | -6 | -10 | -6  | -1  | -1 | -1 | -2 | 1  | 0  | 1  | 0  | 0  | 10 | -1 | 0  | 0  |
| 12 | 0  | 3  | 0  | 1  | 0  | 0   | 0 | 1   | 0   | 37 | 24 | 0  | 1  | 19 | 3  | 0  | 1  | 9  | 8   | 5   | -1  | 2  | 1  | 0  | 0  | 0  | 1  | 0  | 0  | 1  | 1  | 1  | 0  |
| 13 | 2  | 0  | 0  | 0  | 0  | 1   | 0 | 1   | 0   | 0  | 0  | 0  | 4  | 0  | 0  | 0  | 0  | 0  | 1   | 1   | 0   | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 14 | -3 | -1 | -1 | -1 | 1  | 1   | 1 | -6  | 9   | -3 | -4 | 2  | 2  | 0  | 0  | -3 | -2 | 0  | 0   | 0   | 0   | 1  | 0  | -6 | 0  | 0  | 4  | 0  | -1 | -1 | -1 | 0  | 0  |
| 15 | -4 | -1 | -1 | -1 | 2  | -1  | 0 | 0   | 1   | -2 | -1 | 0  | 0  | 0  | 0  | 2  | 1  | 0  | 0   | -11 | 0   | 0  | 0  | 0  | 0  | 3  | 1  | 0  | -1 | 0  | -1 | 0  | 0  |
| 16 | -2 | 0  | 0  | 0  | 0  | -1  | 0 | 1   | 0   | -2 | 0  | 0  | 0  | 6  | -4 | 0  | 0  | -8 | -9  | -3  | -3  | 0  | -1 | -1 | 0  | 0  | 0  | 0  | 0  | -1 | 0  | 0  | 0  |
| 17 | -1 | -2 | -2 | 0  | 1  | -6  | 0 | 0   | 0   | -6 | 1  | 0  | 1  | 2  | -4 | 0  | 0  | -3 | -5  | -2  | -14 | -2 | -6 | -2 | 0  | -1 | 7  | 0  | -1 | 1  | -1 | 0  | -1 |
| 18 | -1 | -1 | -1 | -1 | 2  | -1  | 0 | 3   | 1   | -2 | -3 | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 0   | -9  | 0   | 0  | 0  | -1 | 0  | 2  | 1  | 0  | -1 | -1 | -1 | 0  | 0  |
| 19 | -8 | -2 | -3 | -1 | 8  | -1  | 0 | 1   | 5   | -3 | -1 | 10 | 1  | 0  | 0  | 2  | 1  | 0  | 0   | -4  | 0   | 1  | 0  | -1 | 0  | 9  | 2  | 0  | -2 | -1 | -3 | 1  | 0  |
| 20 | 23 | -1 | -2 | -1 | 1  | 0   | 1 | 4   | 1   | -2 | -1 | 7  | 1  | 0  | -1 | 2  | 1  | -1 | -1  | 0   | -4  | 3  | 1  | -3 | 0  | 0  | 4  | 0  | -1 | 0  | -2 | 0  | -1 |
| 21 | 0  | 1  | 0  | 0  | 2  | 0   | 0 | 0   | 0   | 0  | 1  | -1 | 1  | 0  | 0  | -2 | -7 | 0  | 0   | -3  | 0   | 0  | 0  | 0  | 0  | 3  | 2  | 0  | 0  | 0  | 1  | 0  |    |
| 22 | 0  | 0  | 0  | 0  | 6  | 0   | 0 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -7 | 0  | 0   | -6  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |
| 23 | -1 | 0  | 0  | 0  | 20 | 1   | 0 | 6   | 13  | -1 | 0  | 0  | 0  | 0  | 0  | 0  | -5 | 0  | 0   | -2  | 0   | 1  | 0  | 0  | 0  | 2  | 1  | 0  | 0  | 0  | 0  | 0  |    |
| 24 | 10 | 1  | -1 | 1  | 1  | 0   | 0 | 22  | 7   | 0  | 1  | 0  | 1  | 3  | 0  | 3  | 1  | 0  | 8   | 0   | 0   | 0  | 0  | -1 | 0  | 0  | 2  | 0  | 0  | 1  | -1 | 2  | -1 |
| 25 | -9 | -2 | 0  | 0  | 0  | 0   | 0 | 1   | 0   | -1 | 1  | 0  | 0  | 1  | -1 | 0  | 0  | 0  | -1  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1 | 0  |
| 26 | 8  | -1 | 0  | 0  | 0  | 0   | 0 | 1   | 0   | 0  | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  |    |
| 27 | 0  | -2 | -1 | 0  | 0  | 0   | 0 | 0   | 0   | -1 | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0   | 2   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1 | 0  | -1 | 0  |    |
| 28 | 0  | 1  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  |    |
| 29 | 3  | 12 | 0  | 3  | 1  | 1   | 0 | 2   | 1   | 0  | 1  | 0  | 2  | 4  | 1  | 0  | 2  | 2  | 3   | 4   | 0   | 0  | 1  | 4  | 0  | 1  | 8  | 0  | 1  | 2  | 3  | 2  | 0  |
| 30 | 2  | 0  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 2  | 15 | 0  | 0  | 1  | 0  | 0  | 0  | 1  | 0   | 1   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 31 | -4 | 10 | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 0  | 5  | 0  | 0  | 0  | -1 | 0  | 0  | -1 | 0   | 0   | -1  | 0  | 0  | -1 | -1 | 0  | 0  | 0  | 0  | 0  | 1  | 0  |    |
| 32 | 10 | 0  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 0  | 1  | -1 | 0  | -1 | -1 | 0  | -1 | -1 | -1  | -1  | 1   | 0  | 0  | -1 | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |
| 33 | -1 | 0  | 0  | 0  | 0  | 0   | 0 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1 | 0  | 1   | -1  | 0   | 0  | 0  | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |    |

**AM HGVs % Demand Changes**

|    | 1   | 2   | 3 | 4   | 5 | 6 | 7 | 8 | 9 | 10  | 11  | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|-----|-----|---|-----|---|---|---|---|---|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | -   | 53% | - | 85% | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 2  | 93% | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 3  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 4  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 5  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 6  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 7  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 8  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 9  | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 10 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 11 | -   | -   | - | -   | - | - | - | - | - | -   | 45% | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 12 | -   | -   | - | -   | - | - | - | - | - | 70% | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 13 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 14 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 15 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 16 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 17 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 18 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 19 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 20 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 21 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 22 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 23 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 24 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 25 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 26 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 27 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 28 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 29 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 30 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 31 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 32 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 33 | -   | -   | - | -   | - | - | - | - | - | -   | -   | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |

*IP HGVs Demand Changes*

|    | 1  | 2  | 3  | 4  | 5  | 6   | 7  | 8  | 9   | 10 | 11  | 12  | 13 | 14 | 15 | 16  | 17  | 18 | 19 | 20  | 21 | 22  | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|----|----|----|----|----|-----|----|----|-----|----|-----|-----|----|----|----|-----|-----|----|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 1  | 9  | 0  | 3  | 0  | -1  | 0  | 0  | 0   | 2  | 3   | 2   | 2  | -2 | -2 | -1  | -2  | 5  | -3 | 1   | 0  | 0   | -1 | -2 | -4 | 0  | 9  | 0  | 1  | 4  | 2  | 0  | 0  |
| 2  | 86 | 0  | 1  | 0  | 0  | 1   | 0  | 0  | 0   | -1 | -1  | 1   | 0  | -3 | -2 | 0   | -2  | -2 | -4 | -3  | 1  | 0   | -1 | 0  | -2 | 0  | -1 | 0  | 9  | 0  | 1  | 0  | 0  |
| 3  | -1 | 2  | 0  | 0  | 0  | -1  | 0  | 0  | 0   | 0  | 0   | 1   | 0  | -2 | -1 | 0   | -1  | -2 | -2 | -2  | 0  | 0   | -1 | -1 | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 1  | 0  |
| 4  | 21 | 10 | 0  | 0  | 0  | 0   | 0  | 0  | 0   | 0  | 0   | 1   | 0  | 0  | 0  | 0   | 0   | 0  | 0  | -1  | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  |
| 5  | 0  | 0  | 0  | 0  | 0  | 4   | 0  | 1  | 3   | 0  | 0   | 0   | 0  | 3  | 1  | 0   | 0   | 2  | 6  | 3   | 0  | 2   | 6  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 6  | -2 | 1  | 0  | 1  | 20 | -26 | -1 | 3  | 0   | 0  | 2   | 1   | 1  | 1  | 0  | 0   | 0   | 0  | -1 | 0   | 0  | 0   | -1 | 0  | 0  | 0  | 3  | 0  | 0  | 0  | 0  | 2  | 0  |
| 7  | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 1  | 1   | 0  | 0   | 0   | 0  | 6  | 0  | 0   | 0   | 1  | -1 | -2  | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 8  | -1 | 0  | 0  | 0  | 1  | 1   | 0  | 3  | -14 | 0  | 0   | 0   | 0  | 7  | 0  | 0   | -9  | 0  | 0  | -18 | 0  | 0   | -2 | 3  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 9  | 0  | 0  | 0  | 0  | 7  | 0   | 0  | -7 | -2  | 0  | 0   | 0   | 0  | 3  | 1  | 0   | -3  | 1  | 3  | -7  | -1 | 1   | 3  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 10 | 1  | 0  | 0  | 0  | 0  | 0   | 0  | 0  | 0   | 25 | -17 | 0   | -9 | -1 | -1 | -9  | -5  | -2 | -1 | 0   | 0  | -10 | 0  | 0  | -1 | -1 | 0  | 0  | 0  | 0  | 0  | 0  |    |
| 11 | 3  | 0  | 0  | 1  | 1  | 1   | 0  | 0  | -1  | 13 | 0   | -16 | 3  | -5 | -3 | 0   | 0   | -3 | 1  | 0   | 1  | 0   | -1 | 0  | 0  | 3  | 2  | 0  | 0  | 3  | -1 | 0  | 0  |
| 12 | -1 | 0  | 0  | 1  | 0  | -1  | 0  | 0  | 0   | 3  | 6   | -1  | 1  | 3  | 0  | 0   | 2   | 1  | 10 | 1   | -1 | 0   | 14 | 0  | -1 | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  |
| 13 | 5  | -1 | 0  | 0  | 1  | 1   | 0  | 1  | 0   | 0  | 0   | 0   | 0  | 3  | 1  | 0   | 0   | 0  | 1  | 0   | 0  | 1   | 0  | 1  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  |
| 14 | -2 | -2 | -1 | 0  | 21 | 3   | 9  | 18 | 17  | -3 | -2  | 2   | 0  | 0  | 0  | -19 | -16 | 0  | 0  | 0   | 0  | 1   | 0  | -3 | -3 | 0  | 0  | 0  | 0  | -1 | -1 | -1 | 1  |
| 15 | -4 | -1 | 0  | 1  | 2  | 0   | 0  | 0  | 0   | -1 | -1  | 5   | 0  | 0  | 0  | 2   | 1   | 0  | 0  | 3   | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  |
| 16 | -1 | -1 | 0  | 0  | 3  | 0   | -1 | 1  | 0   | -1 | 0   | 0   | 1  | 9  | -1 | 0   | 0   | -1 | -2 | 1   | -1 | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 17 | -2 | -3 | -1 | 0  | 0  | 0   | 0  | 0  | -2  | -6 | 6   | 1   | 1  | 2  | -1 | 0   | 0   | -1 | -1 | 2   | -7 | 0   | -2 | -1 | 0  | 0  | 1  | 0  | 0  | 1  | -1 | 0  | -1 |
| 18 | -2 | -2 | -1 | 0  | 4  | 0   | 0  | 3  | 0   | -2 | -4  | 3   | 0  | 0  | 0  | 2   | 1   | 0  | 0  | 3   | 0  | 0   | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | -1 | 0  |
| 19 | -7 | -3 | -2 | 2  | 12 | -2  | -1 | 1  | 1   | -1 | -2  | 24  | 1  | 0  | 0  | 2   | 1   | 0  | 0  | 3   | 0  | 1   | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 3  | -2 | 0  | 0  |
| 20 | 3  | -1 | -1 | 0  | 3  | 0   | -2 | 0  | -3  | -3 | -4  | 1   | 0  | 0  | -1 | -5  | -7  | 0  | -1 | 0   | -2 | 2   | 0  | -2 | -1 | 0  | 2  | 0  | 2  | 0  | 1  | 0  | -1 |
| 21 | -2 | 0  | 0  | 0  | 0  | 0   | 0  | 0  | -1  | -4 | -1  | 0   | 0  | 0  | 0  | -9  | 0   | 0  | 0  | -7  | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 22 | -1 | 0  | 0  | 0  | 6  | 0   | 0  | 0  | 0   | -1 | 3   | 1   | 0  | 0  | 0  | 7   | 0   | 0  | 3  | 0   | 0  | 0   | 0  | 1  | 0  | 1  | 2  | 0  | 0  | 0  | 0  | 0  | 0  |
| 23 | -1 | 0  | 0  | 0  | 9  | 0   | 0  | 1  | 1   | 0  | 3   | 0   | 0  | 0  | 0  | -31 | 0   | 0  | -3 | 0   | 1  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 24 | -1 | -1 | -1 | 0  | 0  | -1  | -1 | 1  | 3   | 0  | -1  | 2   | 1  | 3  | 0  | 2   | 0   | 0  | 6  | 0   | 0  | 0   | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1 | 0  | -1 |
| 25 | -8 | -3 | 0  | 0  | 2  | 0   | 0  | 1  | 0   | -1 | 0   | 0   | 2  | 1  | 0  | 0   | 0   | 0  | 1  | 0   | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 1  | -1 | -1 | 0  | 0  |
| 26 | 7  | 0  | 0  | 0  | 1  | 0   | 0  | 1  | 0   | 0  | 1   | -3  | 0  | 0  | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0  | 2  | 0  | 1  | 0  | 2  | 0  | 0  |
| 27 | 1  | -2 | 0  | -3 | 1  | 1   | -1 | 1  | 0   | -2 | 0   | 1   | 1  | 1  | 0  | 0   | 0   | 0  | 0  | 1   | 0  | 0   | 0  | 1  | 0  | 0  | 0  | 2  | 0  | -1 | -1 | 0  | 0  |
| 28 | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| 29 | 0  | 5  | 0  | 2  | 1  | 0   | 0  | 0  | 0   | 0  | 0   | 1   | 2  | 0  | 0  | 0   | 1   | 1  | 0  | 4   | 0  | 0   | 0  | 1  | 0  | 1  | 5  | 0  | 1  | 2  | 2  | 0  | 0  |
| 30 | -1 | -1 | 0  | 0  | 0  | 0   | 0  | 0  | 0   | 0  | 4   | 1   | 0  | 1  | 0  | 0   | 1   | 1  | 1  | 1   | 0  | 0   | -3 | 1  | 0  | 0  | 0  | 3  | 0  | 0  | 0  | 0  | 0  |
| 31 | 3  | 1  | 0  | 0  | 1  | 0   | 0  | 0  | 0   | -1 | -1  | -12 | 0  | 0  | 0  | -1  | 0   | 0  | 1  | -1  | 1  | 0   | 0  | 1  | -2 | 0  | -1 | 0  | 4  | 0  | 0  | 1  | 0  |
| 32 | 1  | 0  | 2  | 0  | 0  | 2   | 0  | 0  | 0   | 0  | 0   | 0   | 0  | -1 | -1 | 0   | -1  | -1 | -1 | -2  | 2  | 1   | 0  | -1 | -1 | 0  | -1 | 0  | 0  | 2  | 0  | 1  | 0  |
| 33 | 0  | 1  | 0  | 0  | 0  | 0   | 0  | 0  | 0   | 0  | 0   | 1   | 0  | 1  | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 1  | 0  |

**IP HGVs % Demand Changes**

|    | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|-----|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 2  | 94% | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 3  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 4  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 5  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 6  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 7  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 8  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 9  | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 10 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 11 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 12 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 13 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 14 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 15 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 16 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 17 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 18 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 19 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 20 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 21 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 22 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 23 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 24 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 25 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 26 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 27 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 28 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 29 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 30 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 31 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 32 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 33 | -   | - | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |

**PM HGVs Demand Changes**

|    | 1 | 2   | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|---|-----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | - | 17% | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 2  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 3  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 4  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 5  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 6  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 7  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 8  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 9  | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 10 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 11 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 12 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 13 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 14 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 15 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 16 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 17 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 18 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 19 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 20 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 21 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 22 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 23 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 24 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 25 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 26 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 27 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 28 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 29 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 30 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 31 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 32 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |
| 33 | - | -   | - | - | - | - | - | - | - | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  | -  |

**PM HGVs Demand % Changes**

|    | 1   | 2   | 3  | 4  | 5  | 6  | 7  | 8   | 9  | 10  | 11 | 12 | 13 | 14  | 15  | 16 | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |   |
|----|-----|-----|----|----|----|----|----|-----|----|-----|----|----|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|---|
| 1  | 0   | 44  | 0  | 0  | 0  | 5  | 0  | 1   | 0  | -1  | -1 | 1  | 2  | 0   | -1  | -1 | 5   | 3   | 0   | 21  | 0   | 0   | 0   | 1  | -3 | 1  | 5  | 0  | 1  | 0  | 0  | 0  | 0  |   |
| 2  | -12 | -46 | 0  | 0  | 0  | 0  | 0  | 0   | 0  | -1  | 0  | 2  | 0  | 0   | 0   | 0  | 2   | 0   | -1  | -1  | 0   | 0   | 0   | 1  | -1 | 0  | 0  | 22 | 0  | 0  | 0  | 0  |    |   |
| 3  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 1   | 0  | 0   | 0  | 1  | 0  | -1  | -1  | 0  | -1  | -1  | -2  | -2  | 0   | 1   | 0   | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |   |
| 4  | 0   | 0   | 0  | 0  | 0  | 1  | 0  | 1   | 0  | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 1   | 0   | 1   | -1  | 0   | 0   | 0   | 1  | -1 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 5  | 0   | 0   | 0  | 0  | 0  | 7  | 0  | 1   | 5  | 0   | 0  | 0  | 0  | 2   | 1   | 1  | 0   | 2   | 2   | 2   | 2   | 0   | 4   | 4  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0 |
| 6  | -3  | -1  | 0  | 0  | 11 | -8 | 0  | 2   | 0  | 0   | 0  | 1  | 0  | 20  | 0   | 0  | -6  | 0   | -1  | 0   | 0   | 0   | 0   | 0  | 0  | 0  | -1 | 0  | 0  | 0  | 1  | 0  | 0  |   |
| 7  | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 1   | 2  | 0   | 0  | 0  | 0  | 5   | 0   | 0  | 0   | 2   | -1  | -1  | 0   | 0   | 0   | 0  | 0  | 0  | -1 | 0  | 0  | 0  | 0  | 0  | 0  |   |
| 8  | -1  | 0   | 0  | 0  | 0  | 10 | 0  | 14  | 3  | 0   | 0  | 0  | 0  | 1   | 0   | 0  | -5  | 1   | 0   | -18 | -19 | 0   | -2  | 23 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1 |
| 9  | 0   | 0   | 0  | 0  | -4 | 0  | 0  | -11 | 0  | 0   | 0  | 0  | 0  | -1  | 0   | 0  | -1  | -1  | -2  | -10 | -2  | 0   | -1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 10 | -1  | 0   | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0   | 14 | 0  | 0  | -12 | -2  | 0  | 1   | -2  | -1  | 0   | 0   | 0   | -1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -5 | 0  | 0 |
| 11 | -2  | 0   | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 3   | 0  | -7 | 0  | -11 | -6  | 0  | 2   | -10 | -17 | -7  | -1  | -1  | -1  | -1 | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  |   |
| 12 | 0   | 1   | 0  | 1  | 0  | 3  | 0  | 2   | 0  | -2  | 2  | 0  | 0  | 11  | 3   | 0  | 0   | 2   | 8   | 0   | 0   | 2   | 1   | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 13 | 0   | 0   | 0  | 0  | 0  | 1  | 0  | 1   | 0  | 0   | 0  | 0  | 0  | 2   | 1   | 0  | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 14 | -2  | 0   | -1 | 0  | -1 | 0  | -2 | -1  | 2  | -3  | -2 | 2  | 5  | 0   | 0   | -2 | -2  | 0   | 0   | 0   | 0   | 0   | 0   | 7  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 15 | -2  | 0   | 0  | 0  | 2  | -1 | 0  | 0   | 0  | -1  | -1 | 1  | 1  | 0   | 0   | -2 | 0   | 0   | 0   | -15 | 0   | 0   | 0   | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 16 | -1  | 0   | 0  | 0  | 3  | 1  | 0  | 0   | 0  | 0   | 0  | 1  | 3  | -1  | 0   | 0  | -3  | -4  | -3  | -1  | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | -1 | -1 | -1 | 0  | 0 |
| 17 | 0   | -1  | -1 | 0  | 2  | -4 | 0  | 3   | 0  | -7  | 0  | 0  | 1  | 1   | -1  | 0  | 0   | -1  | -2  | -2  | -9  | -10 | -12 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | -1 | -1 | 0  | 0 |
| 18 | -1  | 0   | -1 | -1 | -4 | -1 | 0  | 0   | -2 | -3  | 0  | 1  | 0  | 0   | -1  | 0  | 0   | 0   | 0   | -12 | 0   | 0   | 0   | 0  | 0  | 1  | -1 | 0  | 0  | -1 | -1 | 0  | 0  | 0 |
| 19 | -5  | 0   | -1 | -1 | 11 | -1 | -1 | 1   | 1  | 0   | -3 | 5  | 1  | 0   | 0   | -1 | -1  | 0   | 0   | -4  | 0   | 0   | 0   | 3  | 0  | 3  | 1  | 0  | -1 | -1 | -1 | -1 | 0  | 0 |
| 20 | 2   | 0   | -1 | 0  | 2  | 0  | -2 | 6   | 0  | -14 | -2 | 0  | 2  | 0   | -11 | -3 | -3  | -8  | -5  | 0   | -12 | -3  | 0   | 0  | -1 | 0  | 0  | 0  | 1  | -1 | 0  | 0  | 0  | 0 |
| 21 | -1  | 0   | 0  | 0  | 0  | 0  | 0  | -2  | 0  | 0   | -1 | 0  | 0  | 0   | 0   | 0  | -4  | 0   | 0   | -3  | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | -1 | 0  | 0  | 0  | 0  | 0 |
| 22 | -1  | 0   | 0  | 0  | 8  | 0  | 0  | 0   | 0  | 0   | 0  | 1  | 0  | 0   | 0   | 0  | -14 | 0   | 0   | -9  | 0   | 0   | 0   | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 23 | -1  | 0   | 0  | 0  | 5  | 0  | 0  | 0   | 1  | 0   | 0  | 1  | 0  | 0   | 0   | 0  | -3  | 0   | 0   | -1  | 0   | 0   | 0   | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 24 | -1  | 0   | -1 | -1 | 0  | 0  | 0  | 8   | 7  | 0   | 0  | 0  | 0  | 1   | 0   | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | -1 | 0  | 0  | 0  | 0  | -1 | 0  | 0  | 0  | 0  | 0 |
| 25 | -5  | -1  | 0  | -1 | 2  | 0  | 0  | 2   | 0  | 0   | 1  | 0  | 1  | 0   | 0   | 0  | 0   | -1  | 0   | -17 | 0   | 0   | 0   | 0  | 0  | 0  | -1 | 0  | 0  | -4 | -1 | -1 | 0  | 0 |
| 26 | 2   | 0   | 0  | 0  | 1  | 1  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0   | 2   | 0  | 0   | 1   | 5   | 0   | 0   | 0   | 1   | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0 |
| 27 | 0   | 0   | 0  | 0  | 1  | 3  | 0  | 3   | 0  | -1  | -1 | 0  | 0  | 0   | 0   | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0 |
| 28 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 29 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 1  | 0   | 0   | 0  | 0   | 0   | 0   | 2   | 0   | 0   | 0   | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 30 | -1  | 0   | 0  | 0  | 0  | 2  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 0   | 0   | 0   | -1  | 0   | 0   | 0   | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 31 | 0   | 0   | 1  | 0  | 0  | 5  | 0  | 1   | 0  | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | -1 | 0  | 1  | 0  | 0  | 0  | 0  | 6  | 0  | 0 |
| 32 | 0   | 0   | 2  | 0  | 0  | 5  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0   | 0   | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| 33 | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 1   | 0   | 0  | 0   | 0   | 0   | -1  | 0   | 0   | 0   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |





Cars - AM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL  | GEH | PASS /FAIL  |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|-------------|-----|-------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 1,949         | 1,950         | 7               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1B             | Inbound          | Calibration       | Yes      | 3,232         | 3,234         | 10              | 100%                 | 2                 | 0%           | PASS        | 0   | PASS        |
| SL_1C             | Inbound          | Calibration       | Yes      | 2,767         | 2,767         | 7               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1D             | Inbound          | Calibration       |          | 1,938         | 1,937         | 4               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_1E             | Inbound          | Calibration       |          | 2,181         | 2,181         | 9               | 89%                  | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_2A             | Inbound          | Calibration       |          | 417           | 418           | 2               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_5A             | Inbound          | Calibration       | Yes      | 2,186         | 2,187         | 5               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_7A             | Inbound          | Model Development | Yes      | 3,769         | 3,769         | 8               | 75%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_7B             | Inbound          | Model Development |          | 4,033         | 4,033         | 10              | 90%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_8A             | Inbound          | Calibration       |          | 702           | 703           | 3               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_11A            | Inbound          | Calibration       | Yes      | 4,217         | 4,251         | 13              | 100%                 | 34                | 1%           | PASS        | 1   | PASS        |
| SL_11B            | Inbound          | Calibration       |          | 2,599         | 2,599         | 3               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_13A            | Inbound          | Calibration       |          | 2,295         | 2,298         | 7               | 57%                  | 3                 | 0%           | PASS        | 0   | PASS        |
| SL_15A            | Inbound          | Calibration       |          | 2,241         | 2,240         | 5               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_16A            | Inbound          | Calibration       |          | 2,933         | 2,935         | 10              | 100%                 | 2                 | 0%           | PASS        | 0   | PASS        |
| SL_17A            | Inbound          | Calibration       |          | 3,817         | 3,877         | 4               | 100%                 | 60                | 2%           | PASS        | 1   | PASS        |
| SL_1A             | Outbound         | Calibration       | Yes      | 2,070         | 2,069         | 7               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_1B             | Outbound         | Calibration       | Yes      | 3,281         | 3,276         | 10              | 100%                 | -6                | 0%           | PASS        | 0   | PASS        |
| SL_1C             | Outbound         | Calibration       | Yes      | 2,641         | 2,642         | 7               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_1D             | Outbound         | Calibration       |          | 1,996         | 1,996         | 4               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1E             | Outbound         | Calibration       |          | 2,268         | 2,267         | 9               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_2A             | Outbound         | Calibration       |          | 532           | 532           | 2               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_5A             | Outbound         | Calibration       | Yes      | 2,271         | 2,271         | 5               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_7A             | Outbound         | Model Development | Yes      | 3,670         | 3,668         | 8               | 100%                 | -2                | 0%           | PASS        | 0   | PASS        |
| SL_7B             | Outbound         | Model Development |          | 4,114         | 4,114         | 10              | 90%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_8A             | Outbound         | Calibration       |          | 627           | 627           | 3               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_11A            | Outbound         | Calibration       | Yes      | 4,009         | 4,024         | 13              | 85%                  | 15                | 0%           | PASS        | 0   | PASS        |
| SL_11B            | Outbound         | Calibration       |          | 2,655         | 2,656         | 3               | 67%                  | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_13A            | Outbound         | Calibration       |          | 2,214         | 2,175         | 8               | 88%                  | -39               | -2%          | PASS        | 1   | PASS        |
| SL_15A            | Outbound         | Calibration       |          | 2,307         | 2,357         | 5               | 80%                  | 50                | 2%           | PASS        | 1   | PASS        |
| SL_16A            | Outbound         | Calibration       |          | 2,669         | 2,577         | 10              | 90%                  | -92               | -3%          | PASS        | 2   | PASS        |
| SL_17A            | Outbound         | Calibration       |          | 4,599         | 4,600         | 4               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>100%</b> |     | <b>100%</b> |

LGV - AM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL  |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|-------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 287           | 261           | 7               | 100%                 | -26               | -9%          | FAIL       | 2   | PASS        |
| SL_1B             | Inbound          | Calibration       | Yes      | 515           | 501           | 10              | 100%                 | -14               | -3%          | PASS       | 1   | PASS        |
| SL_1C             | Inbound          | Calibration       | Yes      | 406           | 425           | 7               | 100%                 | 18                | 4%           | PASS       | 1   | PASS        |
| SL_1D             | Inbound          | Calibration       |          | 328           | 315           | 4               | 100%                 | -13               | -4%          | PASS       | 1   | PASS        |
| SL_1E             | Inbound          | Calibration       |          | 321           | 325           | 9               | 100%                 | 4                 | 1%           | PASS       | 0   | PASS        |
| SL_2A             | Inbound          | Calibration       |          | 65            | 68            | 2               | 100%                 | 3                 | 5%           | PASS       | 0   | PASS        |
| SL_5A             | Inbound          | Calibration       | Yes      | 352           | 348           | 5               | 100%                 | -4                | -1%          | PASS       | 0   | PASS        |
| SL_7A             | Inbound          | Model Development | Yes      | 502           | 552           | 8               | 100%                 | 50                | 10%          | FAIL       | 2   | PASS        |
| SL_7B             | Inbound          | Model Development |          | 586           | 616           | 10              | 100%                 | 29                | 5%           | PASS       | 1   | PASS        |
| SL_8A             | Inbound          | Calibration       |          | 99            | 88            | 3               | 100%                 | -11               | -11%         | FAIL       | 1   | PASS        |
| SL_11A            | Inbound          | Calibration       | Yes      | 558           | 587           | 13              | 100%                 | 30                | 5%           | PASS       | 1   | PASS        |
| SL_11B            | Inbound          | Calibration       |          | 319           | 326           | 3               | 100%                 | 7                 | 2%           | PASS       | 0   | PASS        |
| SL_13A            | Inbound          | Calibration       |          | 365           | 365           | 7               | 100%                 | -1                | 0%           | PASS       | 0   | PASS        |
| SL_15A            | Inbound          | Calibration       |          | 328           | 339           | 5               | 100%                 | 11                | 3%           | PASS       | 1   | PASS        |
| SL_16A            | Inbound          | Calibration       |          | 328           | 322           | 10              | 100%                 | -6                | -2%          | PASS       | 0   | PASS        |
| SL_17A            | Inbound          | Calibration       |          | 634           | 636           | 4               | 100%                 | 2                 | 0%           | PASS       | 0   | PASS        |
| SL_1A             | Outbound         | Calibration       | Yes      | 320           | 317           | 7               | 100%                 | -3                | -1%          | PASS       | 0   | PASS        |
| SL_1B             | Outbound         | Calibration       | Yes      | 523           | 494           | 10              | 100%                 | -30               | -6%          | FAIL       | 1   | PASS        |
| SL_1C             | Outbound         | Calibration       | Yes      | 396           | 385           | 7               | 100%                 | -11               | -3%          | PASS       | 1   | PASS        |
| SL_1D             | Outbound         | Calibration       |          | 336           | 353           | 4               | 100%                 | 17                | 5%           | PASS       | 1   | PASS        |
| SL_1E             | Outbound         | Calibration       |          | 325           | 316           | 9               | 100%                 | -8                | -3%          | PASS       | 0   | PASS        |
| SL_2A             | Outbound         | Calibration       |          | 83            | 87            | 2               | 100%                 | 4                 | 4%           | PASS       | 0   | PASS        |
| SL_5A             | Outbound         | Calibration       | Yes      | 363           | 365           | 5               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS        |
| SL_7A             | Outbound         | Model Development | Yes      | 495           | 545           | 8               | 100%                 | 50                | 10%          | FAIL       | 2   | PASS        |
| SL_7B             | Outbound         | Model Development |          | 584           | 630           | 10              | 100%                 | 46                | 8%           | FAIL       | 2   | PASS        |
| SL_8A             | Outbound         | Calibration       |          | 79            | 59            | 3               | 100%                 | -20               | -25%         | FAIL       | 2   | PASS        |
| SL_11A            | Outbound         | Calibration       | Yes      | 566           | 502           | 13              | 100%                 | -64               | -11%         | FAIL       | 3   | PASS        |
| SL_11B            | Outbound         | Calibration       |          | 325           | 360           | 3               | 100%                 | 35                | 11%          | FAIL       | 2   | PASS        |
| SL_13A            | Outbound         | Calibration       |          | 381           | 374           | 8               | 100%                 | -7                | -2%          | PASS       | 0   | PASS        |
| SL_15A            | Outbound         | Calibration       |          | 333           | 322           | 5               | 80%                  | -11               | -3%          | PASS       | 1   | PASS        |
| SL_16A            | Outbound         | Calibration       |          | 302           | 306           | 10              | 90%                  | 4                 | 1%           | PASS       | 0   | PASS        |
| SL_17A            | Outbound         | Calibration       |          | 764           | 785           | 4               | 100%                 | 21                | 3%           | PASS       | 1   | PASS        |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>72%</b> |     | <b>100%</b> |

HGV - AM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 217           | 217           | 7               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Inbound          | Calibration       | Yes      | 565           | 608           | 10              | 100%                 | 43                | 8%           | FAIL       | 2   | PASS       |
| SL_1C             | Inbound          | Calibration       | Yes      | 490           | 490           | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1D             | Inbound          | Calibration       |          | 302           | 289           | 4               | 100%                 | -14               | -4%          | PASS       | 1   | PASS       |
| SL_1E             | Inbound          | Calibration       |          | 181           | 162           | 9               | 100%                 | -19               | -11%         | FAIL       | 1   | PASS       |
| SL_2A             | Inbound          | Calibration       |          | 70            | 69            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Inbound          | Calibration       | Yes      | 312           | 310           | 5               | 100%                 | -2                | -1%          | PASS       | 0   | PASS       |
| SL_7A             | Inbound          | Model Development | Yes      | 210           | 219           | 8               | 100%                 | 8                 | 4%           | PASS       | 1   | PASS       |
| SL_7B             | Inbound          | Model Development |          | 290           | 304           | 10              | 100%                 | 13                | 5%           | PASS       | 1   | PASS       |
| SL_8A             | Inbound          | Calibration       |          | 81            | 59            | 3               | 100%                 | -22               | -27%         | FAIL       | 3   | PASS       |
| SL_11A            | Inbound          | Calibration       | Yes      | 396           | 363           | 13              | 100%                 | -33               | -8%          | FAIL       | 2   | PASS       |
| SL_11B            | Inbound          | Calibration       |          | 181           | 181           | 3               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Inbound          | Calibration       |          | 120           | 122           | 7               | 100%                 | 2                 | 2%           | PASS       | 0   | PASS       |
| SL_15A            | Inbound          | Calibration       |          | 319           | 310           | 5               | 100%                 | -9                | -3%          | PASS       | 0   | PASS       |
| SL_16A            | Inbound          | Calibration       |          | 252           | 262           | 10              | 100%                 | 9                 | 4%           | PASS       | 1   | PASS       |
| SL_17A            | Inbound          | Calibration       |          | 774           | 776           | 4               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1A             | Outbound         | Calibration       | Yes      | 200           | 199           | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Outbound         | Calibration       | Yes      | 563           | 524           | 10              | 100%                 | -39               | -7%          | FAIL       | 2   | PASS       |
| SL_1C             | Outbound         | Calibration       | Yes      | 427           | 417           | 7               | 100%                 | -10               | -2%          | PASS       | 0   | PASS       |
| SL_1D             | Outbound         | Calibration       |          | 336           | 352           | 4               | 100%                 | 17                | 5%           | PASS       | 1   | PASS       |
| SL_1E             | Outbound         | Calibration       |          | 190           | 178           | 9               | 100%                 | -12               | -7%          | FAIL       | 1   | PASS       |
| SL_2A             | Outbound         | Calibration       |          | 77            | 77            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Outbound         | Calibration       | Yes      | 227           | 227           | 5               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_7A             | Outbound         | Model Development | Yes      | 202           | 203           | 8               | 100%                 | 1                 | 1%           | PASS       | 0   | PASS       |
| SL_7B             | Outbound         | Model Development |          | 308           | 315           | 10              | 100%                 | 6                 | 2%           | PASS       | 0   | PASS       |
| SL_8A             | Outbound         | Calibration       |          | 50            | 50            | 3               | 100%                 | 0                 | -1%          | PASS       | 0   | PASS       |
| SL_11A            | Outbound         | Calibration       | Yes      | 399           | 250           | 13              | 100%                 | -148              | -37%         | FAIL       | 8   | FAIL       |
| SL_11B            | Outbound         | Calibration       |          | 170           | 170           | 3               | 100%                 | -1                | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Outbound         | Calibration       |          | 142           | 138           | 8               | 100%                 | -4                | -3%          | PASS       | 0   | PASS       |
| SL_15A            | Outbound         | Calibration       |          | 351           | 345           | 5               | 80%                  | -6                | -2%          | PASS       | 0   | PASS       |
| SL_16A            | Outbound         | Calibration       |          | 298           | 285           | 10              | 90%                  | -13               | -4%          | PASS       | 1   | PASS       |
| SL_17A            | Outbound         | Calibration       |          | 882           | 883           | 4               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>78%</b> |     | <b>97%</b> |

Cars - IP Average Peak Hour

| Screenline Number | Inbound/ Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL  | GEH | PASS /FAIL  |
|-------------------|-------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|-------------|-----|-------------|
| SL_1A             | Inbound           | Calibration       | Yes      | 1,949         | 1,950         | 7               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1B             | Inbound           | Calibration       | Yes      | 3,232         | 3,234         | 10              | 100%                 | 2                 | 0%           | PASS        | 0   | PASS        |
| SL_1C             | Inbound           | Calibration       | Yes      | 2,767         | 2,767         | 7               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1D             | Inbound           | Calibration       |          | 1,938         | 1,937         | 4               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_1E             | Inbound           | Calibration       |          | 2,181         | 2,181         | 9               | 89%                  | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_2A             | Inbound           | Calibration       |          | 417           | 418           | 2               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_5A             | Inbound           | Calibration       | Yes      | 2,186         | 2,187         | 5               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_7A             | Inbound           | Model Development | Yes      | 3,769         | 3,769         | 8               | 75%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_7B             | Inbound           | Model Development |          | 4,033         | 4,033         | 10              | 90%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_8A             | Inbound           | Calibration       |          | 702           | 703           | 3               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_11A            | Inbound           | Calibration       | Yes      | 4,217         | 4,251         | 13              | 100%                 | 34                | 1%           | PASS        | 1   | PASS        |
| SL_11B            | Inbound           | Calibration       |          | 2,599         | 2,599         | 3               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_13A            | Inbound           | Calibration       |          | 2,295         | 2,298         | 7               | 57%                  | 3                 | 0%           | PASS        | 0   | PASS        |
| SL_15A            | Inbound           | Calibration       |          | 2,241         | 2,240         | 5               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_16A            | Inbound           | Calibration       |          | 2,933         | 2,935         | 10              | 100%                 | 2                 | 0%           | PASS        | 0   | PASS        |
| SL_17A            | Inbound           | Calibration       |          | 3,817         | 3,877         | 4               | 100%                 | 60                | 2%           | PASS        | 1   | PASS        |
| SL_1A             | Outbound          | Calibration       | Yes      | 2,070         | 2,069         | 7               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_1B             | Outbound          | Calibration       | Yes      | 3,281         | 3,276         | 10              | 100%                 | -6                | 0%           | PASS        | 0   | PASS        |
| SL_1C             | Outbound          | Calibration       | Yes      | 2,641         | 2,642         | 7               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_1D             | Outbound          | Calibration       |          | 1,996         | 1,996         | 4               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_1E             | Outbound          | Calibration       |          | 2,268         | 2,267         | 9               | 100%                 | -1                | 0%           | PASS        | 0   | PASS        |
| SL_2A             | Outbound          | Calibration       |          | 532           | 532           | 2               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_5A             | Outbound          | Calibration       | Yes      | 2,271         | 2,271         | 5               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_7A             | Outbound          | Model Development | Yes      | 3,670         | 3,668         | 8               | 100%                 | -2                | 0%           | PASS        | 0   | PASS        |
| SL_7B             | Outbound          | Model Development |          | 4,114         | 4,114         | 10              | 90%                  | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_8A             | Outbound          | Calibration       |          | 627           | 627           | 3               | 100%                 | 0                 | 0%           | PASS        | 0   | PASS        |
| SL_11A            | Outbound          | Calibration       | Yes      | 4,009         | 4,024         | 13              | 85%                  | 15                | 0%           | PASS        | 0   | PASS        |
| SL_11B            | Outbound          | Calibration       |          | 2,655         | 2,656         | 3               | 67%                  | 1                 | 0%           | PASS        | 0   | PASS        |
| SL_13A            | Outbound          | Calibration       |          | 2,214         | 2,175         | 8               | 88%                  | -39               | -2%          | PASS        | 1   | PASS        |
| SL_15A            | Outbound          | Calibration       |          | 2,307         | 2,357         | 5               | 80%                  | 50                | 2%           | PASS        | 1   | PASS        |
| SL_16A            | Outbound          | Calibration       |          | 2,669         | 2,577         | 10              | 90%                  | -92               | -3%          | PASS        | 2   | PASS        |
| SL_17A            | Outbound          | Calibration       |          | 4,599         | 4,600         | 4               | 100%                 | 1                 | 0%           | PASS        | 0   | PASS        |
| <b>Total</b>      |                   |                   |          |               |               |                 |                      |                   |              | <b>100%</b> |     | <b>100%</b> |

LGV - IP Average Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL  |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|-------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 287           | 261           | 7               | 100%                 | -26               | -9%          | FAIL       | 2   | PASS        |
| SL_1B             | Inbound          | Calibration       | Yes      | 515           | 501           | 10              | 100%                 | -14               | -3%          | PASS       | 1   | PASS        |
| SL_1C             | Inbound          | Calibration       | Yes      | 406           | 425           | 7               | 100%                 | 18                | 4%           | PASS       | 1   | PASS        |
| SL_1D             | Inbound          | Calibration       |          | 328           | 315           | 4               | 100%                 | -13               | -4%          | PASS       | 1   | PASS        |
| SL_1E             | Inbound          | Calibration       |          | 321           | 325           | 9               | 100%                 | 4                 | 1%           | PASS       | 0   | PASS        |
| SL_2A             | Inbound          | Calibration       |          | 65            | 68            | 2               | 100%                 | 3                 | 5%           | PASS       | 0   | PASS        |
| SL_5A             | Inbound          | Calibration       | Yes      | 352           | 348           | 5               | 100%                 | -4                | -1%          | PASS       | 0   | PASS        |
| SL_7A             | Inbound          | Model Development | Yes      | 502           | 552           | 8               | 100%                 | 50                | 10%          | FAIL       | 2   | PASS        |
| SL_7B             | Inbound          | Model Development |          | 586           | 616           | 10              | 100%                 | 29                | 5%           | PASS       | 1   | PASS        |
| SL_8A             | Inbound          | Calibration       |          | 99            | 88            | 3               | 100%                 | -11               | -11%         | FAIL       | 1   | PASS        |
| SL_11A            | Inbound          | Calibration       | Yes      | 558           | 587           | 13              | 100%                 | 30                | 5%           | PASS       | 1   | PASS        |
| SL_11B            | Inbound          | Calibration       |          | 319           | 326           | 3               | 100%                 | 7                 | 2%           | PASS       | 0   | PASS        |
| SL_13A            | Inbound          | Calibration       |          | 365           | 365           | 7               | 100%                 | -1                | 0%           | PASS       | 0   | PASS        |
| SL_15A            | Inbound          | Calibration       |          | 328           | 339           | 5               | 100%                 | 11                | 3%           | PASS       | 1   | PASS        |
| SL_16A            | Inbound          | Calibration       |          | 328           | 322           | 10              | 100%                 | -6                | -2%          | PASS       | 0   | PASS        |
| SL_17A            | Inbound          | Calibration       |          | 634           | 636           | 4               | 100%                 | 2                 | 0%           | PASS       | 0   | PASS        |
| SL_1A             | Outbound         | Calibration       | Yes      | 320           | 317           | 7               | 100%                 | -3                | -1%          | PASS       | 0   | PASS        |
| SL_1B             | Outbound         | Calibration       | Yes      | 523           | 494           | 10              | 100%                 | -30               | -6%          | FAIL       | 1   | PASS        |
| SL_1C             | Outbound         | Calibration       | Yes      | 396           | 385           | 7               | 100%                 | -11               | -3%          | PASS       | 1   | PASS        |
| SL_1D             | Outbound         | Calibration       |          | 336           | 353           | 4               | 100%                 | 17                | 5%           | PASS       | 1   | PASS        |
| SL_1E             | Outbound         | Calibration       |          | 325           | 316           | 9               | 100%                 | -8                | -3%          | PASS       | 0   | PASS        |
| SL_2A             | Outbound         | Calibration       |          | 83            | 87            | 2               | 100%                 | 4                 | 4%           | PASS       | 0   | PASS        |
| SL_5A             | Outbound         | Calibration       | Yes      | 363           | 365           | 5               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS        |
| SL_7A             | Outbound         | Model Development | Yes      | 495           | 545           | 8               | 100%                 | 50                | 10%          | FAIL       | 2   | PASS        |
| SL_7B             | Outbound         | Model Development |          | 584           | 630           | 10              | 100%                 | 46                | 8%           | FAIL       | 2   | PASS        |
| SL_8A             | Outbound         | Calibration       |          | 79            | 59            | 3               | 100%                 | -20               | -25%         | FAIL       | 2   | PASS        |
| SL_11A            | Outbound         | Calibration       | Yes      | 566           | 502           | 13              | 100%                 | -64               | -11%         | FAIL       | 3   | PASS        |
| SL_11B            | Outbound         | Calibration       |          | 325           | 360           | 3               | 100%                 | 35                | 11%          | FAIL       | 2   | PASS        |
| SL_13A            | Outbound         | Calibration       |          | 381           | 374           | 8               | 100%                 | -7                | -2%          | PASS       | 0   | PASS        |
| SL_15A            | Outbound         | Calibration       |          | 333           | 322           | 5               | 80%                  | -11               | -3%          | PASS       | 1   | PASS        |
| SL_16A            | Outbound         | Calibration       |          | 302           | 306           | 10              | 90%                  | 4                 | 1%           | PASS       | 0   | PASS        |
| SL_17A            | Outbound         | Calibration       |          | 764           | 785           | 4               | 100%                 | 21                | 3%           | PASS       | 1   | PASS        |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>72%</b> |     | <b>100%</b> |

HGV - IP Average Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 217           | 217           | 7               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Inbound          | Calibration       | Yes      | 565           | 608           | 10              | 100%                 | 43                | 8%           | FAIL       | 2   | PASS       |
| SL_1C             | Inbound          | Calibration       | Yes      | 490           | 490           | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1D             | Inbound          | Calibration       |          | 302           | 289           | 4               | 100%                 | -14               | -4%          | PASS       | 1   | PASS       |
| SL_1E             | Inbound          | Calibration       |          | 181           | 162           | 9               | 100%                 | -19               | -11%         | FAIL       | 1   | PASS       |
| SL_2A             | Inbound          | Calibration       |          | 70            | 69            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Inbound          | Calibration       | Yes      | 312           | 310           | 5               | 100%                 | -2                | -1%          | PASS       | 0   | PASS       |
| SL_7A             | Inbound          | Model Development | Yes      | 210           | 219           | 8               | 100%                 | 8                 | 4%           | PASS       | 1   | PASS       |
| SL_7B             | Inbound          | Model Development |          | 290           | 304           | 10              | 100%                 | 13                | 5%           | PASS       | 1   | PASS       |
| SL_8A             | Inbound          | Calibration       |          | 81            | 59            | 3               | 100%                 | -22               | -27%         | FAIL       | 3   | PASS       |
| SL_11A            | Inbound          | Calibration       | Yes      | 396           | 363           | 13              | 100%                 | -33               | -8%          | FAIL       | 2   | PASS       |
| SL_11B            | Inbound          | Calibration       |          | 181           | 181           | 3               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Inbound          | Calibration       |          | 120           | 122           | 7               | 100%                 | 2                 | 2%           | PASS       | 0   | PASS       |
| SL_15A            | Inbound          | Calibration       |          | 319           | 310           | 5               | 100%                 | -9                | -3%          | PASS       | 0   | PASS       |
| SL_16A            | Inbound          | Calibration       |          | 252           | 262           | 10              | 100%                 | 9                 | 4%           | PASS       | 1   | PASS       |
| SL_17A            | Inbound          | Calibration       |          | 774           | 776           | 4               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1A             | Outbound         | Calibration       | Yes      | 200           | 199           | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Outbound         | Calibration       | Yes      | 563           | 524           | 10              | 100%                 | -39               | -7%          | FAIL       | 2   | PASS       |
| SL_1C             | Outbound         | Calibration       | Yes      | 427           | 417           | 7               | 100%                 | -10               | -2%          | PASS       | 0   | PASS       |
| SL_1D             | Outbound         | Calibration       |          | 336           | 352           | 4               | 100%                 | 17                | 5%           | PASS       | 1   | PASS       |
| SL_1E             | Outbound         | Calibration       |          | 190           | 178           | 9               | 100%                 | -12               | -7%          | FAIL       | 1   | PASS       |
| SL_2A             | Outbound         | Calibration       |          | 77            | 77            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Outbound         | Calibration       | Yes      | 227           | 227           | 5               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_7A             | Outbound         | Model Development | Yes      | 202           | 203           | 8               | 100%                 | 1                 | 1%           | PASS       | 0   | PASS       |
| SL_7B             | Outbound         | Model Development |          | 308           | 315           | 10              | 100%                 | 6                 | 2%           | PASS       | 0   | PASS       |
| SL_8A             | Outbound         | Calibration       |          | 50            | 50            | 3               | 100%                 | 0                 | -1%          | PASS       | 0   | PASS       |
| SL_11A            | Outbound         | Calibration       | Yes      | 399           | 250           | 13              | 100%                 | -148              | -37%         | FAIL       | 8   | FAIL       |
| SL_11B            | Outbound         | Calibration       |          | 170           | 170           | 3               | 100%                 | -1                | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Outbound         | Calibration       |          | 142           | 138           | 8               | 100%                 | -4                | -3%          | PASS       | 0   | PASS       |
| SL_15A            | Outbound         | Calibration       |          | 351           | 345           | 5               | 80%                  | -6                | -2%          | PASS       | 0   | PASS       |
| SL_16A            | Outbound         | Calibration       |          | 298           | 285           | 10              | 90%                  | -13               | -4%          | PASS       | 1   | PASS       |
| SL_17A            | Outbound         | Calibration       |          | 882           | 883           | 4               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>78%</b> |     | <b>97%</b> |

Cars - PM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 3,182         | 3,183         | 7               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Inbound          | Calibration       | Yes      | 4,187         | 4,298         | 10              | 100%                 | 111               | 3%           | PASS       | 2   | PASS       |
| SL_1C             | Inbound          | Calibration       | Yes      | 5,079         | 5,079         | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1D             | Inbound          | Calibration       |          | 3,406         | 3,406         | 4               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1E             | Inbound          | Calibration       |          | 2,952         | 2,954         | 9               | 100%                 | 2                 | 0%           | PASS       | 0   | PASS       |
| SL_2A             | Inbound          | Calibration       |          | 707           | 707           | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Inbound          | Calibration       | Yes      | 3,982         | 3,998         | 5               | 100%                 | 15                | 0%           | PASS       | 0   | PASS       |
| SL_7A             | Inbound          | Model Development | Yes      | 5,773         | 5,771         | 8               | 100%                 | -2                | 0%           | PASS       | 0   | PASS       |
| SL_7B             | Inbound          | Model Development |          | 5,777         | 5,779         | 10              | 100%                 | 3                 | 0%           | PASS       | 0   | PASS       |
| SL_8A             | Inbound          | Calibration       |          | 912           | 911           | 3               | 67%                  | -1                | 0%           | PASS       | 0   | PASS       |
| SL_11A            | Inbound          | Calibration       | Yes      | 4,701         | 4,835         | 13              | 85%                  | 135               | 3%           | PASS       | 2   | PASS       |
| SL_11B            | Inbound          | Calibration       |          | 2,836         | 2,838         | 3               | 100%                 | 3                 | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Inbound          | Calibration       |          | 2,647         | 2,415         | 7               | 43%                  | -232              | -9%          | FAIL       | 5   | FAIL       |
| SL_15A            | Inbound          | Calibration       |          | 4,252         | 4,253         | 5               | 60%                  | 2                 | 0%           | PASS       | 0   | PASS       |
| SL_16A            | Inbound          | Calibration       |          | 3,931         | 3,855         | 10              | 100%                 | -75               | -2%          | PASS       | 1   | PASS       |
| SL_17A            | Inbound          | Calibration       |          | 5,777         | 6,166         | 4               | 50%                  | 390               | 7%           | FAIL       | 5   | FAIL       |
| SL_1A             | Outbound         | Calibration       | Yes      | 3,242         | 3,243         | 7               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_1B             | Outbound         | Calibration       | Yes      | 4,924         | 4,831         | 10              | 100%                 | -93               | -2%          | PASS       | 1   | PASS       |
| SL_1C             | Outbound         | Calibration       | Yes      | 5,278         | 5,278         | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1D             | Outbound         | Calibration       |          | 3,382         | 3,382         | 4               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1E             | Outbound         | Calibration       |          | 3,736         | 3,741         | 9               | 100%                 | 5                 | 0%           | PASS       | 0   | PASS       |
| SL_2A             | Outbound         | Calibration       |          | 685           | 685           | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_5A             | Outbound         | Calibration       | Yes      | 3,828         | 3,839         | 5               | 100%                 | 11                | 0%           | PASS       | 0   | PASS       |
| SL_7A             | Outbound         | Model Development | Yes      | 5,719         | 5,720         | 8               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_7B             | Outbound         | Model Development |          | 6,491         | 6,546         | 10              | 90%                  | 55                | 1%           | PASS       | 1   | PASS       |
| SL_8A             | Outbound         | Calibration       |          | 1,223         | 1,223         | 3               | 67%                  | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_11A            | Outbound         | Calibration       | Yes      | 5,124         | 5,175         | 13              | 92%                  | 51                | 1%           | PASS       | 1   | PASS       |
| SL_11B            | Outbound         | Calibration       |          | 5,019         | 5,020         | 3               | 100%                 | 1                 | 0%           | PASS       | 0   | PASS       |
| SL_13A            | Outbound         | Calibration       |          | 2,979         | 2,672         | 8               | 88%                  | -307              | -10%         | FAIL       | 6   | FAIL       |
| SL_15A            | Outbound         | Calibration       |          | 4,366         | 4,627         | 5               | 60%                  | 261               | 6%           | FAIL       | 4   | PASS       |
| SL_16A            | Outbound         | Calibration       |          | 3,642         | 3,644         | 10              | 70%                  | 2                 | 0%           | PASS       | 0   | PASS       |
| SL_17A            | Outbound         | Calibration       |          | 7,587         | 7,586         | 4               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>88%</b> |     | <b>91%</b> |

LGV - PM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 396           | 369           | 7               | 100%                 | -27               | -7%          | FAIL       | 1   | PASS       |
| SL_1B             | Inbound          | Calibration       | Yes      | 522           | 533           | 10              | 100%                 | 11                | 2%           | PASS       | 0   | PASS       |
| SL_1C             | Inbound          | Calibration       | Yes      | 565           | 543           | 7               | 100%                 | -23               | -4%          | PASS       | 1   | PASS       |
| SL_1D             | Inbound          | Calibration       |          | 539           | 539           | 4               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS       |
| SL_1E             | Inbound          | Calibration       |          | 220           | 225           | 9               | 100%                 | 5                 | 2%           | PASS       | 0   | PASS       |
| SL_2A             | Inbound          | Calibration       |          | 61            | 77            | 2               | 100%                 | 17                | 28%          | FAIL       | 2   | PASS       |
| SL_5A             | Inbound          | Calibration       | Yes      | 518           | 487           | 5               | 100%                 | -31               | -6%          | FAIL       | 1   | PASS       |
| SL_7A             | Inbound          | Model Development | Yes      | 542           | 508           | 8               | 100%                 | -34               | -6%          | FAIL       | 1   | PASS       |
| SL_7B             | Inbound          | Model Development |          | 548           | 555           | 10              | 100%                 | 7                 | 1%           | PASS       | 0   | PASS       |
| SL_8A             | Inbound          | Calibration       |          | 88            | 99            | 3               | 100%                 | 11                | 12%          | FAIL       | 1   | PASS       |
| SL_11A            | Inbound          | Calibration       | Yes      | 443           | 366           | 13              | 100%                 | -77               | -17%         | FAIL       | 4   | PASS       |
| SL_11B            | Inbound          | Calibration       |          | 241           | 262           | 3               | 100%                 | 20                | 8%           | FAIL       | 1   | PASS       |
| SL_13A            | Inbound          | Calibration       |          | 276           | 280           | 7               | 100%                 | 3                 | 1%           | PASS       | 0   | PASS       |
| SL_15A            | Inbound          | Calibration       |          | 536           | 559           | 5               | 60%                  | 23                | 4%           | PASS       | 1   | PASS       |
| SL_16A            | Inbound          | Calibration       |          | 367           | 354           | 10              | 100%                 | -13               | -4%          | PASS       | 1   | PASS       |
| SL_17A            | Inbound          | Calibration       |          | 899           | 870           | 4               | 100%                 | -28               | -3%          | PASS       | 1   | PASS       |
| SL_1A             | Outbound         | Calibration       | Yes      | 408           | 385           | 7               | 100%                 | -23               | -6%          | FAIL       | 1   | PASS       |
| SL_1B             | Outbound         | Calibration       | Yes      | 575           | 587           | 10              | 100%                 | 12                | 2%           | PASS       | 0   | PASS       |
| SL_1C             | Outbound         | Calibration       | Yes      | 612           | 596           | 7               | 100%                 | -16               | -3%          | PASS       | 1   | PASS       |
| SL_1D             | Outbound         | Calibration       |          | 539           | 521           | 4               | 100%                 | -18               | -3%          | PASS       | 1   | PASS       |
| SL_1E             | Outbound         | Calibration       |          | 295           | 302           | 9               | 100%                 | 7                 | 2%           | PASS       | 0   | PASS       |
| SL_2A             | Outbound         | Calibration       |          | 57            | 60            | 2               | 100%                 | 3                 | 5%           | PASS       | 0   | PASS       |
| SL_5A             | Outbound         | Calibration       | Yes      | 519           | 469           | 5               | 100%                 | -50               | -10%         | FAIL       | 2   | PASS       |
| SL_7A             | Outbound         | Model Development | Yes      | 504           | 529           | 8               | 100%                 | 26                | 5%           | PASS       | 1   | PASS       |
| SL_7B             | Outbound         | Model Development |          | 491           | 516           | 10              | 100%                 | 25                | 5%           | PASS       | 1   | PASS       |
| SL_8A             | Outbound         | Calibration       |          | 96            | 119           | 3               | 100%                 | 23                | 24%          | FAIL       | 2   | PASS       |
| SL_11A            | Outbound         | Calibration       | Yes      | 419           | 504           | 13              | 100%                 | 85                | 20%          | FAIL       | 4   | PASS       |
| SL_11B            | Outbound         | Calibration       |          | 282           | 386           | 3               | 100%                 | 104               | 37%          | FAIL       | 6   | FAIL       |
| SL_13A            | Outbound         | Calibration       |          | 256           | 265           | 8               | 100%                 | 8                 | 3%           | PASS       | 1   | PASS       |
| SL_15A            | Outbound         | Calibration       |          | 504           | 512           | 5               | 80%                  | 8                 | 2%           | PASS       | 0   | PASS       |
| SL_16A            | Outbound         | Calibration       |          | 357           | 351           | 10              | 90%                  | -6                | -2%          | PASS       | 0   | PASS       |
| SL_17A            | Outbound         | Calibration       |          | 1,198         | 1,180         | 4               | 100%                 | -18               | -2%          | PASS       | 1   | PASS       |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>63%</b> |     | <b>97%</b> |



HGV - PM Peak Hour

| Screenline Number | Inbound/Outbound | Use               | Near PWD | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL  |
|-------------------|------------------|-------------------|----------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|-------------|
| SL_1A             | Inbound          | Calibration       | Yes      | 105           | 95            | 7               | 100%                 | -10               | -10%         | FAIL       | 1   | PASS        |
| SL_1B             | Inbound          | Calibration       | Yes      | 372           | 381           | 10              | 100%                 | 10                | 3%           | PASS       | 1   | PASS        |
| SL_1C             | Inbound          | Calibration       | Yes      | 327           | 304           | 7               | 100%                 | -23               | -7%          | FAIL       | 1   | PASS        |
| SL_1D             | Inbound          | Calibration       |          | 174           | 169           | 4               | 100%                 | -5                | -3%          | PASS       | 0   | PASS        |
| SL_1E             | Inbound          | Calibration       |          | 95            | 85            | 9               | 100%                 | -9                | -10%         | FAIL       | 1   | PASS        |
| SL_2A             | Inbound          | Calibration       |          | 55            | 56            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| SL_5A             | Inbound          | Calibration       | Yes      | 155           | 154           | 5               | 100%                 | -1                | -1%          | PASS       | 0   | PASS        |
| SL_7A             | Inbound          | Model Development | Yes      | 68            | 69            | 8               | 100%                 | 2                 | 2%           | PASS       | 0   | PASS        |
| SL_7B             | Inbound          | Model Development |          | 120           | 126           | 10              | 100%                 | 6                 | 5%           | PASS       | 1   | PASS        |
| SL_8A             | Inbound          | Calibration       |          | 40            | 23            | 3               | 100%                 | -17               | -42%         | FAIL       | 3   | PASS        |
| SL_11A            | Inbound          | Calibration       | Yes      | 252           | 268           | 13              | 100%                 | 16                | 6%           | FAIL       | 1   | PASS        |
| SL_11B            | Inbound          | Calibration       |          | 70            | 70            | 3               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| SL_13A            | Inbound          | Calibration       |          | 64            | 72            | 7               | 100%                 | 9                 | 14%          | FAIL       | 1   | PASS        |
| SL_15A            | Inbound          | Calibration       |          | 206           | 187           | 5               | 100%                 | -19               | -9%          | FAIL       | 1   | PASS        |
| SL_16A            | Inbound          | Calibration       |          | 147           | 149           | 10              | 100%                 | 2                 | 2%           | PASS       | 0   | PASS        |
| SL_17A            | Inbound          | Calibration       |          | 625           | 603           | 4               | 100%                 | -22               | -4%          | PASS       | 1   | PASS        |
| SL_1A             | Outbound         | Calibration       | Yes      | 108           | 108           | 7               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| SL_1B             | Outbound         | Calibration       | Yes      | 391           | 331           | 10              | 100%                 | -60               | -15%         | FAIL       | 3   | PASS        |
| SL_1C             | Outbound         | Calibration       | Yes      | 265           | 258           | 7               | 100%                 | -7                | -3%          | PASS       | 0   | PASS        |
| SL_1D             | Outbound         | Calibration       |          | 188           | 204           | 4               | 100%                 | 15                | 8%           | FAIL       | 1   | PASS        |
| SL_1E             | Outbound         | Calibration       |          | 102           | 109           | 9               | 100%                 | 7                 | 7%           | FAIL       | 1   | PASS        |
| SL_2A             | Outbound         | Calibration       |          | 45            | 45            | 2               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| SL_5A             | Outbound         | Calibration       | Yes      | 111           | 105           | 5               | 100%                 | -5                | -5%          | PASS       | 1   | PASS        |
| SL_7A             | Outbound         | Model Development | Yes      | 88            | 88            | 8               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| SL_7B             | Outbound         | Model Development |          | 148           | 172           | 10              | 100%                 | 24                | 16%          | FAIL       | 2   | PASS        |
| SL_8A             | Outbound         | Calibration       |          | 45            | 45            | 3               | 100%                 | -1                | -1%          | PASS       | 0   | PASS        |
| SL_11A            | Outbound         | Calibration       | Yes      | 265           | 250           | 13              | 100%                 | -15               | -6%          | FAIL       | 1   | PASS        |
| SL_11B            | Outbound         | Calibration       |          | 138           | 137           | 3               | 100%                 | -1                | -1%          | PASS       | 0   | PASS        |
| SL_13A            | Outbound         | Calibration       |          | 92            | 91            | 8               | 100%                 | -1                | -1%          | PASS       | 0   | PASS        |
| SL_15A            | Outbound         | Calibration       |          | 249           | 211           | 5               | 80%                  | -37               | -15%         | FAIL       | 2   | PASS        |
| SL_16A            | Outbound         | Calibration       |          | 188           | 165           | 10              | 90%                  | -24               | -13%         | FAIL       | 2   | PASS        |
| SL_17A            | Outbound         | Calibration       |          | 556           | 556           | 4               | 100%                 | 0                 | 0%           | PASS       | 0   | PASS        |
| <b>Total</b>      |                  |                   |          |               |               |                 |                      |                   |              | <b>56%</b> |     | <b>100%</b> |

Cars - AM Peak Hour Validation Screenlines

| Screenline Number | Near PWD | Inbound/ Outbound | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL  |
|-------------------|----------|-------------------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|-------------|
| SL_3A             | Yes      | Inbound           | 1,759         | 1,735         | 4               | 100%                 | -25               | -1%          | PASS       | 1   | PASS        |
| SL_4A             | Yes      | Inbound           | 2,196         | 2,175         | 5               | 100%                 | -22               | -1%          | PASS       | 0   | PASS        |
| SL_6A             | Yes      | Inbound           | 6,283         | 6,253         | 9               | 100%                 | -30               | 0%           | PASS       | 0   | PASS        |
| SL_9A             |          | Inbound           | 2,818         | 2,889         | 7               | 86%                  | 71                | 3%           | PASS       | 1   | PASS        |
| SL_10A            | Yes      | Inbound           | 1,434         | 1,422         | 2               | 100%                 | -12               | -1%          | PASS       | 0   | PASS        |
| SL_12A            |          | Inbound           | 3,931         | 3,735         | 9               | 67%                  | -196              | -5%          | PASS       | 3   | PASS        |
| SL_14A            |          | Inbound           | 1,703         | 1,754         | 8               | 100%                 | 51                | 3%           | PASS       | 1   | PASS        |
| SL_3A             | Yes      | Outbound          | 1,288         | 1,247         | 4               | 100%                 | -41               | -3%          | PASS       | 1   | PASS        |
| SL_4A             | Yes      | Outbound          | 2,140         | 2,115         | 5               | 100%                 | -24               | -1%          | PASS       | 1   | PASS        |
| SL_6A             | Yes      | Outbound          | 6,545         | 6,657         | 9               | 89%                  | 112               | 2%           | PASS       | 1   | PASS        |
| SL_9A             |          | Outbound          | 1,597         | 1,605         | 7               | 86%                  | 8                 | 1%           | PASS       | 0   | PASS        |
| SL_10A            | Yes      | Outbound          | 1,160         | 1,220         | 2               | 100%                 | 60                | 5%           | PASS       | 2   | PASS        |
| SL_12A            |          | Outbound          | 3,059         | 3,042         | 10              | 70%                  | -17               | -1%          | PASS       | 0   | PASS        |
| SL_14A            |          | Outbound          | 1,966         | 2,138         | 8               | 75%                  | 171               | 9%           | FAIL       | 4   | PASS        |
| <b>Total</b>      |          |                   |               |               |                 |                      |                   |              | <b>93%</b> |     | <b>100%</b> |

LGV - AM Peak Hour Validation Screenlines

| Screenline Number | Near PWD | Inbound/ Outbound | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|----------|-------------------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_3A             | Yes      | Inbound           | 199           | 182           | 4               | 100%                 | -17               | -8%          | FAIL       | 1   | PASS       |
| SL_4A             | Yes      | Inbound           | 218           | 191           | 5               | 100%                 | -27               | -12%         | FAIL       | 2   | PASS       |
| SL_6A             | Yes      | Inbound           | 631           | 654           | 9               | 100%                 | 22                | 4%           | PASS       | 1   | PASS       |
| SL_9A             |          | Inbound           | 355           | 365           | 7               | 100%                 | 10                | 3%           | PASS       | 1   | PASS       |
| SL_10A            | Yes      | Inbound           | 115           | 116           | 2               | 100%                 | 1                 | 1%           | PASS       | 0   | PASS       |
| SL_12A            |          | Inbound           | 539           | 342           | 9               | 100%                 | -197              | -37%         | FAIL       | 9   | FAIL       |
| SL_14A            |          | Inbound           | 254           | 205           | 8               | 100%                 | -49               | -19%         | FAIL       | 3   | PASS       |
| SL_3A             | Yes      | Outbound          | 125           | 139           | 4               | 100%                 | 14                | 11%          | FAIL       | 1   | PASS       |
| SL_4A             | Yes      | Outbound          | 250           | 191           | 5               | 100%                 | -59               | -24%         | FAIL       | 4   | PASS       |
| SL_6A             | Yes      | Outbound          | 742           | 777           | 9               | 100%                 | 34                | 5%           | PASS       | 1   | PASS       |
| SL_9A             |          | Outbound          | 187           | 210           | 7               | 100%                 | 22                | 12%          | FAIL       | 2   | PASS       |
| SL_10A            | Yes      | Outbound          | 135           | 112           | 2               | 100%                 | -23               | -17%         | FAIL       | 2   | PASS       |
| SL_12A            |          | Outbound          | 461           | 342           | 10              | 100%                 | -120              | -26%         | FAIL       | 6   | FAIL       |
| SL_14A            |          | Outbound          | 207           | 258           | 8               | 88%                  | 50                | 24%          | FAIL       | 3   | PASS       |
| <b>Total</b>      |          |                   |               |               |                 |                      |                   |              | <b>29%</b> |     | <b>86%</b> |

HGV - AM Peak Hour Validation Screenlines

| Screenline Number | Near PWD | Inbound/ Outbound | Observed Flow | Modelled Flow | Number of links | % of Links Compliant | Actual Difference | % Difference | PASS /FAIL | GEH | PASS /FAIL |
|-------------------|----------|-------------------|---------------|---------------|-----------------|----------------------|-------------------|--------------|------------|-----|------------|
| SL_3A             | Yes      | Inbound           | 66            | 88            | 4               | 100%                 | 22                | 33%          | FAIL       | 2   | PASS       |
| SL_4A             | Yes      | Inbound           | 103           | 107           | 5               | 100%                 | 4                 | 4%           | PASS       | 0   | PASS       |
| SL_6A             | Yes      | Inbound           | 640           | 598           | 9               | 100%                 | -41               | -6%          | FAIL       | 2   | PASS       |
| SL_9A             |          | Inbound           | 172           | 125           | 7               | 100%                 | -47               | -27%         | FAIL       | 4   | PASS       |
| SL_10A            | Yes      | Inbound           | 142           | 110           | 2               | 100%                 | -31               | -22%         | FAIL       | 3   | PASS       |
| SL_12A            |          | Inbound           | 179           | 198           | 9               | 100%                 | 18                | 10%          | FAIL       | 1   | PASS       |
| SL_14A            |          | Inbound           | 160           | 95            | 8               | 100%                 | -65               | -41%         | FAIL       | 6   | FAIL       |
| SL_3A             | Yes      | Outbound          | 49            | 93            | 4               | 100%                 | 44                | 89%          | FAIL       | 5   | FAIL       |
| SL_4A             | Yes      | Outbound          | 116           | 123           | 5               | 100%                 | 7                 | 6%           | FAIL       | 1   | PASS       |
| SL_6A             | Yes      | Outbound          | 674           | 631           | 9               | 100%                 | -43               | -6%          | FAIL       | 2   | PASS       |
| SL_9A             |          | Outbound          | 111           | 83            | 7               | 100%                 | -28               | -25%         | FAIL       | 3   | PASS       |
| SL_10A            | Yes      | Outbound          | 88            | 49            | 2               | 100%                 | -39               | -44%         | FAIL       | 5   | FAIL       |
| SL_12A            |          | Outbound          | 178           | 198           | 10              | 100%                 | 20                | 11%          | FAIL       | 1   | PASS       |
| SL_14A            |          | Outbound          | 163           | 111           | 8               | 88%                  | -51               | -32%         | FAIL       | 4   | FAIL       |
| <b>Total</b>      |          |                   |               |               |                 |                      |                   |              | <b>7%</b>  |     | <b>71%</b> |