

APPENDIX 25-7

HIGHWAY CAPACITY SOFTWARE (HCS) LEVEL OF SERVICE OUTPUT

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | NY 414 (North of Project) - Location A | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 6 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 3.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 201 | Opposing Demand Flow Rate, veh/h | 134 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 12.68 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.12 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 60.9 |
| Speed Slope Coefficient | 3.58100 | Speed Power Coefficient | 0.56042 |
| PF Slope Coefficient | -1.18740 | PF Power Coefficient | 0.82046 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.9 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 59.9 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 59.9 | Percent Followers, % | 27.3 |
| Segment Travel Time, minutes | 1.00 | Followers Density, followers/mi/ln | 0.9 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | NY 414 (South of Project) - Location B | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 6 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 254 | Opposing Demand Flow Rate, veh/h | 170 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 9.02 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.15 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 61.3 |
| Speed Slope Coefficient | 3.61638 | Speed Power Coefficient | 0.54810 |
| PF Slope Coefficient | -1.19652 | PF Power Coefficient | 0.81754 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 1.4 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 60.0 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 60.0 | Percent Followers, % | 32.3 |
| Segment Travel Time, minutes | 1.00 | Followers Density, followers/mi/ln | 1.4 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | CR 18 - Location C | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 1.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 84 | Opposing Demand Flow Rate, veh/h | 55 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 5.79 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.05 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 58.3 |
| Speed Slope Coefficient | 3.39334 | Speed Power Coefficient | 0.59795 |
| PF Slope Coefficient | -1.16675 | PF Power Coefficient | 0.82171 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.2 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.3 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 58.3 | Percent Followers, % | 14.1 |
| Segment Travel Time, minutes | 1.03 | Followers Density, followers/mi/ln | 0.2 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------------------|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | Bronson Hill Road - Location D | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 17 | Opposing Demand Flow Rate, veh/h | 12 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 4.33 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.01 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 58.1 |
| Speed Slope Coefficient | 3.34079 | Speed Power Coefficient | 0.63832 |
| PF Slope Coefficient | -1.13231 | PF Power Coefficient | 0.83157 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.0 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.1 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|-----|
| Average Speed, mi/h | 58.1 | Percent Followers, % | 3.8 |
| Segment Travel Time, minutes | 1.03 | Followers Density, followers/mi/ln | 0.0 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|------------------------------|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | Baker Hill Road - Location E | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 19 | Opposing Demand Flow Rate, veh/h | 13 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 5.00 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.01 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 58.0 |
| Speed Slope Coefficient | 3.34115 | Speed Power Coefficient | 0.63672 |
| PF Slope Coefficient | -1.13371 | PF Power Coefficient | 0.83118 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.0 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.0 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|-----|
| Average Speed, mi/h | 58.0 | Percent Followers, % | 4.1 |
| Segment Travel Time, minutes | 1.03 | Followers Density, followers/mi/ln | 0.0 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------------|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | Hedden Road - Location F | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 19 | Opposing Demand Flow Rate, veh/h | 13 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 5.00 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.01 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 58.0 |
| Speed Slope Coefficient | 3.34115 | Speed Power Coefficient | 0.63672 |
| PF Slope Coefficient | -1.13371 | PF Power Coefficient | 0.83118 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.0 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.0 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|-----|
| Average Speed, mi/h | 58.0 | Percent Followers, % | 4.1 |
| Segment Travel Time, minutes | 1.03 | Followers Density, followers/mi/ln | 0.0 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------|----------------------|-------------------------|
| Analyst | | Date | 1/22/2020 |
| Agency | TRC | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Existing Design Hour |
| Project Description | CR 16 - Location G | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 4 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 117 | Opposing Demand Flow Rate, veh/h | 79 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 7.83 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.07 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 59.9 |
| Speed Slope Coefficient | 3.49938 | Speed Power Coefficient | 0.58447 |
| PF Slope Coefficient | -1.17157 | PF Power Coefficient | 0.82340 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.4 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 59.6 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 59.6 | Percent Followers, % | 18.1 |
| Segment Travel Time, minutes | 1.01 | Followers Density, followers/mi/ln | 0.4 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | NY 414 (North of Project) - Location A | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 6 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 3.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 206 | Opposing Demand Flow Rate, veh/h | 139 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 12.20 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.12 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 60.9 |
| Speed Slope Coefficient | 3.58422 | Speed Power Coefficient | 0.55848 |
| PF Slope Coefficient | -1.18904 | PF Power Coefficient | 0.81990 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 1.0 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 59.9 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 59.9 | Percent Followers, % | 27.8 |
| Segment Travel Time, minutes | 1.00 | Followers Density, followers/mi/ln | 1.0 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | NY 414 (South of Project) - Location B | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 6 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 317 | Opposing Demand Flow Rate, veh/h | 233 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 17.35 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.19 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 61.0 |
| Speed Slope Coefficient | 3.62433 | Speed Power Coefficient | 0.53048 |
| PF Slope Coefficient | -1.21192 | PF Power Coefficient | 0.81302 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 2.0 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 59.4 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 59.4 | Percent Followers, % | 37.9 |
| Segment Travel Time, minutes | 1.01 | Followers Density, followers/mi/ln | 2.0 |
| Vehicle LOS | B | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | CR 18 - Location C | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 1.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 147 | Opposing Demand Flow Rate, veh/h | 118 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 24.32 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.09 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 57.6 |
| Speed Slope Coefficient | 3.39544 | Speed Power Coefficient | 0.56657 |
| PF Slope Coefficient | -1.19486 | PF Power Coefficient | 0.81434 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.6 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 57.0 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 57.0 | Percent Followers, % | 22.2 |
| Segment Travel Time, minutes | 1.05 | Followers Density, followers/mi/ln | 0.6 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------------------|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | Bronson Hill Road - Location D | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Directional Demand Flow Rate, veh/h | 60 | Opposing Demand Flow Rate, veh/h | 54 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 1.96 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.04 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 58.1 |
| Speed Slope Coefficient | 3.38596 | Speed Power Coefficient | 0.59864 |
| PF Slope Coefficient | -1.16701 | PF Power Coefficient | 0.82093 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.1 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.1 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 58.1 | Percent Followers, % | 10.9 |
| Segment Travel Time, minutes | 1.03 | Followers Density, followers/mi/ln | 0.1 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|------------------------------|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | Baker Hill Road - Location E | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 107 | Opposing Demand Flow Rate, veh/h | 101 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 51.58 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.06 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 56.5 |
| Speed Slope Coefficient | 3.32425 | Speed Power Coefficient | 0.57376 |
| PF Slope Coefficient | -1.18967 | PF Power Coefficient | 0.81695 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.3 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 56.3 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 56.3 | Percent Followers, % | 17.5 |
| Segment Travel Time, minutes | 1.07 | Followers Density, followers/mi/ln | 0.3 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------------|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | Hedden Road - Location F | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 10 | Shoulder Width, ft | 2 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 54 | Opposing Demand Flow Rate, veh/h | 48 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 46.67 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.03 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 56.6 |
| Speed Slope Coefficient | 3.30063 | Speed Power Coefficient | 0.60294 |
| PF Slope Coefficient | -1.16365 | PF Power Coefficient | 0.82444 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.1 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 56.6 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 56.6 | Percent Followers, % | 10.0 |
| Segment Travel Time, minutes | 1.06 | Followers Density, followers/mi/ln | 0.1 |
| Vehicle LOS | A | | |

HCS7 Two-Lane Highway Report

Project Information

| | | | |
|---------------------|--------------------|----------------------|-------------------------|
| Analyst | BH | Date | 04/22/2020 |
| Agency | PDE | Analysis Year | 2020 |
| Jurisdiction | NYS DOT | Time Period Analyzed | Construction Peak Hour |
| Project Description | CR 16 - Location G | Unit | United States Customary |

Segment 1

Vehicle Inputs

| | | | |
|-------------------|--------------|------------------------------|------|
| Segment Type | Passing Zone | Length, ft | 5280 |
| Lane Width, ft | 11 | Shoulder Width, ft | 4 |
| Speed Limit, mi/h | 55 | Access Point Density, pts/mi | 2.0 |

Demand and Capacity

| | | | |
|-------------------------------------|------|----------------------------------|-------|
| Directional Demand Flow Rate, veh/h | 166 | Opposing Demand Flow Rate, veh/h | 128 |
| Peak Hour Factor | 0.94 | Total Trucks, % | 24.17 |
| Segment Capacity, veh/h | 1700 | Demand/Capacity (D/C) | 0.10 |

Intermediate Results

| | | | |
|-----------------------------------|----------|----------------------------------|---------|
| Segment Vertical Class | 1 | Free-Flow Speed, mi/h | 59.4 |
| Speed Slope Coefficient | 3.49504 | Speed Power Coefficient | 0.56282 |
| PF Slope Coefficient | -1.19104 | PF Power Coefficient | 0.81845 |
| In Passing Lane Effective Length? | No | Total Segment Density, veh/mi/ln | 0.7 |
| %Improved % Followers | 0.0 | % Improved Avg Speed | 0.0 |

Subsegment Data

| # | Segment Type | Length, ft | Radius, ft | Superelevation, % | Average Speed, mi/h |
|---|--------------|------------|------------|-------------------|---------------------|
| 1 | Tangent | 5280 | - | - | 58.6 |

Vehicle Results

| | | | |
|------------------------------|------|------------------------------------|------|
| Average Speed, mi/h | 58.6 | Percent Followers, % | 24.0 |
| Segment Travel Time, minutes | 1.02 | Followers Density, followers/mi/ln | 0.7 |
| Vehicle LOS | A | | |