

**Step 1: Suitability and Buildout Data Based on POCD (DRAFT)**

NOTE: THIS BUILDOUT AND TRIP GENERATION ANALYSIS CONTAINS METHODOLOGY AND ASSUMPTIONS SPECIFIC TO THE ROUTE 10 CORRIDOR STUDY. IT IS NOT VALID OR INTENDED TO BE USED FOR ANY OTHER STUDY, GEOGRAPHY, OR TIMEFRAME.

| A                                     | B   | C  | D  | E  | F                                    | G  | H                                       | I   | J  | K  |
|---------------------------------------|---|--|--|--|--------------------------------------|--|---|---|--|--|
| CRCOG Developable Land Analysis Model |   |  |  |  |                                      |  |   |   |  |  |
| Corridor Area                         | Net Usable Land Area (acres)                                |  |  | Land Use Reduction Factors                   |                                      |  | Average Expected Floor Area Ratio (FAR) | Gross Potential Floor Area [sq. ft.]<br>Column (G x H) x 43,560 | Estimated Existing Building Area [sq. ft.] | Net Potential Floor Area [sq. ft.]<br>Column I - J |
|                                       | Gross Land Area Susceptible to New or Redevelopment (acres) | Wetlands, 100Yr Flood, Steep Slopes > 10%, Existing ROW, (acres) | Net Usable Land Area (acres)<br>Column B - C | Future Road R.O.W. (acres)<br>5% of Column D | Open Space Factor<br>10% of Column B | Net Buildable Area (acres)<br>Column D - (E + F) |   |   |  |  |
| North Gateway (1)                     | 250   | 27   | 223  | 11   | 25.0                                 | 187  | 0.45                                    | 3,656,000   | 141,000                                    | 3,515,000  |
| Town Center (2)*                      | 150   | 22   | 128  | 6  | 15.0                                 | 106  | 0.65                                    | 3,009,000   | 1,319,000                                  | 1,690,000  |
| Weatogue (3)                          | 50  | 17   | 33   | 2  | 5.0                                  | 26   | 0.65                                    | 737,000   | 118,000                                    | 619,000  |
| South Gateway (4)                     | 100   | 20   | 80   | 4  | 10.0                                 | 66   | 0.45                                    | 1,297,000   | 113,000                                    | 1,184,000  |
| <b>Totals</b>                         | <b>550</b>  | <b>87</b>  | <b>463</b>                                   | <b>23</b>                                    | <b>55</b>                            | <b>385</b>                                       |   | <b>8,699,000</b>  | <b>1,691,000</b>                           | <b>7,008,000</b>                                   |

\* The Town Center Code and Physical Plan was used to estimate its gross potential floor area (Col. K). Including Dyno Nobel properties, the overall gross potential floor area is approximately 2.7M GSF. The Floor Area Ratio (FAR) for Town Center was derived from this number and the FARs for the other three geographies are based on their relationship to Town Center (average height & intensity).

**Step 2: 2030 Land Use Analysis based on POCD and Community Input  
With Resulting Trip Generation (DRAFT)**

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| Corridor Area     | Based on POCD Assumptions  |                  |   |   |   |                     |  |                        |  |   |   |  |
|-------------------|----------------------------|------------------|---|---|---|---------------------|--|------------------------|--|---|---|--|
|                   | L                          | M                | N   | O   | P   | Q                   | R  | S                      | T                                      | V   |   |  |
|                   | Absorption (Buildout) Rate |                  | Land Use Mix for Net Build-Out Area, 2030 [%] |   | Approx. Net Build-out Area, 2030 [sq. ft] |                     |  |                        |  |   | From Transportation Analysis                                      |  |
|                   | % Developed by Year 2030   |                  | Residential (Suburban)                        | Commercial Office and Non-Office (Suburban) | Mixed-Use (Compact, Walkable)             | Residential (M x N) | Commercial Office and Non-Office (M x O) | Mixed-Use Area (M x P) | Total Raw New Trips (Vehicles per day) | Total Adjusted New Trips (Vehicles per Day) | % Vehicular Trip Reduction due to Smart Growth and TDM Strategies |  |
| North Gateway (1) | 50%                        | 1,758,000        | 20%   | 30%   | 50%                                       | 352,000             | 527,000                                  | 879,000                | 25,905                                 | 19,211                                      | 26%   |  |
| Town Center (2)   | 50%                        | 845,000          | 15%   | 5%  | 80%                                       | 127,000             | 42,000                                   | 676,000                | 10,511                                 | 6,884                                       | 35%   |  |
| Weatogue (3)      | 50%                        | 310,000          | 10%   | 5%  | 85%                                       | 31,000              | 15,000                                   | 263,000                | 4,463                                  | 2,994                                       | 33%   |  |
| South Gateway (4) | 50%                        | 592,000          | 40%   | 30%   | 30%                                       | 237,000             | 178,000                                  | 178,000                | 10,120                                 | 8,003                                       | 21%   |  |
| <b>Totals</b>     | <b>50%</b>                 | <b>3,505,000</b> | <b>21%</b>                                    | <b>22%</b>                                  | <b>43%</b>                                | <b>747,000</b>      | <b>762,000</b>                           | <b>1,509,000</b>       | <b>50,999</b>                          | <b>37,091</b>                               | <b>27%</b>  |  |

| Land Use      | Vehicle Trip Reduction Assumptions**                       |                          |  |  |                                     |                   |                                   |                                 |                                 |  |  |
|---------------|--|--------------------------|--|--|-------------------------------------|-------------------|-----------------------------------|---------------------------------|---------------------------------|--|--|
|               | Assumed Trip Reduction for Smart Growth and TDM Strategies |                          |  |  | Daily Trip Generation * By Land Use |                   |                                   | Net Average Daily Traffic (ADT) |                                 |  |  |
|               | Pass-by Traffic  | A: Mixed Use Development | B: Compact or Transit-Oriented Development | C: Improved Transit & Non-motorized Travel | D: Travel Demand Management (TDM)   | Total % Reduction | Gross Average Daily Traffic (ADT) | Total Trip Reduction            | Net Average Daily Traffic (ADT) |  |  |
| Residential   | 0%   | 0%                       | 2%   | 2%   | 5%                                  | 9%                | 2,359                             | 212                             | 2,147                           |  |  |
| Commercial    | 5%   | 0%                       | 5%   | 2%   | 5%                                  | 16%               | 27,383                            | 4,491                           | 22,892                          |  |  |
| Mixed Use     | 10%  | 25%                      | 5%   | 2%   | 5%                                  | 43%               | 21,257                            | 9,204                           | 12,053                          |  |  |
| <b>Totals</b> |  |                          |  |  |                                     |                   | <b>50,999</b>                     | <b>13,908</b>                   | <b>37,092</b>                   |  |  |

\* Average Daily Traffic (ADT) and Trip Generation Rates are based on published ITE Rates (2008) for corresponding land uses.

\*\* Trip reduction assumptions are based on published ITE Trip Generation Rates (Mixed Use), peer-reviewed research, observations, and case studies.

2030 ADT is predicted to be 16-17,500 vehicles per day along the corridor. The new dev. scenario may cause a...

225% increase in traffic

**Step 3: Transportation Analysis at Critical Intersections (DRAFT)**

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| Transportation Analysis                                  |                                    |   |       |                            |       |                      |       |                                   |         |    |    |  |
|--|------------------------------------|---|-------|----------------------------|-------|----------------------|-------|-----------------------------------|---------|----|----|--|
| Peak Hour Capacity (Bi-Directional) at Key Intersections |                                    |   |       |                            |       |                      |       |                                   |         |    |    |  |
| Corridor Area  | Critical Intersection in Geography | Total Capacity* (vph) at Level of Service E |       | Existing Volume (vph) 2030 |       | New Trips (vph) 2030 |       | Surplus Capacity (vph) or failure |         |    |    |  |
|  |                                    | AM  | PM    | AM                         | PM    | AM                   | PM    | AM                                | PM      | AM | PM |  |
| North Gateway (1)  | Tarriffville Road                  | 1,598                                       | 1,924 | 898                        | 1,124 | 734                  | 1,387 | (34)                              | (587)   |    |    |  |
| Town Center (2)  | West Street                        | 1,450                                       | 1,695 | 750                        | 995   | 991                  | 1,821 | (291)                             | (1,121) |    |    |  |
| Weatogue (3)   | Hartford Road (185)                | 909   | 1,357 | 409                        | 757   | 638                  | 1,213 | (138)                             | (613)   |    |    |  |
| South Gateway (4)  | The Hartford Driveway              | 2,046                                       | 1,559 | 1,246                      | 1,259 | 746                  | 1,431 | 54                                | (1,131) |    |    |  |

\*Determination of maximum through capacity is based on methodology from the Highway Capacity Manual (2000)