

# Appendix I

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Noise Measurement Data Noise  
Modeling Calculations

|    |                     |                                      |                                      |      |      |      |     |     |      |      |      |     |     |     |     |
|----|---------------------|--------------------------------------|--------------------------------------|------|------|------|-----|-----|------|------|------|-----|-----|-----|-----|
| 1  | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 66.3 | 66.3 | 66.4 | 0.0 | 0.1 | 68.0 | 68.0 | 68.0 | 0.0 | 0.0 | 1.7 | 1.7 |
| 2  | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 67.0 | 67.1 | 67.3 | 0.1 | 0.2 | 68.6 | 68.7 | 68.8 | 0.1 | 0.1 | 1.6 | 1.7 |
| 3  | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 59.5 | 59.8 | 60.4 | 0.3 | 0.8 | 60.8 | 61.0 | 61.4 | 0.2 | 0.6 | 1.5 | 1.9 |
| 4  | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 61.5 | 62.0 | 62.6 | 0.5 | 1.1 | 62.3 | 62.7 | 63.2 | 0.4 | 0.9 | 1.2 | 1.7 |
| 5  | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 62.2 | 62.6 | 62.9 | 0.3 | 0.7 | 63.0 | 63.3 | 63.6 | 0.3 | 0.6 | 1.1 | 1.4 |
| 6  | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 63.7 | 63.8 | 63.8 | 0.1 | 0.1 | 65.0 | 65.0 | 65.1 | 0.0 | 0.1 | 1.3 | 1.4 |
| 7  | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 63.4 | 66.3 | 69.0 | 2.9 | 5.6 | 64.7 | 67.0 | 69.4 | 2.3 | 4.7 | 3.6 | 6.0 |
| 8  | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 54.4 | 54.6 | 54.7 | 0.1 | 0.2 | 54.4 | 54.6 | 54.7 | 0.1 | 0.2 | 0.1 | 0.2 |
| 9  | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 49.8 | 51.1 | 52.3 | 1.3 | 2.5 | 51.1 | 52.1 | 53.1 | 1.0 | 1.9 | 2.3 | 3.3 |
| 10 | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 59.8 | 60.0 | 60.3 | 0.2 | 0.5 | 61.7 | 61.8 | 62.0 | 0.1 | 0.3 | 2.0 | 2.2 |
| 11 | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 56.4 | 56.7 | 57.0 | 0.2 | 0.6 | 58.3 | 58.5 | 58.7 | 0.1 | 0.4 | 2.0 | 2.3 |

Traffic Noise Spreadsheet Calculator



Project: Elk Grove CNU Hospital

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

|                            |                     |                                      |                                      | Input  |             |   |     |                                      |          |         |       |       |                             | Output                               |         |
|----------------------------|---------------------|--------------------------------------|--------------------------------------|--------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|-----------------------------|--------------------------------------|---------|
| Number                     | Name                | Segment Description and Location     |                                      | ADT    | Speed (mph) | Distance to Directional Centerline, (feet) <sub>a</sub> |     | Traffic Distribution Characteristics |          |         |       |       | Ldn, (dBA) <sub>5,6,7</sub> | Ldn Including Applicable Attenuation |         |
|                            |                     | From                                 | To                                   |        |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve |                             |                                      | % Night |
| <b>Existing Conditions</b> |                     |                                      |                                      |        |             |   |     |                                      |          |         |       |       |                             |                                      |         |
| 1                          | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 77,000 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 71.3                                 | 66.3    |
| 2                          | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 91,000 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 72.0                                 | 67.0    |
| 3                          | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 26,400 | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 64.5                                 | 59.5    |
| 4                          | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 40,900 | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 66.5                                 | 61.5    |
| 5                          | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 35,200 | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 67.2                                 | 62.2    |
| 6                          | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 13,300 | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%                        | 63.7                                 | 63.7    |
| 7                          | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 7,300  | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 63.4                                 | 63.4    |
| 8                          | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,000  | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 59.4                                 | 54.4    |
| 9                          | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 1,700  | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 54.8                                 | 49.8    |
| 10                         | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 20,900 | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 64.8                                 | 59.8    |
| 11                         | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 22,100 | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 61.4                                 | 56.4    |

Traffic Noise Spreadsheet Calculator



Project:

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

|  |                     |                                      |                                      | Input  |             |   |     |                                      |          |         |       |       |         | Output                      |                                      |
|--|---------------------|--------------------------------------|--------------------------------------|--------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|---------|-----------------------------|--------------------------------------|
| Number                                 | Name                | Segment Description and Location     |                                      | ADT    | Speed (mph) | Distance to Directional Centerline, (feet) <sub>s</sub> |     | Traffic Distribution Characteristics |          |         |       |       |         | Ldn, (dBA) <sub>s,6,7</sub> | Ldn Including Applicable Attenuation |
|  |                     | From                                 | To                                   |        |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve | % Night |                             |                                      |
| <b>Existing Plus Project (Phase 1)</b> |                     |                                      |                                      |        |             |   |     |                                      |          |         |       |       |         |                             |                                      |
| 1                                      | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 77,200 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 71.3                        | 66.3                                 |
| 2                                      | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 92,600 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 72.1                        | 67.1                                 |
| 3                                      | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 28,200 | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 64.8                        | 59.8                                 |
| 4                                      | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 46,100 | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 67.0                        | 62.0                                 |
| 5                                      | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 38,100 | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 67.6                        | 62.6                                 |
| 6                                      | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 13,500 | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%    | 63.8                        | 63.8                                 |
| 7                                      | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 14,300 | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 66.3                        | 66.3                                 |
| 8                                      | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,100  | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 59.6                        | 54.6                                 |
| 9                                      | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 2,300  | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 56.1                        | 51.1                                 |
| 10                                     | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 22,000 | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 65.0                        | 60.0                                 |
| 11                                     | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 23,300 | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 61.7                        | 56.7                                 |

Traffic Noise Spreadsheet Calculator



Project: Buildout

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

| Input                                   |                     |                                      |                                      |        |             |   |     |                                      |          |         |       |       |         | Output                      |                                      |
|---|---------------------|--------------------------------------|--------------------------------------|--------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|---------|-----------------------------|--------------------------------------|
| Number                                  | Name                | Segment Description and Location     |                                      | ADT    | Speed (mph) | Distance to Directional Centerline, (feet) <sub>1</sub> |     | Traffic Distribution Characteristics |          |         |       |       |         | Ldn, (dBA) <sub>5,6,7</sub> | Ldn Including Applicable Attenuation |
|   |                     | From                                 | To                                   |        |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve | % Night |                             |                                      |
| <b>Existing Plus Project (Buildout)</b> |                     |                                      |                                      |        |             |   |     |                                      |          |         |       |       |         |                             |                                      |
| 1                                       | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 78,100 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 71.4                        | 66.4                                 |
| 2                                       | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 95,400 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 72.3                        | 67.3                                 |
| 3                                       | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 31,900 | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 65.4                        | 60.4                                 |
| 4                                       | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 52,500 | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 67.6                        | 62.6                                 |
| 5                                       | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 41,300 | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 67.9                        | 62.9                                 |
| 6                                       | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 13,700 | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%    | 63.8                        | 63.8                                 |
| 7                                       | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 26,500 | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 69.0                        | 69.0                                 |
| 8                                       | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,200  | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 59.7                        | 54.7                                 |
| 9                                       | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 3,000  | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 57.3                        | 52.3                                 |
| 10                                      | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 23,400 | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 65.3                        | 60.3                                 |
| 11                                      | Franklin Boulevard  | Laguna Boulevard                     | Whitlock Parkway                     | 25,100 | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 62.0                        | 57.0                                 |

Traffic Noise Spreadsheet Calculator



Project: Elk Grove CNU Hospital

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

|                              |                     |                                      |                                      | Input   |             |   |     |                                      |          |         |       |       |                             | Output                               |         |
|------------------------------|---------------------|--------------------------------------|--------------------------------------|---------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|-----------------------------|--------------------------------------|---------|
| Number                       | Name                | Segment Description and Location     |                                      | ADT     | Speed (mph) | Distance to Directional Centerline, (feet) <sub>a</sub> |     | Traffic Distribution Characteristics |          |         |       |       | Ldn, (dBA) <sub>5,6,7</sub> | Ldn Including Applicable Attenuation |         |
|                              |                     | From                                 | To                                   |         |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve |                             |                                      | % Night |
| <b>Cumulative Conditions</b> |                     |                                      |                                      |         |             |   |     |                                      |          |         |       |       |                             |                                      |         |
| 1                            | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 113,200 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 73.0                                 | 68.0    |
| 2                            | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 130,700 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 73.6                                 | 68.6    |
| 3                            | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 35,400  | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 65.8                                 | 60.8    |
| 4                            | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 49,200  | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 67.3                                 | 62.3    |
| 5                            | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 42,400  | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 68.0                                 | 63.0    |
| 6                            | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 17,900  | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%                        | 65.0                                 | 65.0    |
| 7                            | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 9,800   | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 64.7                                 | 64.7    |
| 8                            | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,000   | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 59.4                                 | 54.4    |
| 9                            | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 2,300   | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 56.1                                 | 51.1    |
| 10                           | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 31,900  | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 66.7                                 | 61.7    |
| 11                           | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 34,200  | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 63.3                                 | 58.3    |

Traffic Noise Spreadsheet Calculator



Project: Phase 1

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

|  |                     | Input                                |                                      |         |             |   |     |                                      |          |         |       |       | Output                      |                                      |         |
|--|---------------------|--------------------------------------|--------------------------------------|---------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|-----------------------------|--------------------------------------|---------|
| Number                                   | Name                | Segment Description and Location     |                                      | ADT     | Speed (mph) | Distance to Directional Centerline, (feet) <sub>a</sub> |     | Traffic Distribution Characteristics |          |         |       |       | Ldn, (dBA) <sub>5,6,7</sub> | Ldn Including Applicable Attenuation |         |
|  |                     | From                                 | To                                   |         |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve |                             |                                      | % Night |
| <b>Cumulative Plus Project (Phase 1)</b> |                     |                                      |                                      |         |             |   |     |                                      |          |         |       |       |                             |                                      |         |
| 1  | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 113,400 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 73.0                                 | 68.0    |
| 2  | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 132,300 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 73.7                                 | 68.7    |
| 3  | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 37,200  | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 66.0                                 | 61.0    |
| 4  | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 54,400  | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 67.7                                 | 62.7    |
| 5  | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 45,300  | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 68.3                                 | 63.3    |
| 6  | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 18,100  | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%                        | 65.0                                 | 65.0    |
| 7  | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 16,800  | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 67.0                                 | 67.0    |
| 8  | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,100   | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 59.6                                 | 54.6    |
| 9  | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 2,900   | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 57.1                                 | 52.1    |
| 10                                       | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 33,000  | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 66.8                                 | 61.8    |
| 11                                       | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 35,400  | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 63.5                                 | 58.5    |

Traffic Noise Spreadsheet Calculator



Project: **Buildout**

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

|   |                     | Input                                |                                      |         |             |   |     |                                      |          |         |       |       | Output  |                             |                                      |
|---|---------------------|--------------------------------------|--------------------------------------|---------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|---------|-----------------------------|--------------------------------------|
| Number                                    | Name                | Segment Description and Location     |                                      | ADT     | Speed (mph) | Distance to Directional Centerline, (feet) <sub>4</sub> |     | Traffic Distribution Characteristics |          |         |       |       |         | Ldn, (dBA) <sub>5,6,7</sub> | Ldn Including Applicable Attenuation |
|   |                     | From                                 | To                                   |         |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve | % Night |                             |                                      |
| <b>Cumulative Plus Project (Buildout)</b> |                     |                                      |                                      |         |             |   |     |                                      |          |         |       |       |         |                             |                                      |
| 1   | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 114,300 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 73.0                        | 68.0                                 |
| 2   | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 135,100 | 65          | 190   | 265 | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%    | 73.8                        | 68.8                                 |
| 3   | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 40,900  | 45          | 100   | 110 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 66.4                        | 61.4                                 |
| 4   | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 60,800  | 45          | 100   | 110 | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 68.2                        | 63.2                                 |
| 5   | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 48,500  | 45          | 80  | 90  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 68.6                        | 63.6                                 |
| 6   | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 18,300  | 40          | 60  | 65  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%    | 65.1                        | 65.1                                 |
| 7   | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 29,000  | 35          | 30  | 35  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 69.4                        | 69.4                                 |
| 8   | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,200   | 35          | 40  | 40  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 59.7                        | 54.7                                 |
| 9   | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 3,600   | 35          | 45  | 45  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 58.1                        | 53.1                                 |
| 10  | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 34,400  | 45          | 80  | 95  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%    | 67.0                        | 62.0                                 |
| 11  | Franklin Boulevard  | Laguna Boulevard                     | Whitelock Parkway                    | 37,200  | 45          | 150   | 150 | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%    | 63.7                        | 58.7                                 |



Traffic Noise Spreadsheet Calculator



Project: Elk Grove CNU Hospital

Noise Level Descriptor: Ldn  
 Site Conditions: Soft  
 Traffic Input: ADT  
 Traffic K-Factor:

| Segment Description and Location |                     |                                      |                                      | Input  |             |   |     |                                      |          |         |       |       | Output                      |  |        |        |        |        |  |  |
|----------------------------------|---------------------|--------------------------------------|--------------------------------------|--------|-------------|---|-----|--------------------------------------|----------|---------|-------|-------|-----------------------------|--|--------|--------|--------|--------|--|--|
| Number                           | Name                | From                                 | To                                   | ADT    | Speed (mph) | Distance to Directional Centerline, (feet) <sub>4</sub> |     | Traffic Distribution Characteristics |          |         |       |       | Ldn, (dBA) <sub>5,6,7</sub> | Distance to Contour, (feet) <sub>3</sub> |        |        |        |        |  |  |
|                                  |                     |                                      |                                      |        |             | Near  | Far | % Auto                               | % Medium | % Heavy | % Day | % Eve |                             | % Night                                  | 70 dBA | 65 dBA | 60 dBA | 55 dBA |  |  |
| <b>Existing Conditions</b>       |                     |                                      |                                      |        |             |   |     |                                      |          |         |       |       |                             |  |        |        |        |        |  |  |
| 1                                | I-5                 | Hood Franklin Road                   | Elk Grove Boulevard                  | 77,000 | 65          | 50  | 50  | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 81.0                                     | 269    | 580    | 1250   | 2693   |  |  |
| 2                                | I-5                 | Elk Grove Boulevard                  | Laguna Boulevard                     | 91,000 | 65          | 50  | 50  | 84.6%                                | 10.3%    | 5.1%    | 80.0% | 15.0% | 5.0%                        | 81.7                                     | 301    | 649    | 1397   | 3011   |  |  |
| 3                                | Elk Grove Boulevard | I-5                                  | West Taron Drive/Harbour Point Drive | 26,400 | 45          | 50  | 50  | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 69.4                                     | 45     | 98     | 210    | 453    |  |  |
| 4                                | Elk Grove Boulevard | West Taron Drive/Harbour Point Drive | Franklin Boulevard                   | 40,900 | 45          | 50  | 50  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 71.3                                     | 61     | 132    | 284    | 612    |  |  |
| 5                                | Elk Grove Boulevard | Franklin Boulevard                   | Bruceville Road                      | 35,200 | 45          | 50  | 50  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 70.7                                     | 55     | 119    | 257    | 554    |  |  |
| 6                                | Harbour Point Drive | Elk Grove Boulevard                  | Laguna Boulevard                     | 13,300 | 40          | 50  | 50  | 98.0%                                | 1.3%     | 0.7%    | 80.0% | 15.0% | 5.0%                        | 65.1                                     | 24     | 51     | 110    | 237    |  |  |
| 7                                | West Taron Drive    | Riparian Drive                       | Elk Grove Boulevard                  | 7,300  | 35          | 50  | 50  | 98.9%                                | 0.7%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 60.6                                     | 12     | 25     | 55     | 117    |  |  |
| 8                                | West Taron Drive    | Ruddy Duck Way                       | Riparian Drive                       | 4,000  | 35          | 50  | 50  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 58.0                                     | 8      | 17     | 37     | 79     |  |  |
| 9                                | Riparian Drive      | West Taron Drive                     | Waterfowl Drive                      | 1,700  | 35          | 50  | 50  | 99.2%                                | 0.5%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 54.1                                     | 4      | 9      | 20     | 44     |  |  |
| 10                               | Franklin Boulevard  | Elk Grove Boulevard                  | Laguna Boulevard                     | 20,900 | 45          | 50  | 50  | 98.8%                                | 0.8%     | 0.4%    | 80.0% | 15.0% | 5.0%                        | 68.4                                     | 39     | 84     | 182    | 391    |  |  |
| 11                               | Franklin Boulevard  | Laguna                               | Whitelock Parkway                    | 22,100 | 45          | 50  | 50  | 99.0%                                | 0.7%     | 0.3%    | 80.0% | 15.0% | 5.0%                        | 68.6                                     | 40     | 87     | 187    | 403    |  |  |

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| 15 | Federal Highway Administration Traffic Noise Model Technical Manual. Report No. FHWA-PD-96-010. 1998 (January). Equation (18), Pg 69 |  |

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