

Appendix A  
Scoring Criteria

## A. Scoring Criteria

### 1. Scoring Instructions

| <b>A - PRESERVE INFRASTRUCTURE</b> |  |                                     |                |                |              |
|------------------------------------|--|-------------------------------------|----------------|----------------|--------------|
| <b>Weight</b>                      | Item                                     | Scoring Criteria                    | Minimum Scores | Maximum Scores | % of Section |
| 12.5%                              | A1                                       | Pavement Evaluation                 | 0              | 75.0           | 75.0%        |
|                                    | A2                                       | Structure Sufficiency Rating        | 0              | 15.0           | 15.0%        |
|                                    | A3                                       | Structure Categorization            | 0              | 10.0           | 10.0%        |
|                                    | Preserve Assets Total Score              |                                     | 0              | 100            | 100.0%       |
| <b>B - OPTIMIZE MOBILITY</b>       |  |                                     |                |                |              |
| <b>Weight</b>                      | Item                                     | Scoring Criteria                    | Minimum Scores | Maximum Scores | % of Section |
| 27.5%                              | B1                                       | AADT                                | 0              | 35.0           | 35.0%        |
|                                    | B2                                       | Traffic Delay                       | 0              | 40.0           | 40.0%        |
|                                    | B3                                       | System Connectivity/Efficiency      | 0              | 25.0           | 25.0%        |
|                                    | Improving Mobility Total Score           |                                     | 0              | 100            | 100.0%       |
| <b>C - IMPROVING SAFETY</b>        |  |                                     |                |                |              |
| <b>Weight</b>                      | Item                                     | Scoring Criteria                    | Minimum Scores | Maximum Scores | % of Section |
| 27.5%                              | C1                                       | Crash Severity                      | 0              | 40.0           | 40.0%        |
|                                    | C2                                       | Crash Reduction (CMF)               | 0              | 40.0           | 40.0%        |
|                                    | C3                                       | Crash Rate                          | 0              | 20.0           | 20.0%        |
|                                    | Improving Safety Total Score             |                                     | 0              | 100            | 100.0%       |
| <b>D - TRANSFORMING ECONOMIES</b>  |  |                                     |                |                |              |
| <b>Weight</b>                      | Item                                     | Scoring Criteria                    | Minimum Scores | Maximum Scores | % of Section |
| 25.0%                              | D1                                       | Truck Percentage                    | 0              | 25.0           | 25.0%        |
|                                    | D2                                       | Freight Reliability                 | 0              | 25.0           | 25.0%        |
|                                    | D3                                       | Support Economic Development        | 0              | 50.0           | 50.0%        |
|                                    | Promote Economic Development Total Score |                                     | 0              | 100            | 100.0%       |
| <b>E - SUSTAINABILITY</b>          |  |                                     |                |                |              |
| <b>Weight</b>                      | Item                                     | Scoring Criteria                    | Minimum Scores | Maximum Scores | % of Section |
| 7.5%                               | E1                                       | Intermodal/Technology Accommodation | 0              | 40.0           | 40.0%        |
|                                    | E2                                       | Financial / Staffing Sustainability | 0              | 40.0           | 40.0%        |
|                                    | E3                                       | Environmental Effects               | 0              | 20.0           | 20.0%        |
|                                    | Community Total Score                    |                                     | 0              | 100            | 100.0%       |

**SUB-SECTION A - PRESERVE INFRASTRUCTURE**

| Overall Preserve Assets |         |             |  |
|-------------------------|---------|-------------|--|
| Total Score             | Ranking | Score       |  |
| 100                     | HIGH    | 50          |  |
|                         | MEDIUM  | 20.7 - 31.2 |  |
|                         | LOW     | 33          |  |

This section is intended to account for existing pavement and structure conditions within the limits of a project. Points are awarded to those projects with poor pavement or structure conditions as a means to prioritize them from a preservation of asset perspective. Projects in greater need of pavement or structure preservation will receive a higher number of points and thus receive a higher ranking as compared to those projects with newer or better condition pavement.

| A1 - Pavement Evaluation Scoring System |                   |      |       |                         |       |       |
|---|-------------------|------|-------|-------------------------|-------|-------|
| Maximum Score                           | Scoring System    |      |       |                         |       |       |
|   | AC Pavement (PRI) |      |       | Concrete Pavement (IRI) |       |       |
|   | Min.              | Max. | Score | Min.                    | Max.  | Score |
| 75.0                                    | 0                 | 49   | 0     | 0                       | 90    | 0     |
|   | 50                | 399  | 25.0  | 90                      | 130   | 18.8  |
|   | 400               | 699  | 50.0  | 130                     | 170   | 37.5  |
|   | 700               | 1400 | 75.0  | 170                     | 230   | 56.3  |
|   |                   |      |       | 230                     | Above | 75.0  |

Description

Points are awarded to projects with poor pavement conditions. For flexible pavements, the condition of the pavement is based on the PRI, with higher PRIs receiving a higher score. For rigid pavements, the condition is based on the IRI and the age of the pavement. Points are awarded to rougher pavements. NDOT is currently in the process of developing a PRI for Rigid pavements to replace IRI in this summary.

For new alignments, the condition of the pavement along the existing route is used. The existing route is defined as the predominant NDOT facility to see the greatest shift in traffic volumes once the new alignment is complete.

| A2 - Structure Sufficiency Rating |                |      |       |
|-----------------------------------|----------------|------|-------|
| Maximum Score                     | Scoring System |      |       |
|                                   | Min.           | Max. | Score |
| 15.0                              | 0              | 49   | 15.0  |
|                                   | 50             | 79   | 11.3  |
|                                   | 80             | 99   | 7.5   |
|                                   | 100            |      | 3.8   |
|                                   | No Structures  |      |       |

Description

Points are awarded to those projects with structures in greater need of rehabilitation or reconstruction based on the lowest sufficiency rating of all the structures within the project limits.

Unless structures were installed by some previous phase, new alignments will not receive any points for preservation of structures.

| <b>A3 - Structure Categorization</b>  |                       |       |
|---|-----------------------|-------|
|   | <b>Scoring System</b> |       |
| Maximum Score   | Criteria              | Score |
| 10.0  | Both SD and FO        | 10.0  |
|   | Either SD or FO       | 5.0   |
|   | not SD or FO          | 0     |
| Description   |                       |       |
| Points are awarded to those projects with structures categorized as either structurally deficient (SD) or functionally obsolete (FO). |                       |       |

| Study          | Location                             | Description                                     | Preserve Infrastructure  |                              |                                      |                            |                          |     |
|----------------|--------------------------------------|---|--|------------------------------|--------------------------------------|----------------------------|--------------------------|-----|
|                |                                      |   | Pavement Evaluation  | Structure Sufficiency Rating | Struct. Deficient or Funct. Obsolete | Total Infrastructure Score | Weighted Preserve Rating |     |
|                |                                      |   | 75.0%  | 15.0%                        | 10.0%                                | 100.0%                     | 12.5%                    |     |
| <b>Roadway</b> |                                      |   |  |                              |                                      |                            |                          |     |
| 1              |                                      | US 395  | Widen US-395 from Clear Acre Lane to Red Rock Drive (MP 27.06 to 35.81)  | 37.5                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
| 2              |                                      | I-80 East                                       | Widen I-80 from McCarran Boulevard to USA Parkway (MP 17.56 to 32.75)  | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 3              |                                      | I-580   | New Auxiliary Lanes between interchanges:<br>1. NB I-580 Moana Ln to Virginia St (MP 22.56 to 21.51)<br>2. NB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51)<br>3. SB I-580 Moana Ln to Virginia St/Kietzke Ln (MP 22.56 to 21.51)<br>4. SB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP20.72 to21.51) | 37.5                         | 9.4                                  | 0.0                        | 46.9                     | 5.9 |
| 4              |                                      | I-80 West                                       | Widen EB I-80 Robb Drive to Keystone Avenue (MP 9.23 to 12.48)   | 15.6                         | 9.4                                  | 5.0                        | 30.0                     | 3.8 |
| 5              | <b>EDAWN La Posada Study</b>         | La Posada Alternatives                          | Potential roadway connection from La Posada to USA Parkway   | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 6              | <b>Sparks TMSA Study</b>             | La Posada                                       |  |                              |                                      |                            |                          |     |
| 7              | <b>NDOT South Meadows Evaluation</b> | South Meadows Connector                         | New alignment from South Meadows to USA Parkway  | 11.7                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
| 8              | <b>Pyramid/US 395 Connector</b>      | Connection between Pyramid and US 395 (Overall) | New alignment currently under EIS study  | 37.5                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
| 9              |                                      | Phase 1   | Widen Pyramid Hwy between Queen Way and Sparks Blvd. (MP 1.97 to 5.44)   | 25.0                         | 9.4                                  | 0.0                        | 34.4                     | 4.3 |
| 10             |                                      | Phase 2   | Widen Disc Dr. from Pyramid hwy. to Vista Blvd.  | 25.0                         | 0.0                                  | 0.0                        | 25.0                     | 3.1 |
| 11             |                                      | Phase 3   | Construct new US 395 Connector from Parr interchange to Pyramid Highway  | 37.5                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
| 12             |                                      | Phase 4   | Add new direct connect Ramps at US395 w/ widening of US395   | 37.5                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
| 13             |                                      | Phase 5   | Widen Pyramid highway from Sparks Blvd. to Calle   | 25.0                         | 0.0                                  | 0.0                        | 25.0                     | 3.1 |

|                |                                |                                      | De La Plata (MP 5.44 to 9.75)  |                              |                                      |                            |                          |     |
|----------------|--------------------------------|--------------------------------------|--|------------------------------|--------------------------------------|----------------------------|--------------------------|-----|
| Study          | Location                       | Description                          | Preserve Infrastructure  |                              |                                      |                            |                          |     |
|                |                                |                                      | Pavement Evaluation  | Structure Sufficiency Rating | Struct. Deficient or Funct. Obsolete | Total Infrastructure Score | Weighted Preserve Rating |     |
|                |                                |                                      | 75.0%  | 15.0%                        | 10.0%                                | 100.0%                     | 12.5%                    |     |
| <b>Roadway</b> |                                |                                      |  |                              |                                      |                            |                          |     |
| 14             |                                | Phase 6                              | New interchange near Sun Valley local improvements                     | 37.5                         | 9.4                                  | 5.0                        | 51.9                     | 6.5 |
|                | SEC Alignment Studies          |                                      |  |                              |                                      |                            |                          |     |
|                | Storey County Land Use         |                                      |  |                              |                                      |                            |                          |     |
| 15             |                                | Patrick/I-80 Interchange             | Reconstruct Interchange  | 0                            | 6.3                                  | 5                          | 11.3                     | 1.4 |
| 16             |                                | Lockwood/I-80 Interchange            | Reconstruct Interchange  | 0                            | 9.4                                  | 0                          | 9.4                      | 1.2 |
| 17             |                                | Vanpooling                           | See transit column below   |                              |                                      |                            |                          |     |
| 18             |                                | TRIC internal transit/rail           | NDOT currently studying as part of inter-county regional transit study |                              |                                      |                            |                          |     |
| 19             | Reno Spaghetti Bowl            | I-80/I-580/US 395 System Interchange | Reconstruct Interchange (MP 25.0)                                      | 23.4                         | 9.4                                  | 10.0                       | 42.8                     | 5.4 |
| 20             | NDOT Autonomous Vehicles Grant | I-80                                 | Feasibility of a pilot AV corridor project                             | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
|                | 2009 I-80 Corridor Study       |                                      |  |                              |                                      |                            |                          |     |
|                |                                | Patrick/I-80 Interchange             | Reconstruct Interchange (MP 28.1)                                      |                              |                                      |                            |                          |     |
|                |                                | Lockwood/I-80 Interchange            | Reconstruct Interchange (MP 22.5)                                      |                              |                                      |                            |                          |     |
|                |                                | Patrick/I-80 Interchange             | Construct Roundabout ramp termini                                      |                              |                                      |                            |                          |     |
|                |                                | Lockwood/I-80 Interchange            | Construct Roundabout ramp termini                                      |                              |                                      |                            |                          |     |
| 21             |                                | Eastbound I-80 - McCarran to Sparks  | Add auxiliary lanes (MP 16.5 to 17.6)                                  | 11.7                         | 0.0                                  | 0.0                        | 11.7                     | 1.5 |
| 22             |                                | Eastbound I-80 McCarran to Vista     | Widen to 3 lanes (MP 17.6 to 19.7)                                     | 11.7                         | 9.4                                  | 0.0                        | 21.1                     | 2.6 |
|                |                                | Eastbound I-80 Vista to Lockwood     | Add auxiliary lane   |                              |                                      |                            |                          |     |
|                |                                | Eastbound I-80 Vista to Patrick      | Widen to 3 lanes   |                              |                                      |                            |                          |     |
| 23             |                                | Westbound I-80 Sparks to McCarran    | Add auxiliary lane (MP 16.5 to 17.6)                                   | 11.7                         | 0.0                                  | 0.0                        | 11.7                     | 1.5 |
| 24             |                                | Westbound I-80 Vista to McCarran     | Widen to 3 lanes (MP 17.6 to 19.7)                                     | 11.7                         | 9.4                                  | 0.0                        | 21.1                     | 2.6 |
|                |                                | Westbound Lockwood to Vista          | Add auxiliary lane   |                              |                                      |                            |                          |     |

|                                 |   | Westbound Patrick to Vista                  | Widen to 3 lanes  |                              |                                      |                            |                          |     |
|---------------------------------|---|---|---|------------------------------|--------------------------------------|----------------------------|--------------------------|-----|
| Study                           | Location  | Description                                 | Preserve Infrastructure                                       |                              |                                      |                            |                          |     |
|                                 |   |   | Pavement Evaluation   | Structure Sufficiency Rating | Struct. Deficient or Funct. Obsolete | Total Infrastructure Score | Weighted Preserve Rating |     |
|                                 |   |   | 75.0%   | 15.0%                        | 10.0%                                | 100.0%                     | 12.5%                    |     |
| <b>Roadway</b>                  |   |   |   |                              |                                      |                            |                          |     |
| 25                              |   | Install ITS backbone                        | E. McCarran to Wadsworth                                      | 11.7                         | 0.0                                  | 0.0                        | 11.7                     | 1.5 |
| <b>Freight</b>                  |   |   |   |                              |                                      |                            |                          |     |
|                                 | <b>Nevada State Freight Plan</b>                        |   |   |                              |                                      |                            |                          |     |
| 26                              |   | I-80 Safety Improvements                    | Eastern Truckee Canyon (USA Parkway interchange improvements) | 0.0                          | 0.0                                  | 0.0                        | 0.0                      | 0.0 |
| 27                              |   | I-80 USA Parkway Interchange                | New interchange with possible direct connect system           | 0.0                          | 6.3                                  | 5.0                        | 11.3                     | 1.4 |
| 28                              |   | Lockwood Interchange                        | New interchange including bridge over the Truckee             |                              |                                      |                            |                          |     |
|                                 | <b>NDOT Statewide Truck Parking Implementation Plan</b> |   |   |                              |                                      |                            |                          |     |
| <b>Other</b>                    |   |   |   |                              |                                      |                            |                          |     |
| 29                              | McCarran SMP  | McCarran Interchange                        | Construct new interchange at McCarran Boulevard               | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 30                              | City of Sparks  | Sparks Interchange                          | Construct new interchange at Sparks Blvd.                     | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 31                              | City of Sparks  | Vista Interchange                           | Construct new interchange at Vista Blvd.                      | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 32                              | RTC   | Clean Water Way                             | Clean Water bypass (from Veterans Pkwy to I-80)(Eastbound)    | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 33                              | I-80 Reversible lanes                                   | Vista to USA                                | Reversible lanes from Vista to USA Pkwy                       | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| 34                              | Eagle Canyon Alignment                                  | Lemmon Valley to Spanish Springs            | New alignment from Spanish Springs to Lemmon Valley (8.2 mi)  | 11.7                         | 9.4                                  | 5.0                        | 26.1                     | 3.3 |
| <b>Transit/Rideshare</b>        |   |   |   |                              |                                      |                            |                          |     |
|                                 | RTC Commuter Rail                                       |   |   |                              |                                      |                            |                          |     |
|                                 | TESLA Park and Ride                                     |   |   |                              |                                      |                            |                          |     |
|                                 | RTC Vanpool   |   |   |                              |                                      |                            |                          |     |
| <b>Operational Agency Plans</b> |   |   |   |                              |                                      |                            |                          |     |
|                                 |   | NDOT Inter-County and Regional Transit Plan |   |                              |                                      |                            |                          |     |
|                                 |   | EDWAN Transit Management Association        |   |                              |                                      |                            |                          |     |

**State of Nevada Department of Transportation Data Summary – Flexible**

**IR080, from East McCarran Blvd to USA Parkway**

**Collection Year: 2016**

| Route | From Cumulative Mile | To Cumulative Mile | Direction | Travel Lanes | PSI  | IRI | Visual Rut > 1/2" | Picture | ADT One Directional | Corrective Action      |
|-------|----------------------|--------------------|-----------|--------------|------|-----|-------------------|---------|---------------------|------------------------|
| IR080 | 26.792               | 27.000             | E         | 2            | 4.33 | 33  | N                 | 1       | 15,000              | Preventive Maintenance |
| IR080 | 27.000               | 28.000             | E         | 2            | 4.36 | 32  | N                 | 1       | 15,000              | Preventive Maintenance |
| IR080 | 28.000               | 29.000             | E         | 2            | 4.32 | 34  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 29.000               | 30.000             | E         | 2            | 4.34 | 33  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 30.000               | 31.000             | E         | 2            | 4.30 | 35  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 31.000               | 32.000             | E         | 2            | 4.34 | 33  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 32.000               | 32.022             | E         | 2            | 4.35 | 33  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 32.022               | 33.000             | E         | 2            | 4.33 | 34  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 27.000               | 26.792             | W         | 2            | 4.35 | 33  | N                 | 1       | 15,000              | Preventive Maintenance |
| IR080 | 28.000               | 27.000             | W         | 2            | 4.41 | 29  | N                 | 1       | 15,000              | Preventive Maintenance |
| IR080 | 29.000               | 28.000             | W         | 2            | 4.33 | 33  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 30.000               | 29.000             | W         | 2            | 4.37 | 31  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 31.000               | 30.000             | W         | 2            | 4.29 | 36  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 32.000               | 31.000             | W         | 2            | 4.31 | 35  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 32.022               | 32.000             | W         | 2            | 4.44 | 27  | N                 | 1       | 16,000              | Preventive Maintenance |
| IR080 | 33.000               | 32.022             | W         | 2            | 4.34 | 33  | N                 | 1       | 16,000              | Preventive Maintenance |



**State of Nevada Department of Transportation Data Summary – Rigid**

**IR080, from East McCarran Blvd to USA Parkway**

**Collection Year: 2016**

| District | Route | County | From Cumulative Mile | To Cumulative Mile | Direction | IRI | IRI Points | ADT One Directional | Rating | Corrective Action      |
|----------|-------|--------|----------------------|--------------------|-----------|-----|------------|---------------------|--------|------------------------|
| 2        | IR080 | WA     | 17.000               | 17.550             | E         | 99  | 300        | 55,000              | 300    | Corrective Maintenance |
| 2        | IR080 | WA     | 17.550               | 17.587             | E         | 93  | 300        | 47,000              | 300    | Corrective Maintenance |
| 2        | IR080 | WA     | 17.587               | 17.638             | E         | 59  | 100        | 47,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 17.638               | 18.000             | E         | 42  | 100        | 47,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 18.000               | 19.000             | E         | 31  | 0          | 38,000              | 0      | Preventive Maintenance |
| 2        | IR080 | WA     | 19.000               | 20.000             | E         | 40  | 0          | 24,000              | 0      | Preventive Maintenance |
| 2        | IR080 | WA     | 20.000               | 20.005             | E         | 154 | 500        | 18,750              | 500    | Overlay                |
| 2        | IR080 | WA     | 20.005               | 20.056             | E         | 68  | 100        | 18,750              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 20.056               | 21.000             | E         | 67  | 100        | 18,750              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 21.000               | 22.000             | E         | 59  | 100        | 18,750              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 22.000               | 23.000             | E         | 57  | 100        | 17,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 23.000               | 24.000             | E         | 71  | 200        | 17,000              | 200    | Corrective Maintenance |
| 2        | IR080 | WA     | 24.000               | 24.917             | E         | 49  | 100        | 15,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 24.917               | 25.000             | E         | 44  | 100        | 15,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 25.000               | 26.000             | E         | 48  | 100        | 15,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 26.000               | 26.792             | E         | 46  | 100        | 15,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 17.000               | 16.000             | W         | 121 | 500        | 59,500              | 500    | Overlay                |
| 2        | IR080 | WA     | 17.550               | 17.000             | W         | 75  | 200        | 55,000              | 200    | Corrective Maintenance |
| 2        | IR080 | WA     | 17.587               | 17.550             | W         | 142 | 500        | 47,000              | 500    | Overlay                |
| 2        | IR080 | WA     | 17.638               | 17.587             | W         | 145 | 500        | 47,000              | 500    | Overlay                |
| 2        | IR080 | WA     | 18.000               | 17.638             | W         | 52  | 100        | 47,000              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 19.000               | 18.000             | W         | 30  | 0          | 38,000              | 0      | Preventive Maintenance |
| 2        | IR080 | WA     | 20.000               | 19.000             | W         | 38  | 0          | 18,750              | 0      | Preventive Maintenance |
| 2        | IR080 | WA     | 20.005               | 20.000             | W         | 50  | 100        | 18,750              | 100    | Corrective Maintenance |
| 2        | IR080 | WA     | 20.056               | 20.005             | W         | 54  | 100        | 18,750              | 100    | Corrective Maintenance |

|   |       |    |        |        |   |    |     |        |     |                        |
|---|-------|----|--------|--------|---|----|-----|--------|-----|------------------------|
| 2 | IR080 | WA | 21.000 | 20.056 | W | 63 | 100 | 18,750 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 22.000 | 21.000 | W | 62 | 100 | 18,750 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 23.000 | 22.000 | W | 58 | 100 | 17,000 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 24.000 | 23.000 | W | 73 | 200 | 17,000 | 200 | Corrective Maintenance |
| 2 | IR080 | WA | 24.917 | 24.000 | W | 59 | 100 | 15,000 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 25.000 | 24.917 | W | 63 | 100 | 15,000 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 26.000 | 25.000 | W | 50 | 100 | 15,000 | 100 | Corrective Maintenance |
| 2 | IR080 | WA | 26.792 | 26.000 | W | 55 | 100 | 15,000 | 100 | Corrective Maintenance |

State of Nevada Department of Transportation Pavement Data Summary - Rigid

US395, from Parr Blvd to Red Rock Road

Collection Year: 2016

| District | Route | County | From Cumulative Mile | To Cumulative Mile | Direction | IRI | IRI Points | ADT One Directional | Rating | Corrective Action      |
|----------|-------|--------|----------------------|--------------------|-----------|-----|------------|---------------------|--------|------------------------|
| 2        | US395 | WA     | 31                   | 31                 | N         | 146 | 400        | 32,000              | 400    | Overlay                |
| 2        | US395 | WA     | 31                   | 31                 | N         | 136 | 400        | 32,000              | 400    | Overlay                |
| 2        | US395 | WA     | 31                   | 32                 | N         | 143 | 400        | 37,000              | 400    | Overlay                |
| 2        | US395 | WA     | 31                   | 31                 | S         | 158 | 400        | 32,000              | 434    | Overlay                |
| 2        | US395 | WA     | 31                   | 31                 | S         | 111 | 200        | 32,000              | 200    | Corrective Maintenance |
| 2        | US395 | WA     | 32                   | 31                 | S         | 151 | 400        | 37,000              | 400    | Overlay                |

**State of Nevada Department of Transportation Pavement Data Summary - Flexible**

**US395, from Parr Blvd to Red Rock Road**

**Collection Year: 2016**

| From Cumulative Mile | To Cumulative Mile | Direction | Travel Lanes | PSI  | IRI | Transverse Extent | Cracks Sealed | Visual Rut > 1/2" | Raveling Severity | ADT One Directional | Corrective Action      |
|----------------------|--------------------|-----------|--------------|------|-----|-------------------|---------------|-------------------|-------------------|---------------------|------------------------|
| 29                   | 30                 | N         | 2            | 3.86 | 56  | 10                | N             | N                 |                   | 32,000              | Preventive Maintenance |
| 30                   | 30                 | N         | 2            | 3.45 | 79  | 30                | Y             | N                 | L                 | 32,000              | Corrective Maintenance |
| 30                   | 31                 | N         | 2            | 3.57 | 82  |                   |               | N                 |                   | 37,000              | Corrective Maintenance |
| 32                   | 32                 | N         | 2            | 3.73 | 68  |                   |               | N                 |                   | 37,000              | Preventive Maintenance |
| 32                   | 33                 | N         | 2            | 3.99 | 51  |                   |               | N                 |                   | 31,500              | Preventive Maintenance |
| 33                   | 34                 | N         | 2            | 4.10 | 44  |                   |               | N                 |                   | 25,000              | Preventive Maintenance |
| 34                   | 35                 | N         | 2            | 3.89 | 58  |                   |               | N                 |                   | 25,000              | Preventive Maintenance |
| 35                   | 35                 | N         | 2            | 4.21 | 40  |                   |               | N                 |                   | 14,500              | Preventive Maintenance |
| 35                   | 36                 | N         | 2            | 4.20 | 38  |                   |               | N                 |                   | 14,500              | Preventive Maintenance |
| 30                   | 29                 | S         | 2            | 3.61 | 78  |                   |               | N                 |                   | 32,000              | Preventive Maintenance |
| 30                   | 30                 | S         | 2            | 3.44 | 68  | 30                | Y             | N                 |                   | 32,000              | Corrective Maintenance |
| 31                   | 30                 | S         | 2            | 3.23 | 106 |                   |               | N                 |                   | 37,000              | Corrective Maintenance |
| 32                   | 32                 | S         | 2            | 3.08 | 96  | 10                | N             | N                 |                   | 37,000              | Corrective Maintenance |
| 33                   | 32                 | S         | 2            | 4.00 | 50  |                   |               | N                 |                   | 31,500              | Preventive Maintenance |
| 34                   | 33                 | S         | 2            | 4.09 | 43  |                   |               | N                 |                   | 25,000              | Preventive Maintenance |
| 35                   | 34                 | S         | 2            | 3.64 | 66  | 10                | N             | N                 |                   | 25,000              | Preventive Maintenance |
| 35                   | 35                 | S         | 2            | 4.14 | 42  |                   |               | N                 |                   | 14,500              | Preventive Maintenance |
| 36                   | 35                 | S         | 2            | 4.14 | 42  |                   |               | N                 |                   | 14,500              | Preventive Maintenance |

**State of Nevada Department of Transportation Pavement Data Summary - Rigid**

**SR445, from Queen Way to Calle De La Plata**

**Collection Year: 2016**

| Route | From Cumulative Mile | To Cumulative Mile | Direction | Travel Lanes | PSI  | IRI | Non Wheel Path Extent | Cracks Sealed | Visual Rut > 1/2" | ADT One Directional | Corrective Action      |
|-------|----------------------|--------------------|-----------|--------------|------|-----|-----------------------|---------------|-------------------|---------------------|------------------------|
| SR445 | 5                    | 5                  | N         | 2            | 3.87 | 59  |                       |               | N                 | 16,500              | Preventive Maintenance |
| SR445 | 5                    | 6                  | N         | 2            | 3.84 | 62  |                       |               | N                 | 17,500              | Preventive Maintenance |
| SR445 | 6                    | 7                  | N         | 2            | 3.68 | 54  | 100                   | N             | N                 | 17,500              | Corrective Maintenance |
| SR445 | 7                    | 8                  | N         | 2            | 3.97 | 55  |                       |               | N                 | 17,500              | Preventive Maintenance |
| SR445 | 8                    | 9                  | N         | 2            | 3.64 | 67  |                       | N             | N                 | 6,000               | Preventive Maintenance |
| SR445 | 9                    | 10                 | N         | 2            | 4.09 | 48  |                       |               | N                 | 6,000               | Preventive Maintenance |
| SR445 | 10                   | 11                 | N         | 2            | 4.00 | 54  |                       |               | N                 | 3,100               | Preventive Maintenance |
| SR445 | 11                   | 11                 | N         | 2            | 3.99 | 55  |                       |               | N                 | 3,100               | Preventive Maintenance |
| SR445 | 11                   | 12                 | N         | 2            | 3.86 | 63  |                       |               | N                 | 3,100               | Preventive Maintenance |
| SR445 | 5                    | 5                  | S         | 2            | 3.71 | 52  | 90                    | N             | N                 | 16,500              | Corrective Maintenance |
| SR445 | 6                    | 5                  | S         | 2            | 3.67 | 52  | 100                   | N             | N                 | 17,500              | Corrective Maintenance |
| SR445 | 7                    | 6                  | S         | 2            | 3.48 | 65  | 100                   | N             | N                 | 17,500              | Corrective Maintenance |
| SR445 | 8                    | 7                  | S         | 2            | 3.96 | 54  |                       |               | N                 | 17,500              | Preventive Maintenance |
| SR445 | 9                    | 8                  | S         | 2            | 3.88 | 41  | 95                    | N             | N                 | 6,000               | Corrective Maintenance |
| SR445 | 10                   | 9                  | S         | 2            | 4.15 | 43  |                       |               | N                 | 6,000               | Preventive Maintenance |
| SR445 | 11                   | 10                 | S         | 2            | 3.93 | 58  |                       |               | N                 | 3,100               | Preventive Maintenance |
| SR445 | 11                   | 11                 | S         | 2            | 3.95 | 57  |                       |               | N                 | 3,100               | Preventive Maintenance |
| SR445 | 12                   | 11                 | S         | 1            | 4.05 | 50  |                       |               | N                 | 3,100               | Preventive Maintenance |

## Bridge Ratings

| Bridge Number | NBI 007: Facility Carried by Structure | NBI 009: Location | NBI 064: Operating Rating: Tons | NBI 066: Inventory Rating: Tons | NDOT 207: Total Deck Area | Unofficial Functionally Obsolete | Unofficial Structurally Deficient | Unofficial Sufficiency Rating |
|---------------|--|-------------------|---------------------------------|---------------------------------|---------------------------|----------------------------------|-----------------------------------|-------------------------------|
| I1306         | PARR BL                                | RENO              | 52.9                            | 34.5                            | 12973                     | N                                | N                                 | 85.9                          |
| G1092N        | US 395N                                | NORTH OF RENO     | 43.5                            | 25.9                            | 8736                      | Y                                | N                                 | 69                            |
| G1092S        | US 395S                                | NORTH OF RENO     | 43.5                            | 25.9                            | 8736                      | N                                | N                                 | 88.6                          |
| I1093N        | US 395N                                | RENO              | 79.1                            | 47.5                            | 7688                      | Y                                | N                                 | 76.9                          |
| I1093S        | US 395S                                | RENO              | 79.1                            | 47.5                            | 7688                      | N                                | N                                 | 96.4                          |
| G1748N        | US 395N                                | NORTH OF RENO     | 44.6                            | 27                              | 13582                     | N                                | N                                 | 90.9                          |
| G1748S        | US 395S                                | NORTH OF RENO     | 57.5                            | 34.5                            | 10564                     | N                                | N                                 | 97.9                          |
| I1749N        | US 395N                                | NORTH OF RENO     | 99.8                            | 63.3                            | 7064                      | N                                | N                                 | 98.2                          |
| I1749S        | US 395S                                | NORTH OF RENO     | 99.8                            | 63.3                            | 7064                      | N                                | N                                 | 98.2                          |
| I1770N        | US 395N                                | NORTH OF RENO     | 96.6                            | 57.9                            | 6865                      | N                                | N                                 | 99.3                          |
| I1770S        | US 395S                                | NORTH OF RENO     | 96.9                            | 57.9                            | 6865                      | N                                | N                                 | 99.3                          |
| I 683N        | US 395N                                | STEAD             | 85.6                            | 51.4                            | 5289                      | Y                                | N                                 | 96                            |
| I 683S        | US 395S                                | STEAD             | 85.6                            | 51.4                            | 5289                      | Y                                | N                                 | 96                            |
| G1697N        | US 395N                                | NORTH OF RENO     | 99.8                            | 90.4                            | 7115                      | N                                | N                                 | 99.4                          |
| G1697S        | US 395S                                | NORTH OF RENO     | 99.8                            | 89.6                            | 6958                      | N                                | N                                 | 99.4                          |
| I1289N        | US 395N                                | NORTH OF RENO     | 99.8                            | 66.2                            | 6332                      | N                                | N                                 | 97.4                          |
| I1289S        | US 395S                                | NORTH OF RENO     | 99.8                            | 66.2                            | 6332                      | N                                | N                                 | 97.4                          |
| I1831         | I 580                                  | RENO              | 99.8                            | 68                              | 48638.4                   | Y                                | N                                 | 79                            |
| H1830         | I 580                                  | SOUTH RENO        | 95.6                            | 57.1                            | 15254                     | N                                | N                                 | 85.4                          |
| <b>B1829</b>  | <b>I 580</b>                           | <b>SOUTH RENO</b> | <b>99.8</b>                     | <b>99.7</b>                     | <b>7651</b>               | <b>N</b>                         | <b>N</b>                          | <b>71.8</b>                   |
| <b>B1801</b>  | <b>SR 667/<br/>DELMONTE LN</b>         | <b>RENO</b>       | <b>93</b>                       | <b>55.7</b>                     | <b>2030</b>               | <b>N</b>                         | <b>N</b>                          | <b>83.1</b>                   |
| I1800         | I 580                                  | RENO              | 99.8                            | 68.2                            | 15539                     | N                                | N                                 | 90.8                          |
| I2936         | I 580                                  | SOUTH RENO        | 85.6                            | 65.8                            | 16385                     | N                                | N                                 | 96.4                          |
| H1798         | I 580                                  | SOUTH RENO        | 99.8                            | 64                              | 32700                     | Y                                | N                                 | 74.4                          |
| I1799         | I 580                                  | RENO              | 99.8                            | 65.4                            | 30386                     | Y                                | N                                 | 74.4                          |
| I1799R        | RMP I 580                              | RENO              | 99.8                            | 79.9                            | 6477                      | N                                | N                                 | 98.6                          |
| H1247         | I 580                                  | RENO              | 99.8                            | 72.7                            | 14577                     | N                                | N                                 | 83                            |
| I1248         | I 580                                  | RENO              | 99.8                            | 73                              | 17251                     | Y                                | N                                 | 90.5                          |
| I1250         | I 580                                  | RENO              | 64                              | 18.7                            | 206608                    | N                                | N                                 | 61.3                          |
| I1301E        | I 80E                                  | WEST OF RENO      | 99.8                            | 41.7                            | 8219.8                    | N                                | N                                 | 96                            |
| I1301W        | I 80W                                  | WEST OF RENO      | 99.8                            | 41.7                            | 12631.7                   | N                                | N                                 | 96                            |
| H 768         | CEMETERY ROAD                          | WEST OF RENO      | 14.7                            | 9                               | 8077.4                    | Y                                | N                                 | 53.2                          |
| H1162E        | I 80E                                  | RENO              | 90                              | 55.8                            | 6380                      | N                                | N                                 | 94.4                          |
| H1162W        | I 80W                                  | RENO              | 90                              | 55.8                            | 8765                      | N                                | N                                 | 94.4                          |
| I 987         | I 80                                   | RENO              | 98.9                            | 59.4                            | 26157                     | N                                | N                                 | 98                            |
| B 815         | SR 445/PYRAMID L.                      | SPARKS            | 83.8                            | 50.3                            | 770                       | N                                | N                                 | 77                            |
| B2537         | SR 445 PYRAMID HWY                     | SPANISH SPRINGS   | 56.7                            | 34                              | 1120                      | N                                | N                                 | 98.2                          |

| Bridge Number | NBI 007: Facility Carried by Structure | NBI 009: Location | NBI 064: Operating Rating: Tons | NBI 066: Inventory Rating: Tons | NDOT 207: Total Deck Area | Unofficial Functionally Obsolete | Unofficial Structurally Deficient | Unofficial Sufficiency Rating |
|---------------|--|-------------------|---------------------------------|---------------------------------|---------------------------|----------------------------------|-----------------------------------|-------------------------------|
| I1008         | VISTA BL                               | SPARKS            | 63.7                            | 38.1                            | 15892                     | N                                | N                                 | 94                            |
| I 750         | LOCKWOOD DR                            | EAST OF SPARKS    | 69.4                            | 30.2                            | 4404                      | N                                | N                                 | 70.5                          |
| I 753E        | I 80E                                  | EAST OF SPARKS    | 99.8                            | 73.4                            | 5164                      | N                                | N                                 | 95                            |
| I 753W        | I 80W                                  | EAST OF SPARKS    | 99.8                            | 73.4                            | 5164                      | N                                | N                                 | 95                            |
| I 660         | I 80                                   | EAST OF SPARKS    | 78.8                            | 47.1                            | 3628                      | Y                                | N                                 | 94                            |
| H 643         | I 80                                   | EAST OF SPARKS    | 78.8                            | 47.1                            | 3700                      | Y                                | N                                 | 72.6                          |
| I2796         | USA PARKWAY                            | WEST OF WADSWORTH | 55.4                            | 42.8                            | 12921                     | Y                                | N                                 | 94.6                          |

### 3. Optimize Mobility

## SUB-SECTION B - OPTIMIZE MOBILITY

| Overall Improve Mobility |         |             |  |
|--------------------------|---------|-------------|--|
| Total Score              | Ranking | Score       |  |
| 100                      | HIGH    | 60          |  |
|                          | MEDIUM  | 45.5 - 82.4 |  |
|                          | LOW     | 33          |  |

Creating and maintaining a convenient and efficient transportation system is a primary goal of NDOT. Projects are evaluated and scored on their current ability to move vehicles throughout the system. Using the criteria below, points are awarded to projects in greater need of mobility improvements.

| B1 - AADT     |   |       |
|---------------|---|-------|
| Maximum Score | AADT Scoring System                           |       |
|               | AADT  | Score |
| 35.0          | Equation Used:<br>Score = ((AADT*0.01)^0.429) |       |
|               | 0   | 0.0   |
|               | 1000  | 2.7   |
|               | 5000  | 5.5   |
|               | 10000   | 7.5   |
|               | 50000   | 15.0  |
|               | 100000  | 20.4  |
|               | 150000  | 24.3  |
|               | 300000  | 32.9  |
|               | Greater than 300000                           | 35.0  |

#### Description

Points are awarded to those projects that have a higher volume of traffic. The scoring has been weighted such that high volumes roadways are weighted proportionally greater than low volume roadways.

| B2 - Travel Time Reduction |                               |     |                                       |             |
|----------------------------|-------------------------------|-----|---------------------------------------|-------------|
| Maximum Score              | Travel Time Scoring           |     |                                       |             |
|                            | Time Travel Savings (Minutes) |     | Score (Highest and Lowest shown)      |             |
|                            |                               |     | Rural Principal Arterial - Interstate | Urban Local |
| 40.0                       | 0                             | 2.9 | 10.0                                  | 0.0         |
|                            | 3                             | 5.8 | 12.0                                  | 4.0         |
|                            | 5.9                           | 8.6 | 20.0                                  | 8.0         |



|  |      |      |      |      |
|--|------|------|------|------|
|  | 8.7  | 11.5 | 32.0 | 14.0 |
|  | 11.6 | 14.3 | 40.0 | 24.0 |
|  | 14.4 | 17.2 | 40.0 | 36.0 |
|  | 17.3 | 20   | 40.0 | 40.0 |

Description

Points are awarded based on a project that will reduce travel time. The two functional classes receiving the highest and lowest scores based on the delay are shown. All other classifications fall between these two classes.

**B3 - System Connectivity/Efficiency**

| Connectivity Scoring |   |       |
|----------------------|---|-------|
| Maximum Score        | Criteria  | Score |
| 25.0                 | Project is an existing roadway along a completed and existing roadway network.                                  | 0     |
|                      | Project is a preliminary phase of a larger project and could provide a future link to the roadway network.      | 8.3   |
|                      | Project is part of an intermediate phase and/or provides additional connections to the overall roadway network. | 16.7  |
|                      | Project is an essential link to the roadway network and completes the overall network improvements.             | 25.0  |

Description

System Connectivity measures how a project fits into the overall roadway system network. Points are awarded to those projects that provide a vital link to the surrounding network or construct additional phases to an already completed portion of a proposed roadway.

| Study          | Location                             | Description                                     | Optimize Mobility  |                        |                                |                      |                          |      |
|----------------|--------------------------------------|---|--|------------------------|--------------------------------|----------------------|--------------------------|------|
|                |                                      |   | AADT   | Travel Delay Reduction | System Connectivity/Efficiency | Total Mobility Score | Weighted Mobility Rating |      |
|                |                                      |   | 35.0%  | 40.0%                  | 25.0%                          | 100.0%               | 27.5%                    |      |
| <b>Roadway</b> |                                      |   |  |                        |                                |                      |                          |      |
| 1              |                                      | US 395  | Widen US-395 from Clear Acre Lane to Red Rock Drive (MP 27.06 to 35.81)  | 16.9                   | 12.0                           | 0.0                  | 28.9                     | 7.9  |
| 2              |                                      | I-80 East                                       | Widen I-80 from McCarran Boulevard to USA Parkway (MP 17.56 to 32.75)  | 11.5                   | 40.0                           | 0.0                  | 51.5                     | 14.2 |
| 3              |                                      | I-580   | New Auxiliary Lanes between interchanges:<br>1. NB I-580 Moana Ln to Virginia St (MP 22.56 to 21.51)<br>2. NB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51)<br>3. SB I-580 Moana Ln to Virginia St/Kietzke Ln (MP 22.56 to 21.51)<br>4. SB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP20.72 to21.51) | 16.9                   | 12.0                           | 0.0                  | 28.9                     | 7.9  |
| 4              |                                      | I-80 West                                       | Widen EB I-80 Robb Drive to Keystone Avenue (MP 9.23 to 12.48)   | 17.7                   | 12.0                           | 0.0                  | 29.7                     | 8.2  |
| 5              | <b>EDAWN La Posada Study</b>         | La Posada Alternatives                          | Potential roadway connection from La Posada to USA Parkway   | 5.4                    | 40.0                           | 16.7                 | 62.1                     | 17.1 |
| 6              | <b>Sparks TMSA Study</b>             | La Posada                                       |  |                        |                                |                      |                          |      |
| 7              | <b>NDOT South Meadows Evaluation</b> | South Meadows Connector                         | New alignment from South Meadows to USA Parkway  | 5.4                    | 14.0                           | 16.7                 | 36.1                     | 9.9  |
| 8              | <b>Pyramid/US 395 Connector</b>      | Connection between Pyramid and US 395 (Overall) | New alignment currently under EIS study  | 13.1                   | 40.0                           | 25.0                 | 78.1                     | 21.5 |
| 9              |                                      | Phase 1   | Widen Pyramid Hwy between Queen Way and Sparks Blvd. (MP 1.97 to 5.44)   | 14.0                   | 10.0                           | 8.3                  | 32.3                     | 8.9  |
| 10             |                                      | Phase 2   | Widen Disc Dr. from Pyramid hwy. to Vista Blvd.  | 5.4                    | 10.0                           | 0.0                  | 15.4                     | 4.2  |

| Study          | Location                              | Description                          | Optimize Mobility  |                        |                                 |                      |                          |      |
|----------------|---------------------------------------|--------------------------------------|--|------------------------|---------------------------------|----------------------|--------------------------|------|
|                |                                       |                                      | AADT   | Travel Delay Reduction | System Connectivity/ Efficiency | Total Mobility Score | Weighted Mobility Rating |      |
|                |                                       |                                      | 35.0%  | 40.0%                  | 25.0%                           | 100.0%               | 27.5%                    |      |
| <b>Roadway</b> |                                       |                                      |  |                        |                                 |                      |                          |      |
| 11             |                                       | Phase 3                              | Construct new US 395 Connector from Parr interchange to Pyramid Highway        | 13.1                   | 20.0                            | 16.7                 | 49.8                     | 13.7 |
| 12             |                                       | Phase 4                              | Add new direct connect Ramps at US395 w/ widening of US395                     | 13.1                   | 10.0                            | 25.0                 | 48.1                     | 13.2 |
| 13             |                                       | Phase 5                              | Widen Pyramid highway from Sparks Blvd. to Calle De La Plata (MP 5.44 to 9.75) | 11.7                   | 10.0                            | 8.3                  | 30.0                     | 8.3  |
| 14             |                                       | Phase 6                              | New interchange near Sun Valley local improvements                             | 13.0                   | 32.0                            | 16.7                 | 61.7                     | 17.0 |
|                | SEC Alignment Studies                 |                                      |  |                        |                                 |                      |                          |      |
|                | <b>Storey County Land Use</b>         |                                      |  |                        |                                 |                      |                          |      |
| 15             |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange  | 11.5                   | 10                              | 8.3                  | 29.8                     | 8.2  |
| 16             |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange  | 12.7                   | 10                              | 8.3                  | 31.0                     | 8.5  |
| 17             |                                       | Vanpooling                           | See transit column below   |                        |                                 |                      |                          |      |
| 18             |                                       | TRIC internal transit/rail           | NDOT currently studying as part of inter-county regional transit study         |                        |                                 |                      |                          |      |
| 19             | <b>Reno Spaghetti Bowl</b>            | I-80/I-580/US 395 System Interchange | Reconstruct Interchange (MP 25.0)  | 25.6                   | 40.0                            | 16.7                 | 82.3                     | 22.6 |
| 20             | <b>NDOT Autonomous Vehicles Grant</b> | I-80                                 | Feasibility of a pilot AV corridor project                                     | 4.3                    | 10                              | 8.3                  | 22.6                     | 6.2  |
|                | <b>2009 I-80 Corridor Study</b>       |                                      |  |                        |                                 |                      |                          |      |
|                |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange (MP 28.1)  |                        |                                 |                      |                          |      |
|                |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange (MP 22.5)  |                        |                                 |                      |                          |      |
|                |                                       | Patrick/I-80 Interchange             | Construct Roundabout ramp termini  |                        |                                 |                      |                          |      |
|                |                                       | Lockwood/I-80 Interchange            | Construct Roundabout ramp termini  |                        |                                 |                      |                          |      |

| Study          | Location  | Description                         | Optimize Mobility   |                        |                                 |                      |                          |      |
|----------------|---|-------------------------------------|---|------------------------|---------------------------------|----------------------|--------------------------|------|
|                |   |                                     | AADT  | Travel Delay Reduction | System Connectivity/ Efficiency | Total Mobility Score | Weighted Mobility Rating |      |
|                |   |                                     | 35.0%   | 40.0%                  | 25.0%                           | 100.0%               | 27.5%                    |      |
| <b>Roadway</b> |   |                                     |   |                        |                                 |                      |                          |      |
| 21             |   | Eastbound I-80 - McCarran to Sparks | Add auxiliary lanes (MP 16.5 to 17.6)                         | 12.8                   | 10.0                            | 0.0                  | 22.8                     | 6.3  |
| 22             |   | Eastbound I-80 McCarran to Vista    | Widen to 3 lanes (MP 17.6 to 19.7)                            | 10.5                   | 10.0                            | 0.0                  | 20.5                     | 5.6  |
|                |   | Eastbound I-80 Vista to Lockwood    | Add auxiliary lane  |                        |                                 |                      |                          |      |
|                |   | Eastbound I-80 Vista to Patrick     | Widen to 3 lanes  |                        |                                 |                      |                          |      |
| 23             |   | Westbound I-80 Sparks to McCarran   | Add auxiliary lane (MP 16.5 to 17.6)                          | 12.8                   | 10.0                            | 0.0                  | 22.8                     | 6.3  |
| 24             |   | Westbound I-80 Vista to McCarran    | Widen to 3 lanes (MP 17.6 to 19.7)                            | 10.5                   | 10.0                            | 0.0                  | 20.5                     | 5.6  |
|                |   | Westbound Lockwood to Vista         | Add auxiliary lane  |                        |                                 |                      |                          |      |
|                |   | Westbound Patrick to Vista          | Widen to 3 lanes  |                        |                                 |                      |                          |      |
| 25             |   | Install ITS backbone                | E. McCarran to Wadsworth                                      | 10.6                   | 12.0                            | 0.0                  | 22.6                     | 6.2  |
| <b>Freight</b> |   |                                     |   |                        |                                 |                      |                          |      |
|                | <b>Nevada State Freight Plan</b>                        |                                     |   |                        |                                 |                      |                          |      |
| 26             |   | I-80 Safety Improvements            | Eastern Truckee Canyon (USA Parkway interchange improvements) | 11.9                   | 20.0                            | 0.0                  | 31.9                     | 8.8  |
| 27             |   | I-80 USA Parkway Interchange        | New interchange with possible direct connect system           | 11.9                   | 10                              | 8.3                  | 23.8                     | 6.5  |
| 28             |   | Lockwood Interchange                | New interchange including bridge over the Truckee             |                        |                                 |                      |                          |      |
|                | <b>NDOT Statewide Truck Parking Implementation Plan</b> |                                     |   |                        |                                 |                      |                          |      |
| <b>Other</b>   |   |                                     |   |                        |                                 |                      |                          |      |
| 29             | McCarran SMP  | McCarran Interchange                | Construct new interchange at McCarran Boulevard               | 18.9                   | 10.0                            | 8.3                  | 37.2                     | 10.2 |
| 30             | City of Sparks  | Sparks Interchange                  | Construct new interchange at Sparks Blvd.                     | 18.9                   | 10.0                            | 8.3                  | 37.2                     | 10.2 |

| Study                           | Location                                    | Description                      | Optimize Mobility  |                        |                                 |                      |                          |             |
|---------------------------------|---|----------------------------------|--|------------------------|---------------------------------|----------------------|--------------------------|-------------|
|                                 |   |                                  | AADT   | Travel Delay Reduction | System Connectivity/ Efficiency | Total Mobility Score | Weighted Mobility Rating |             |
|                                 |   |                                  | 35.0%  | 40.0%                  | 25.0%                           | 100.0%               | 27.5%                    |             |
| <b>31</b>                       | City of Sparks                              | Vista Interchange                | Construct new interchange at Vista Blvd.                     | 18.9                   | 10.0                            | 8.3                  | 37.2                     | <b>10.2</b> |
| <b>32</b>                       | RTC   | Clean Water Way                  | Clean Water bypass (from Veterans Pkwy to I-80)(Eastbound)   | 18.9                   | 12.0                            | 8.3                  | 39.2                     | <b>10.8</b> |
| <b>33</b>                       | I-80 Reversible lanes                       | Vista to USA                     | Reversible lanes from Vista to USA Pkwy                      | 11.9                   | 32.0                            | 0.0                  | 43.9                     | <b>12.1</b> |
| <b>34</b>                       | Eagle Canyon Alignment                      | Lemmon Valley to Spanish Springs | New alignment from Spanish Springs to Lemmon Valley (8.2 mi) | 2.9                    | 40.0                            | 16.7                 | 61.3                     | <b>16.4</b> |
| <b>Transit/Rideshare</b>        |   |                                  |  |                        |                                 |                      |                          |             |
|                                 | RTC Commuter Rail                           |                                  |  |                        |                                 |                      |                          |             |
|                                 | TESLA Park and Ride                         |                                  |  |                        |                                 |                      |                          |             |
|                                 | RTC Vanpool                                 |                                  |  |                        |                                 |                      |                          |             |
| <b>Operational Agency Plans</b> |   |                                  |  |                        |                                 |                      |                          |             |
|                                 | NDOT Inter-County and Regional Transit Plan |                                  |  |                        |                                 |                      |                          |             |
|                                 | EDWAN Transit Management Association        |                                  |  |                        |                                 |                      |                          |             |

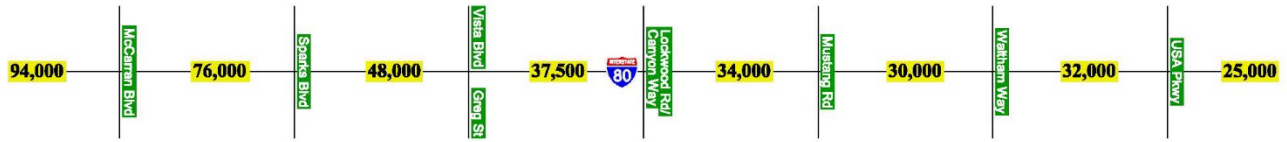
### AADT Totals

| Project No. | AADT   | Score | Year | Truck AADT | AADT   | Truck Percentage |              |                |
|-------------|--------|-------|------|------------|--------|------------------|--------------|----------------|
| 1           | 73000  | 16.9  | 2015 | 3756       | 74000  | 5.1%             |              |                |
| 2           | 30000  | 11.6  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 3           | 72500  | 16.9  | 2014 | 4341       | 141000 | 3.1%             |              |                |
| 4           | 81000  | 17.7  | 2014 | 6374       | 68000  | 9.4%             |              |                |
| 5           | 5000   | 5.4   |      |            |        | 0.0%             | Less than 1% |                |
| 6           | 0      | 0.0   |      |            |        | 0.0%             | Less than 1% |                |
| 7           | 5000   | 5.4   |      |            |        | 0.0%             | Less than 1% |                |
| 8           | 40000  | 13.1  |      |            |        | 0.0%             | Less than 1% | Estimated AADT |
| 9           | 47000  | 14.0  | 2016 | 231        | 41000  | 0.6%             |              |                |
| 10          | 5000   | 5.4   |      |            |        |                  |              | Estimated AADT |
| 11          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 12          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 13          | 31000  | 11.7  | 2016 | 231        | 41000  | 0.6%             |              |                |
| 14          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 15          | 30000  | 11.6  | 2016 | 4231       | 37500  | 11.3%            |              |                |
| 16          | 37500  | 12.7  | 2016 | 4231       | 37500  | 11.3%            |              |                |
| 17          |        |       |      |            |        |                  |              |                |
| 18          |        |       |      |            |        |                  |              |                |
| 19          | 192000 | 25.6  | 2014 | 4341       | 118000 | 3.7%             |              |                |
| 20          | 3000   | 4.3   | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 21          | 38000  | 12.8  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 22          | 24000  | 10.5  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 23          | 38000  | 12.8  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 24          | 24000  | 10.5  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 25          | 25000  | 10.7  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 26          | 32000  | 11.9  | 2016 | 4231       | 32000  | 13.2%            |              |                |
| 27          | 32000  | 11.9  | 2016 | 4231       | 32000  | 13.2%            |              |                |
| 28          |        |       |      |            |        |                  |              |                |
| 29          | 94000  | 18.9  | 2014 | 4341       | 72500  | 6.0%             |              |                |
| 30          | 32000  | 11.9  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 34          | 1200   | 2.9   |      |            |        | 0.0%             | Less than 1% | Estimated AADT |

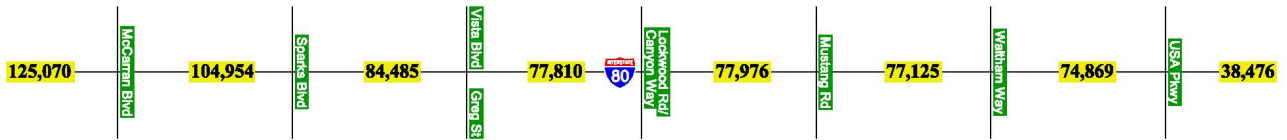
### AADT Totals

| Project No. | AADT   | Score | Year | Truck AADT | AADT   | Truck Percentage |              |                |
|-------------|--------|-------|------|------------|--------|------------------|--------------|----------------|
| 1           | 73000  | 16.9  | 2015 | 3756       | 74000  | 5.1%             |              |                |
| 2           | 30000  | 11.6  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 3           | 72500  | 16.9  | 2014 | 4341       | 141000 | 3.1%             |              |                |
| 4           | 81000  | 17.7  | 2014 | 6374       | 68000  | 9.4%             |              |                |
| 5           | 5000   | 5.4   |      |            |        | 0.0%             | Less than 1% |                |
| 6           | 0      | 0.0   |      |            |        | 0.0%             | Less than 1% |                |
| 7           | 5000   | 5.4   |      |            |        | 0.0%             | Less than 1% |                |
| 8           | 40000  | 13.1  |      |            |        | 0.0%             | Less than 1% | Estimated AADT |
| 9           | 47000  | 14.0  | 2016 | 231        | 41000  | 0.6%             |              |                |
| 10          | 5000   | 5.4   |      |            |        |                  |              | Estimated AADT |
| 11          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 12          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 13          | 31000  | 11.7  | 2016 | 231        | 41000  | 0.6%             |              |                |
| 14          | 40000  | 13.1  |      |            |        |                  |              | Estimated AADT |
| 15          | 30000  | 11.6  | 2016 | 4231       | 37500  | 11.3%            |              |                |
| 16          | 37500  | 12.7  | 2016 | 4231       | 37500  | 11.3%            |              |                |
| 17          |        |       |      |            |        |                  |              |                |
| 18          |        |       |      |            |        |                  |              |                |
| 19          | 192000 | 25.6  | 2014 | 4341       | 118000 | 3.7%             |              |                |
| 20          | 3000   | 4.3   | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 21          | 38000  | 12.8  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 22          | 24000  | 10.5  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 23          | 38000  | 12.8  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 24          | 24000  | 10.5  | 2014 | 4341       | 32000  | 13.6%            |              |                |
| 25          | 25000  | 10.7  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 26          | 32000  | 11.9  | 2016 | 4231       | 32000  | 13.2%            |              |                |
| 27          | 32000  | 11.9  | 2016 | 4231       | 32000  | 13.2%            |              |                |
| 28          |        |       |      |            |        |                  |              |                |
| 29          | 94000  | 18.9  | 2014 | 4341       | 72500  | 6.0%             |              |                |
| 30          | 32000  | 11.9  | 2015 | 6991       | 34000  | 20.6%            |              |                |
| 34          | 3500   | 4.6   |      |            |        | 0.0%             | Less than 1% | Estimated AADT |

**2016 AADT I-80 (E. McCarran Blvd to USA Pkwy)**

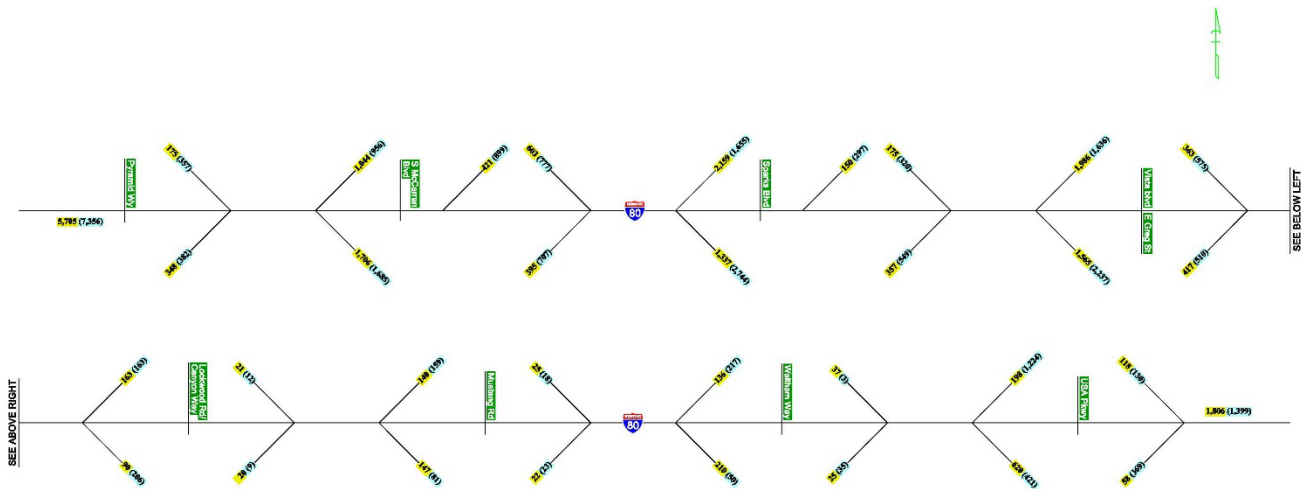


**2040 Estimated ADT I-80 (E. McCarran Blvd to USA Pkwy)**



Note: ADT was estimated from the available Peak-Hour Volume. The assumption was that 8% of ADT is Peak-Hour Volume.

**2016 Pyramid Way to USA Parkway Peak-Period Volumes for Regional Limits**



AM(PM): 7:00-9:00(16:00-18:00)

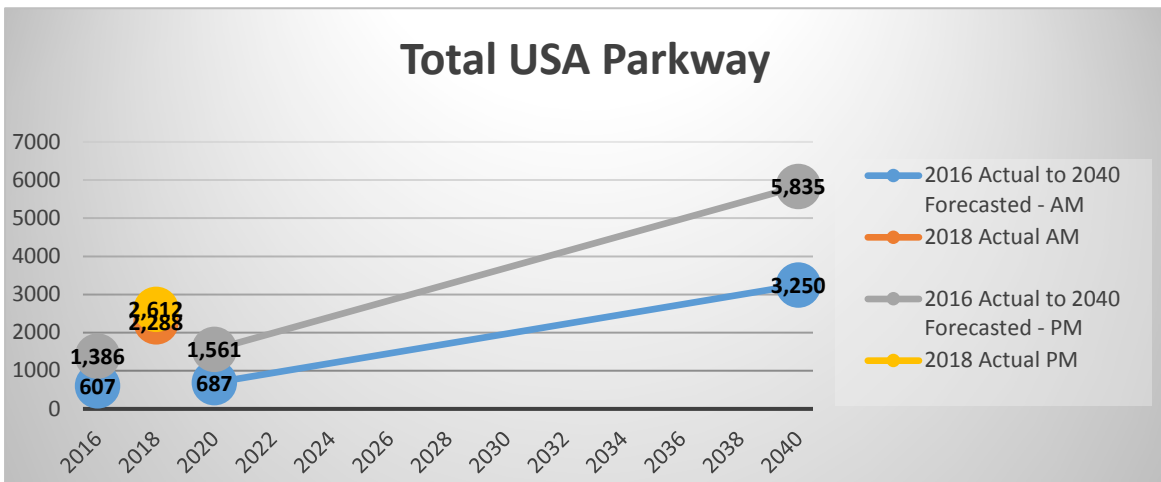
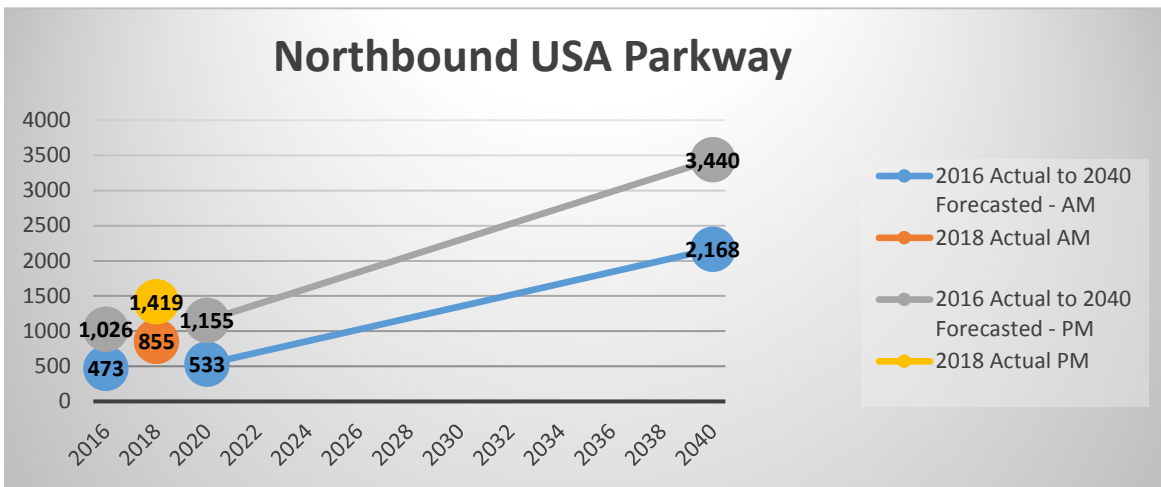
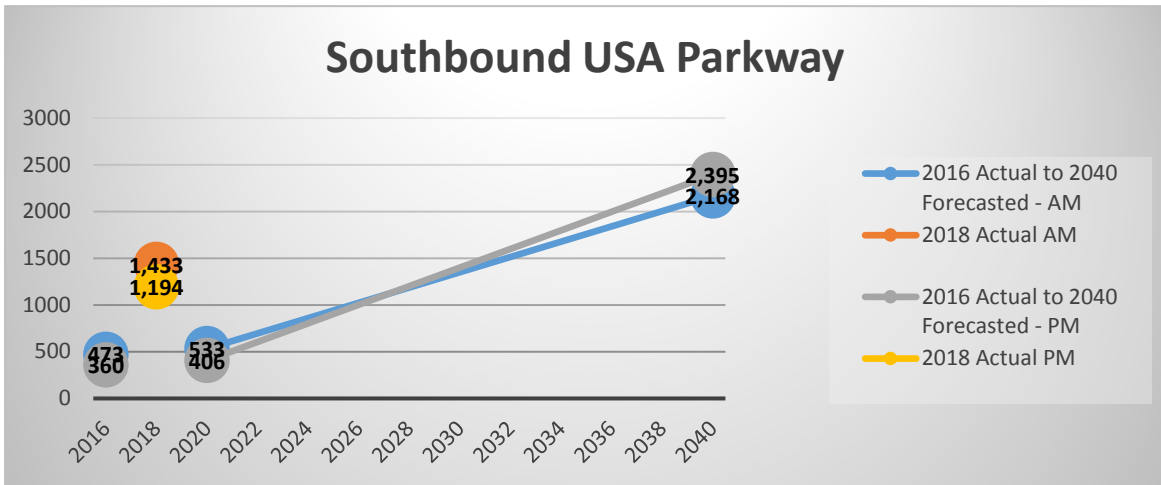


### I-80 Traffic Counts

|             |              |             |                |
|-------------|--------------|-------------|----------------|
| STREET_FRO  | Vista Int    | STREET_FRO  | W McCarran Int |
| STREET_TO   | Lockwood Int | STREET_TO   | Keystone Int   |
| LATITUDE    |              | LATITUDE    |                |
| LONGITUDE   |              | LONGITUDE   |                |
| LAT_DECIMAL | 39.52        | LAT_DECIMAL | 39.53          |
| LON_DECIMAL | -119.69      | LON_DECIMAL | -119.84        |
| ROUTE_NAME  | IR80         | ROUTE_NAME  | IR80E          |
| StationType | Permanent    | StationType | ShortTerm      |
| Visible     | Y            | Visible     | Y              |
| AADT_2007   | 35,000.00    | AADT_2007   | 73,000.00      |
| AADT_2008   | 32,000.00    | AADT_2008   | 72,000.00      |
| AADT_2009   | 31,000.00    | AADT_2009   | 72,000.00      |
| AADT_2010   | 30,000.00    | AADT_2010   | 68,000.00      |
| AADT_2011   | 30,000.00    | AADT_2011   | 69,000.00      |
| AADT_2012   | 29,800.00    | AADT_2012   | 67,000.00      |
| AADT_2013   | 30,500.00    | AADT_2013   | 69,000.00      |
| AADT_2014   | 32,000.00    | AADT_2014   | 68,000.00      |
| AADT_2015   | 34,000.00    | AADT_2015   | 80,000.00      |
| AADT_2016   | 37,500.00    | AADT_2016   | 79,000.00      |
| AADT_2017   | 44,000.00    | AADT_2017   | 81,000.00      |

## USA Traffic Counts

|             |            | 2018 Actual |      |        |            | 2018 Actual |     |        |       | 2018 Actual |              |
|-------------|------------|-------------|------|--------|------------|-------------|-----|--------|-------|-------------|--------------|
|             | Southbound |             |      |        | Northbound |             |     |        | Total |             |              |
|             | AM         | PM          |      |        | AM         | PM          |     |        | AM    | PM          |              |
| <b>2016</b> | 473        | 360         |      |        | 134        | 1026        |     |        | 607   | 1386        |              |
| <b>2018</b> |            |             | 1433 | 1193.5 |            |             | 855 | 1418.5 |       |             | 2288    2612 |
| <b>2020</b> | 533        | 406         |      |        | 154        | 1155        |     |        | 687   | 1561        |              |
| <b>2040</b> | 2168       | 2395        |      |        | 1082       | 3440        |     |        | 3250  | 5835        |              |



### US 395 Traffic Counts: Parr Blvd

|             |  |
|-------------|--|
| Name        | 0310468  |
| ROUTE_ID    |  |
| LOCATION_D  | btwn McCarran Bl Intch 'Exit 70' & Parr Bl Intch 'Exit 71' |
| STREET_FRO  | McCarran Bl  |
| STREET_TO   | Parr Bl  |
| LATITUDE    |  |
| LONGITUDE   |  |
| LAT_DECIMAL | 39.56  |
| LON_DECIMAL | -119.80  |
| ROUTE_NAME  | US395N   |
| StationType | ShortTerm  |
| Visible     | Y  |
| AADT_2007   | 73,000.00  |
| AADT_2008   | 69,000.00  |
| AADT_2009   | 73,000.00  |
| AADT_2010   | 70,000.00  |
| AADT_2011   | 70,000.00  |
| AADT_2012   | 65,000.00  |
| AADT_2013   | 63,500.00  |
| AADT_2014   | 65,000.00  |
| AADT_2015   | 74,000.00  |
| AADT_2016   | 75,000.00  |
| AADT_2017   | 78,000.00  |

### US 395 Traffic Counts: Stead

|             |           |
|-------------|-----------|
| STREET_FRO  | Lemon Vly |
| STREET_TO   | Stead     |
| LATITUDE    |           |
| LONGITUDE   |           |
| LAT_DECIMAL | 39.62     |
| LON_DECIMAL | -119.87   |
| ROUTE_NAME  | US395N    |
| StationType | ShortTerm |
| Visible     | Y         |
| AADT_2007   | 50,000.00 |
| AADT_2008   | 44,000.00 |
| AADT_2009   | 45,000.00 |
| AADT_2010   | 45,000.00 |
| AADT_2011   | 42,000.00 |
| AADT_2012   | 43,000.00 |
| AADT_2013   | 43,000.00 |
| AADT_2014   | 45,000.00 |
| AADT_2015   | 48,000.00 |
| AADT_2016   | 50,000.00 |
| AADT_2017   | 52,000.00 |



|              | Friday 08/25/2017 |        |        | Saturday 08/26/2017 |       |       |
|--------------|-------------------|--------|--------|---------------------|-------|-------|
|              | ROAD              | S      | N      | ROAD                | S     | N     |
| 0:00         | 541               | 253    | 288    | 844                 | 401   | 443   |
| 1:00         | 328               | 153    | 175    | 492                 | 213   | 279   |
| 2:00         | 287               | 115    | 172    | 400                 | 218   | 182   |
| 3:00         | 392               | 162    | 230    | 368                 | 192   | 176   |
| 4:00         | 904               | 337    | 567    | 547                 | 196   | 351   |
| 5:00         | 2,109             | 914    | 1,195  | 1,081               | 415   | 666   |
| 6:00         | 4,818             | 2,215  | 2,603  | 1,854               | 789   | 1,065 |
| 7:00         | 6,779             | 2,651  | 4,128  | 2,616               | 1,105 | 1,511 |
| 8:00         | 5,834             | 2,234  | 3,600  | 3,548               | 1,408 | 2,140 |
| 9:00         | 5,209             | 2,023  | 3,186  | 4,332               | 1,550 | 2,782 |
| 10:00        | 4,831             | 1,777  | 3,054  |                     |       |       |
| 11:00        | 5,071             | 1,848  | 3,223  |                     |       |       |
| 12:00        | 4,765             | 1,452  | 3,313  |                     |       |       |
| 13:00        | 5,427             | 2,031  | 3,396  |                     |       |       |
| 14:00        | 6,076             | 2,199  | 3,877  |                     |       |       |
| 15:00        | 6,703             | 2,483  | 4,220  |                     |       |       |
| 16:00        | 6,468             | 2,462  | 4,006  |                     |       |       |
| 17:00        | 6,422             | 2,352  | 4,070  |                     |       |       |
| 18:00        | 5,354             | 1,847  | 3,507  |                     |       |       |
| 19:00        | 3,829             | 1,311  | 2,518  |                     |       |       |
| 20:00        | 3,083             | 1,168  | 1,915  |                     |       |       |
| 21:00        | 2,732             | 1,037  | 1,695  |                     |       |       |
| 22:00        | 1,994             | 820    | 1,174  |                     |       |       |
| 23:00        | 1,470             | 564    | 906    |                     |       |       |
| Volume       | 91,426            | 34,408 | 57,018 | 16,082              | 6,487 | 9,595 |
| AM Peak Vol  | 6,879             | 2,743  | 4,289  |                     |       |       |
| AM Peak Fct  | 0.91              | 0.93   | 0.88   |                     |       |       |
| AM Peak Hr   | 7:15              | 6:45   | 7:15   |                     |       |       |
| PM Peak Vol  | 6,703             | 2,548  | 4,220  |                     |       |       |
| PM Peak Fct  | 0.97              | 0.96   | 0.98   |                     |       |       |
| PM Peak Hr   | 16:30             | 16:30  | 15:00  |                     |       |       |
| Seasonal Fct | 0.937             | 0.937  | 0.937  | 0.937               | 0.937 | 0.937 |
| Daily Fct    | 0.890             | 0.890  | 0.890  | 1.115               | 1.115 | 1.115 |
| Axle Fct     | 0.500             | 0.500  | 0.500  | 0.500               | 0.500 | 0.500 |
| Pulse Fct    | 2.000             | 2.000  | 2.000  | 2.000               | 2.000 | 2.000 |

### SR 445 Traffic Outcomes

| <b>SR 445: Disc Dr. Traffic Outcomes</b> |                           |
|--|---------------------------|
| STATION                                  | <b>0310340</b>            |
| ROUTE                                    | <b>SR445</b>              |
| LOCATION                                 | <b>3 mi S of Disc Dr.</b> |
| FROM CROSS STREET                        | <b>Queen Way</b>          |
| TO CROSS STREET                          | <b>Disc Dr.</b>           |
| LATITUDE                                 | <b>39.57</b>              |
| LONGITUDE                                | <b>-119.75</b>            |
| AADT_2017                                | <b>47,000</b>             |
| AADT_2016                                | <b>41,000</b>             |
| AADT_2015                                | <b>45,000</b>             |
| AADT_2014                                | <b>40,500</b>             |

| <b>SR 445: La Posada Rd Outcomes</b> |                                  |
|--------------------------------------|----------------------------------|
| STATION                              | <b>0310341</b>                   |
| ROUTE                                | <b>SR445</b>                     |
| LOCATION                             | <b>.25 mi S of La Posada Rd.</b> |
| FROM CROSS STREET                    | <b>Dolores Dr.</b>               |
| TO CROSS ST                          | <b>La Posada Dr.</b>             |
| LATITUDE                             | <b>39.64</b>                     |
| LONGITUDE                            | <b>-119.71</b>                   |
| AADT_2017                            | <b>31,000</b>                    |
| AADT_2016                            | <b>35,000</b>                    |
| AADT_2015                            | <b>32,500</b>                    |
| AADT_2014                            | <b>29,500</b>                    |

## La Posada Travel Times

| Segment            | Route             | Distance (mi) | Travel Time (min) | Speed (mph) |
|--------------------|-------------------|---------------|-------------------|-------------|
| <b>I-80</b>        |                   |               |                   |             |
| Eagle Dawn to TRIC | Existing          | 23.3          | 35                | 40          |
| TRIC to Eagle Dawn | Existing          | 23.3          | 39                | 36          |
|                    | <b>Round Trip</b> | <b>46.6</b>   | <b>74</b>         | <b>38</b>   |

| La Posada Route - 1A (90%) |                   |             |           |           | Assumption                       |
|----------------------------|-------------------|-------------|-----------|-----------|----------------------------------|
| Eagle Nest to TRIC         | La Posada - 1A    | 12.3        | 16        | 45        | 50% TRIC traffic from Eagle Nest |
| TRIC to Eagle Nest         | La Posada - 1A    | 12.3        | 16        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>24.6</b> | <b>33</b> | <b>45</b> |                                  |
| La Posada Route - 1B (10%) |                   |             |           |           | 50% TRIC traffic from Eagle Nest |
| Eagle Nest to TRIC         | La Posada - 1B    | 16          | 21        | 45        |                                  |
| TRIC to Eagle Nest         | La Posada - 1B    | 16.8        | 22        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>32</b>   | <b>43</b> | <b>45</b> |                                  |

| La Posada Route 2A (90%)   |                   |             |           |           | Assumption                       |
|----------------------------|-------------------|-------------|-----------|-----------|----------------------------------|
| Eagle Nest to TRIC         | La Posada - 2A    | 13          | 17        | 45        | 25% TRIC traffic from Eagle Nest |
| TRIC to Eagle Nest         | La Posada - 2B    | 13          | 17        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>33.6</b> | <b>45</b> | <b>45</b> |                                  |
| La Posada Route - 2B (10%) |                   |             |           |           | 25% TRIC traffic from Eagle Nest |
| Eagle Nest to TRIC         | La Posada - 2B    | 16.8        | 22        | 45        |                                  |
| TRIC to Eagle Nest         | La Posada - 2B    | 16.8        | 22        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>26</b>   | <b>35</b> | <b>45</b> |                                  |

| La Posada Route - 3A (90%) |                   |             |           |           | Assumption                       |
|----------------------------|-------------------|-------------|-----------|-----------|----------------------------------|
| Eagle Nest to TRIC         | La Posada - 3A    | 13          | 22        | 45        | 25% TRIC traffic from Eagle Nest |
| TRIC to Eagle Nest         | La Posada - 3A    | 13          | 22        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>26</b>   | <b>35</b> | <b>45</b> |                                  |
| La Posada Route - 3B (10%) |                   |             |           |           | 25% TRIC traffic from Eagle Nest |
| Eagle Nest to TRIC         | La Posada - 3B    | 16.7        | 22        | 45        |                                  |
| TRIC to Eagle Nest         | La Posada - 3B    | 16.7        | 22        | 45        |                                  |
|                            | <b>Round Trip</b> | <b>33.4</b> | <b>45</b> | <b>45</b> |                                  |

| Avg. Distance | Avg. TT |
|---------------|---------|
| 29.3          | 39      |

| TT Savings / Vehicle (min) |
|----------------------------|
| 35                         |



### South Meadows Travel Times

| Segment                                    | Route             | Distance (mi) | Travel Time (min) | Speed (mph) |
|--|-------------------|---------------|-------------------|-------------|
| Veterans Pkwy / South Meadows Pkwy to TRIC | Existing          | 26.6          | 34                | 47          |
| TRIC to Veterans Pkwy / South Meadows Pkwy | Existing          | 27.5          | 37.5              | 44          |
|  | <b>Round Trip</b> | <b>54.1</b>   | <b>71.5</b>       | <b>45</b>   |

| Proposed                      |     |    |    |    |
|-------------------------------|-----|----|----|----|
| Veterans Pkwy / South Meadows | New | 20 | 27 | 45 |

| TT Savings / Vehicle (min) |
|----------------------------|
| 9.1                        |

### Other Travel Times

|  |  |
|--|--|
| <b>Project 15 (Patrick Interchange)</b>          | No quantitative savings (2040 analysis showed zero (0) intersection delay) |
| <b>Project 16 (Lockwood Interchange)</b>         | N/A  |
| <b>Project 29 (McCarran Interchange)</b>         | Intersection delay savings: 65.5 seconds / vehicle                         |
| <b>Project 21 Aux Lane</b>                       | Can assume 10% increase in speed   |
| <b>Project 22 Widen to Three Lanes</b>           | Can assume 10% increase in speed   |
| <b>Project 23 Aux Lanes</b>                      | Can assume 10% increase in speed   |
| <b>Project 24 Widen to Three Lanes</b>           | Can assume 10% increase in speed   |
| <b>Pyramid – US 395 Connector (Phase 1 to 5)</b> |  |
| Phase 1  | 0.7 minutes / vehicle  |
| Phase 2  | 0.5 minutes / vehicle  |
| Phase 3  | 8.4 minutes/ vehicle   |
| Phase 4  | 1.2 minutes / vehicle  |
| Phase 5  | 20.7 minutes / vehicle   |

## Corridor Scoring

| Location  | Description                           | 2040 Travel Time Savings (min) | 2020 Travel Time Savings (min) |
|-----------|---------------------------------------|--------------------------------|--------------------------------|
| I-80 east | Widening from McCarran to USA Parkway | 17.5                           | 0.5                            |
| I-80 west | EB widening from McCarran to Keystone | 0.4                            | 0.2                            |
| I-580     | Various Auxiliary Lanes               | 0.4                            | 0.15                           |
| US 395    | Widening from Parr to Red Rock        | 4.6                            | -                              |

Note: TT savings are reduction in min/vehicle. The data for TT is from RSFTS HCS & VISSIM analysis

### I-80 East

| 2020 |                   |      |       |      |         |
|------|-------------------|------|-------|------|---------|
|      | Travel Time (min) |      |       |      | Savings |
|      | No-Action         |      | Build |      |         |
|      | AM                | PM   | AM    | PM   |         |
| EB   | 15.7              | 16.0 | 15.7  | 15.9 | 0.05    |
| WB   | 16.9              | 17.6 | 16.8  | 16.8 | 0.45    |

| 2040 |                   |      |       |      |         |
|------|-------------------|------|-------|------|---------|
|      | Travel Time (min) |      |       |      | Savings |
|      | No-Action         |      | Build |      |         |
|      | AM                | PM   | AM    | PM   |         |
| EB   | 15.7              | 16.2 | 15.6  | 15.7 | 0.3     |
| WB   | 29.6              | 37.8 | 16.5  | 16.6 | 17.2    |

|    | Average Speed (mph) |      |       |      | Savings |
|----|---------------------|------|-------|------|---------|
|    | No-Action           |      | Build |      |         |
|    | AM                  | PM   | AM    | PM   |         |
| EB | 67.2                | 65.3 | 68.1  | 67.5 | 1.6     |
| WB | 36.4                | 28.5 | 65.4  | 64.9 | 32.7    |

### I-80 West

| 2020 |                   |    |       |     |         |
|------|-------------------|----|-------|-----|---------|
|      | Travel Time (min) |    |       |     | Savings |
|      | No-Action         |    | Build |     |         |
|      | AM                | PM | AM    | PM  |         |
| EB   | 4.1               | 4  | 3.9   | 3.9 | 0.2     |

| 2040 |                   |    |       |     |         |
|------|-------------------|----|-------|-----|---------|
|      | Travel Time (min) |    |       |     | Savings |
|      | No-Action         |    | Build |     |         |
|      | AM                | PM | AM    | PM  |         |
| EB   | 4.7               | 4  | 4     | 3.9 | 0.4     |

|    | Average Speed (mph) |    |       |      | Savings |
|----|---------------------|----|-------|------|---------|
|    | No-Action           |    | Build |      |         |
|    | AM                  | PM | AM    | PM   |         |
| EB | 54.3                | 63 | 63.9  | 64.3 | 5.5     |

**I-580**

| 2020 |                   |     |       |     |         |
|------|-------------------|-----|-------|-----|---------|
|      | Travel Time (min) |     |       |     | Savings |
|      | No-Action         |     | Build |     |         |
|      | AM                | PM  | AM    | PM  |         |
| NB   | 8.7               | 8.7 | 8.7   | 8.7 | 0       |
| SB   | 8.4               | 8.7 | 8.3   | 8.5 | 0.2     |

| 2040 |                   |     |       |     |         |
|------|-------------------|-----|-------|-----|---------|
|      | Travel Time (min) |     |       |     | Savings |
|      | No-Action         |     | Build |     |         |
|      | AM                | PM  | AM    | PM  |         |
| NB   | 8.9               | 8.9 | 8.8   | 8.8 | 0.1     |
| SB   | 8.5               | 9.2 | 8.4   | 8.7 | 0.3     |

|    | Average Speed (mph) |      |       |      | Savings |
|----|---------------------|------|-------|------|---------|
|    | No-Action           |      | Build |      |         |
|    | AM                  | PM   | AM    | PM   |         |
| NB | 58.8                | 58.7 | 59    | 59.1 | 0.3     |
| SB | 62.1                | 57.7 | 62.9  | 61   | 2.1     |

**US 395**

| 2017 |                    |      |         |
|------|--------------------|------|---------|
|      | Travel Time (min)  |      |         |
|      | Existing Condition |      | Average |
|      | AM                 | PM   |         |
| NB   | 8.7                | 12.8 | 10.8    |
| SB   | 13.4               | 10.3 | 11.9    |

| 2020 |                   |      |         |
|------|-------------------|------|---------|
|      | Travel Time (min) |      |         |
|      | No-Action         |      | Average |
|      | AM                | PM   |         |
| NB   | 8.5               | 12.6 | 10.6    |
| SB   | 11.1              | 8.8  | 9.9     |

| 2040 |                   |      |       |     |         |
|------|-------------------|------|-------|-----|---------|
|      | Travel Time (min) |      |       |     | Savings |
|      | No-Action         |      | Build |     |         |
|      | AM                | PM   | AM    | PM  |         |
| NB   | 8.5               | 17.5 | 8.5   | 8.8 | 4.4     |
| SB   | 9.1               | 8.7  | 8.7   | 8.5 | 0.2     |

**SUB-SECTION C - IMPROVING SAFETY**

**Overall Improving Safety**

| Total Score | Ranking | Score       |
|-------------|---------|-------------|
| 100         | HIGH    | 67          |
|             | MEDIUM  | 45.5 - 92.0 |
|             | LOW     | 33          |

This section accounts for the safety component, specifically the crash data, within the given limits of a project.

For new alignments, the crash data (rate and severity) along the existing route is used. The existing route is defined as the predominant NDOT facility to see the greatest shift in traffic volumes once the new alignment is complete.

**C1 - Crash Severity**

| Maximum Score | Crash Severity Scoring Summary |      |       |
|---------------|--------------------------------|------|-------|
|               | Max.                           | Min. | Score |
| 40.0          | 0                              | 0.1  | 0     |
|               | 0.11                           | 0.5  | 8.0   |
|               | 0.51                           | 0.75 | 16.0  |
|               | 0.76                           | 0.9  | 24.0  |
|               | 0.91                           | 0.99 | 32.0  |
|               | 1                              |      | 40.0  |

Score is equal to crash severity multiplied by max score (40)

**Description**

The Crash Severity is a ratio based on the number of severe crashes to number of total crashes. Fatalities are weighted 6.67 to that of injury or property damage only crashes.

$$\text{Crash Severity Ratio} = 6.67(\text{Fatal}) + (\text{Injury}) / \text{Total number to Crashes}$$

**C2 - Crash reduction (CMF)**

| Maximum Score | Crash Reduction Scoring Summary |      |       |
|---------------|---------------------------------|------|-------|
|               | Min.                            | Max. | Score |
| 40.0          | 0.95                            | 1    | 0     |
|               | 0.86                            | 0.95 | 13.3  |
|               | 0.76                            | 0.85 | 26.7  |
|               | 0                               | 0.75 | 40.0  |

**Description**

A crash modification factor (CMF) is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site. A CMF reflects the safety effect of a countermeasure, whether it is a decrease in crashes (CMF below 1.0), increase in crashes (CMF over 1.0) or no change in crashes (CMF of 1.0) New alignments do not receive points for crash reduction.

$$\text{CMF1} * \text{CMF 2} * \text{CMF3} \text{ Use no more than the top three CFFs}$$

**C3 - Crash Rate**

| <b>Crash Rate Scoring Summary</b> |      |      |       |
|-----------------------------------|------|------|-------|
| Maximum Score                     | Min. | Max. | Score |
| 20.0                              | 0    | 0.25 | 0     |
|                                   | 0.26 | 0.35 | 3.3   |
|                                   | 0.36 | 0.5  | 6.7   |
|                                   | 0.51 | 0.75 | 10.0  |
|                                   | 0.76 | 0.99 | 13.3  |
|                                   | 1    | 2    | 16.7  |
|                                   | 2    |      | 20.0  |

**Description**

Crash Rate is defined as the number of crashed per 1M Miles traveled.

Crash Rate = Total Number of crashes in a given period / 1M Vehicle Miles Traveled in the same period

| Study          | Location                                 | Description                                     | Improving Safety   |            |                       |                    |                       |             |
|----------------|--|---|--|------------|-----------------------|--------------------|-----------------------|-------------|
|                |  |   | Crash Severity   | Crash Rate | Crash Reduction (CMF) | Total Safety Score | Weighted Safety Score |             |
|                |  |   | 40.0%  | 20.0%      | 40.0%                 | 100.0%             | 27.5%                 |             |
| <b>Roadway</b> |  |   |  |            |                       |                    |                       |             |
|                | <b>Reno Sparks Freeway Traffic Study</b> |   |  |            |                       |                    |                       |             |
| 1              |  | US 395  | Widen US-395 from Clear Acre Lane to Red Rock Drive (MP 27.06 to 35.81)  | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |
| 2              |  | I-80 East                                       | Widen I-80 from McCarran Boulevard to USA Parkway (MP 17.56 to 32.75)  | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |
| 3              |  | I-580   | New Auxiliary Lanes between interchanges:<br>1. NB I-580 Moana Ln to Virginia St (MP 22.56 to 21.51)<br>2. NB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51)<br>3. SB I-580 Moana Ln to Virginia St/Kietzke Ln (MP 22.56 to 21.51)<br>4. SB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51) | 8.0        | 16.7                  | 26.7               | 51.4                  | <b>14.1</b> |
| 4              |  | I-80 West                                       | Widen EB I-80 Robb Drive to Keystone Avenue (MP 9.23 to 12.48)   | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |
| 5              | <b>EDAWN La Posada Study</b>             | La Posada Alternatives                          | Potential roadway connection from La Posada to USA Parkway   | 8.0        | 10.0                  | 13.3               | 31.3                  | <b>8.6</b>  |
| 6              | <b>Sparks TMSA Study</b>                 | La Posada                                       |  |            |                       |                    |                       |             |
| 7              | <b>NDOT South Meadows Evaluation</b>     | South Meadows Connector                         | New alignment from South Meadows to USA Parkway  | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |
| 8              | <b>Pyramid/ US 395 Connector</b>         | Connection between Pyramid and US 395 (Overall) | New alignment currently under EIS study  | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |
| 9              |  | Phase 1   | Widen Pyramid Hwy between Queen Way and Sparks Blvd. (MP 1.97 to 5.44)   | 8.0        | 10.0                  | 40.0               | 58.0                  | <b>16.0</b> |

| Study          | Location                              | Description                          | Improving Safety   |            |                       |                    |                       |      |
|----------------|---------------------------------------|--------------------------------------|--|------------|-----------------------|--------------------|-----------------------|------|
|                |                                       |                                      | Crash Severity   | Crash Rate | Crash Reduction (CMF) | Total Safety Score | Weighted Safety Score |      |
|                |                                       |                                      | 40.0%  | 20.0%      | 40.0%                 | 100.0%             | 27.5%                 |      |
| <b>Roadway</b> |                                       |                                      |  |            |                       |                    |                       |      |
| 10             |                                       | Phase 2                              | Widen Disc Dr. from Pyramid hwy. to Vista Blvd.                                | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
| 11             |                                       | Phase 3                              | Construct new US 395 Connector from Parr interchange to Pyramid Highway        | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
| 12             |                                       | Phase 4                              | Add new direct connect Ramps at US395 w/ widening of US395                     | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
| 13             |                                       | Phase 5                              | Widen Pyramid highway from Sparks Blvd. to Calle De La Plata (MP 5.44 to 9.75) | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
| 14             |                                       | Phase 6                              | New interchange near Sun Valley local improvements                             | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
|                | SEC Alignment Studies                 |                                      |  |            |                       |                    |                       |      |
|                | <b>Storey County Land Use</b>         |                                      |  |            |                       |                    |                       |      |
| 15             |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange  | 8.00       | 3.3                   | 40                 | 51.3                  | 14.1 |
| 16             |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange  | 8.00       | 3.3                   | 40                 | 51.3                  | 14.1 |
| 17             |                                       | Vanpooling                           | See transit column below   |            |                       |                    |                       |      |
| 18             |                                       | TRIC internal transit/rail           | NDOT currently studying as part of inter-county regional transit study         |            |                       |                    |                       |      |
| 19             | <b>Reno Spaghetti Bowl</b>            | I-80/I-580/US 395 System Interchange | Reconstruct Interchange  | 8.0        | 10.0                  | 40.0               | 58.0                  | 16.0 |
| 20             | <b>NDOT Autonomous Vehicles Grant</b> | I-80                                 | Feasibility of a pilot AV corridor project                                     | 8.00       | 10                    | 26.7               | 44.7                  | 12.3 |
|                | <b>2009 I-80 Corridor Study</b>       |                                      |  |            |                       |                    |                       |      |

| Study          | Location                            | Description                      | Improving Safety  |            |                       |                    |                       |             |
|----------------|-------------------------------------|----------------------------------|---|------------|-----------------------|--------------------|-----------------------|-------------|
|                |                                     |                                  | Crash Severity  | Crash Rate | Crash Reduction (CMF) | Total Safety Score | Weighted Safety Score |             |
|                |                                     |                                  | 40.0%   | 20.0%      | 40.0%                 | 100.0%             | 27.5%                 |             |
| <b>Roadway</b> |                                     |                                  |   |            |                       |                    |                       |             |
|                |                                     | Patrick/I-80 Interchange         | Reconstruct Interchange                                       |            |                       |                    |                       |             |
|                |                                     | Lockwood/I-80 Interchange        | Reconstruct Interchange                                       |            |                       |                    |                       |             |
|                |                                     | Patrick I-80 Interchange         | Construct Roundabout ramp termini                             |            |                       |                    |                       |             |
|                |                                     | Lockwood/I-80 Interchange        | Construct Roundabout ramp termini                             |            |                       |                    |                       |             |
| <b>21</b>      |                                     | Eastbound I-80 - Aux Lanes       | McCarran to Sparks  | 8.0        | 10.0                  | 26.7               | 44.7                  | <b>12.3</b> |
| <b>22</b>      |                                     | Eastbound I-80 McCarran to Vista | Widen to 3 lanes  | 8.0        | 10.0                  | 26.7               | 44.7                  | <b>12.3</b> |
|                |                                     | Eastbound Vista to Lockwood      | Add auxiliary lane  |            |                       |                    |                       |             |
|                |                                     | Eastbound Vista to Patrick       | Widen to 3 lanes  |            |                       |                    |                       |             |
| <b>23</b>      |                                     | Westbound Spark to McCarran      | Add auxiliary lane  | 8.0        | 10.0                  | 26.7               | 44.7                  | <b>12.3</b> |
| <b>24</b>      |                                     | Westbound Vista to McCarran      | Widen to 3 lanes  | 8.0        | 10.0                  | 26.7               | 44.7                  | <b>12.3</b> |
|                |                                     | Westbound Lockwood to Vista      | Add auxiliary lane  |            |                       |                    |                       |             |
|                |                                     | Westbound Patrick to Vista       | Widen to 3 lanes  |            |                       |                    |                       |             |
| <b>25</b>      |                                     | Install ITS backbone             | E. McCarran to Wadsworth                                      | 8.0        | 10.0                  | 13.3               | 31.3                  | <b>8.6</b>  |
| <b>Freight</b> |                                     |                                  |   |            |                       |                    |                       |             |
|                | <b>Nevada State Freight Plan</b>    |                                  |   |            |                       |                    |                       |             |
| <b>26</b>      |                                     | I-80 Safety Improvements         | Eastern Truckee Canyon (USA Parkway interchange improvements) | 8          | 10                    | 40                 | 58.0                  | <b>16.0</b> |
| <b>27</b>      |                                     | I-80 USA Parkway Interchange     |   | 8          | 3.3                   | 40                 | 51.3                  | <b>14.1</b> |
| <b>28</b>      |                                     | Lockwood Interchange             | New interchange including bridge over the Truckee River       |            |                       |                    |                       |             |
|                | <b>NDOT Statewide Truck Parking</b> |                                  |   |            |                       |                    |                       |             |



|                                 | Implementation Plan                         |                                  |  |            |                       |                    |                       |      |
|---------------------------------|---|----------------------------------|--|------------|-----------------------|--------------------|-----------------------|------|
| Study                           | Location                                    | Description                      | Improving Safety   |            |                       |                    |                       |      |
|                                 |   |                                  | Crash Severity   | Crash Rate | Crash Reduction (CMF) | Total Safety Score | Weighted Safety Score |      |
|                                 |   |                                  | 40.0%  | 20.0%      | 40.0%                 | 100.0%             | 27.5%                 |      |
| <b>Roadway</b>                  |   |                                  |  |            |                       |                    |                       |      |
| <b>Other</b>                    |   |                                  |  |            |                       |                    |                       |      |
| 29                              | McCarran SMP                                |                                  | Construct new interchange at McCarran Boulevard              | 8.0        | 10.0                  | 26.7               | 44.7                  | 12.3 |
| 30                              | I-80 Reversible Lanes                       |                                  | Reversible lanes from Vista to USA Parkway                   | 8.0        | 10.0                  | 26.7               | 44.7                  | 12.3 |
| 31                              | City of Sparks                              | Vista Interchange                | Construct new interchange at Vista Blvd.                     | 13.2       | 10.0                  | 40.0               | 59.9                  | 11.7 |
| 32                              | RTC   | Clean Water Way                  | Clean Water By-Pass (From Veterans Pkwy to I-80) (Eastbound) | 13.2       | 6.7                   | 40.0               | 59.9                  | 16.5 |
| 33                              | I-80 Reversible Lanes                       | Vista to USA Pkwy                | Reversible lanes from Vista to USA Pkwy                      | 13.2       | 10.0                  | 40.0               | 63.2                  | 17.4 |
| 34                              | Eagle Canyon Alignment                      | Lemmon Valley to Spanish Springs | New alignment from Spanish Springs to Lemmon Valley          | 13.2       | 10.0                  | 0.0                | 23.2                  | 6.4  |
| <b>Transit/Rideshare</b>        |   |                                  |  |            |                       |                    |                       |      |
|                                 | RTC Commuter Rail                           |                                  |  |            |                       |                    |                       |      |
|                                 | Tesla Park and Ride                         |                                  |  |            |                       |                    |                       |      |
|                                 | RTC Vanpool                                 |                                  |  |            |                       |                    |                       |      |
| <b>Operational Agency Plans</b> |   |                                  |  |            |                       |                    |                       |      |
|                                 | NDOT Inter-County and Regional Transit Plan |                                  |  |            |                       |                    |                       |      |
|                                 | EDWAN Transit Management Association        |                                  |  |            |                       |                    |                       |      |

# 1. Crash Analysis

Provided by NNTS

The following section presents the crash analysis of crash data obtained from NDOT for the five-year period from September 30, 2010 to October 1, 2015. Utilizing the crash data provided a corridor crash analysis was performed on the following roadways US 395 from I-80 to NV-CA Stateline, I 580 from Mount Rose highway to I-80 and I-80 from the CA/NV Stateline to USA Parkway, excluding the section between W. McCarran and E. McCarran.

The crash rates for US 395, I 580 and I 80 have been compared to other NDOT roadways with the same roadway classification and year.

The crash rates were calculated using the following variables:

$$R = \frac{C \times 1,000,000}{V \times 365 \times N \times L}$$

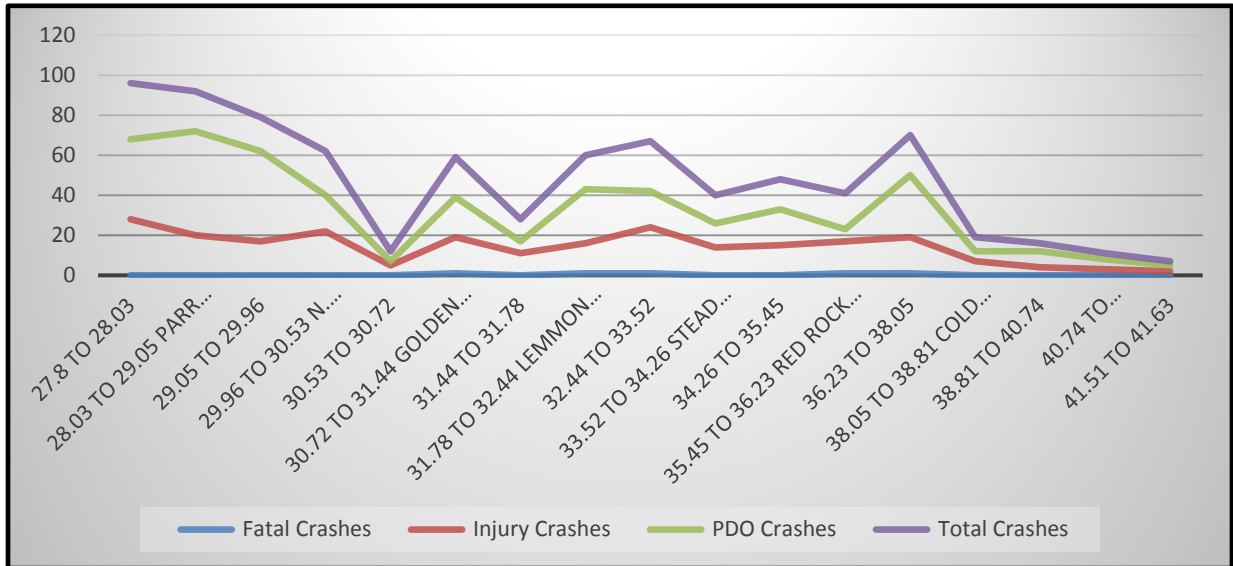
- R = Crash rate for the corridor expressed as crashes per 100 million vehicle-miles
- C = Total number of crashes along the corridor in the study time period
- V = Total number of vehicles using the corridor, expressed in Average Annual Daily Traffic AADT
- N = Number of years of data
- L = Length of the corridor in miles

## 1.1 Existing Corridor Crash Data Analysis US 395

The crash data along US 395 was evaluated and analyzed from I-80 to the NV/CA Stateline (WA MP 27.80 to WA MP 41.63). This section was then broken into two segments the first being from the NV/CA Stateline to the northern limits of the Lemon Valley Interchange (WA MP 27.80 to WA MP 32.44) and the second being from the northern limits of the Lemmon Valley Interchange to the northern limits of the McCarran/Clear Acre Interchange (WA PM 32.44 to WA MP 41.63).

**Figure 1.** As shown below, is the number of crashes along the corridor for the number of fatal crashes, the number of injury crashes, the number of property damage only (PDO) crashes and the total number of crashes.

FIGURE 1. US 395 CRASHES



1. The US 395 corridor had a total of 711 crashes with in the entire section, five fatal crashes with five fatalities, 14 serious injury crashes with 14 serious injuries. The segments listed below show the predominant crash types.
  - a. Segment one had a total of 392 crashes, with two fatal crashes, two serious injury crashes with two serious injuries. The predominant crash types, descending by the number of crashes are Non-Collision (217), Rear-End (164) and Sideswipe Same Direction (107). The Non-Collision crashes were 1.52 times higher in the northbound direction, the Rear-End crashes were 2.00 times higher in the southbound direction.
  - b. Segment two had a total of 319 crashes, with three fatal crashes with three fatalities, 12 severe injury crashes with 12 severe injuries. The predominant crash types, descending by the number of crashes are Non-Collision (220), Rear-End (55) and Sideswipe Same Direction (30). The Non-Collision crashes were 1.35 times higher in the northbound direction, the Rear-End crashes were 1.93 times higher in the southbound direction.

**Table 1**, as shown below, is the analysis of this data. The crash rate for this corridor exceeds the average for the following: the fatal crash rate, and the serious injury crash rate.

Table 1. US 395 Crash Rates

| Crash Type                                | NDOT URBAN PRINCIPAL ARTERIAL OTHER FREEWAYS & EXPRESSWAYS (2015) | US 395 WA MP 27.80 to WA MP 41.63 | US 395 WA MP 27.80 to WA MP 32.44 | US 395 WA MP 32.44 to WA MP 41.63 |
|---|---|-----------------------------------|-----------------------------------|-----------------------------------|
| Fatal                                     | 0.0018  | 0.0023                            | 0.0038                            | 0.0077                            |
| Injury                                    | 0.5690  | 0.0994                            | 0.2078                            | 0.2702                            |
| PDO                                       | 0.9771  | 0.2270                            | 0.5288                            | 0.5430                            |
| Total                                     | 1.5479  | 0.54                              | 0.3287                            | 0.7404                            |
| Serious Injury (Subset of Injury Crashes) | 0.0142  | 0.0065                            | 0.0038                            | 0.0309                            |

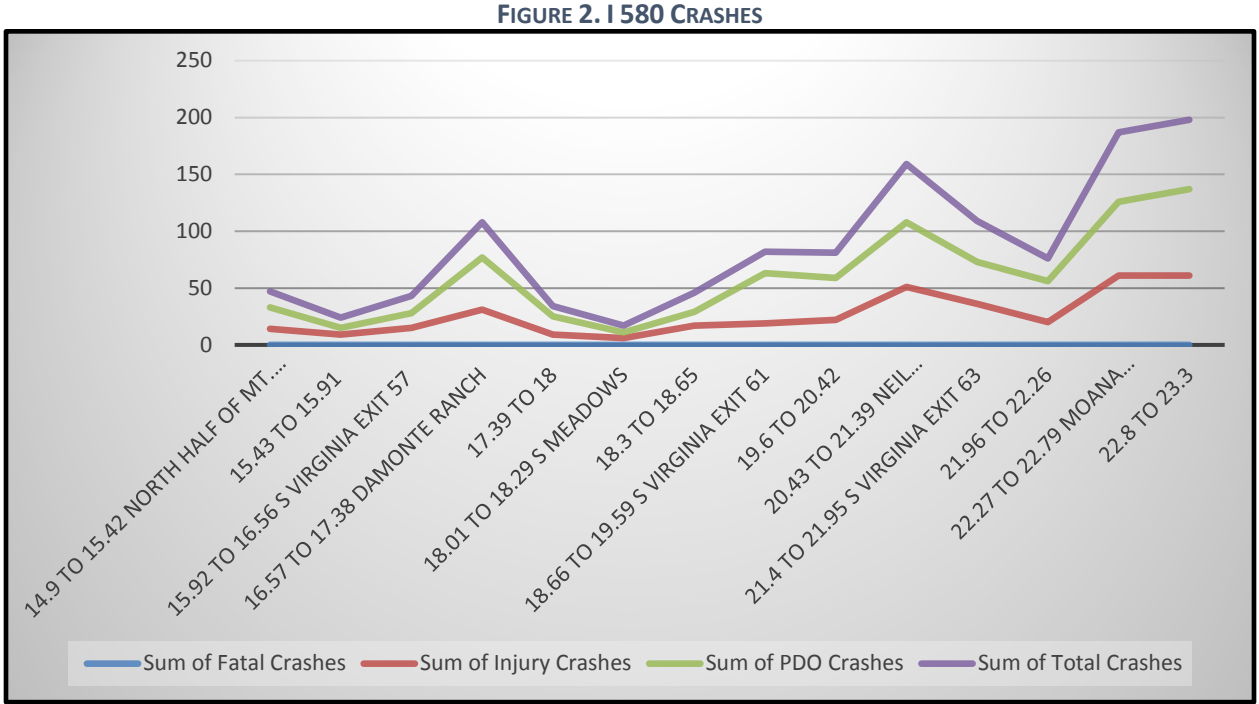
Crash rates per million vehicle-miles

## 1.2 Existing Corridor Crash Data Analysis I-580

The crash data along I-580 was evaluated and analyzed from the northern limits of Mount Rose Highway to I-80 (WA MP 14.90 to WA MP 23.31). This section was then broken into two segments the first segment being from northern limits of

Mount Rose Highway to the southern limits of South Meadows Parkway (WA MP 14.90 to WA MP 18.01) and the second segment being from the southern limits of South Meadows Parkway to the southern limits of Plumb/Villanova Interchange (WA MP 18.01 to 23.31).

**Figure 2.** As shown below, is the number of crashes along the corridor for the number of fatal crashes, the number of injury crashes, the number of property damage only (PDO) crashes and the total number of crashes.



1. The I-580 corridor had a total of 1,211 crashes with-in the entire section, five serious injury crashes with five serious injuries. The segments listed below show the predominant crash types.
  - a. Segment one had a total of 256 crashes, one serious injury crash with one serious injury. The predominant crash types, descending by the number of crashes are Non-Collision (150), Rear-End (41), and Sideswipe Same Direction (31). The Non-Collision crashes were 1.25 times higher in the northbound direction, Rear-End crashes were 1.35 times higher in the southbound direction, the Sideswipe Same Direction crashes were 1.87 times higher in the northbound direction.
  - b. Segment two had a total of 955 crashes, five severe injury crashes with five severe injuries. The predominant crash types, descending by the number of crashes are Rear-End (454), Non-Collision (323), and Sideswipe Same Direction (119). The Rear-End crashes were 1.18 times higher in the southbound direction.

**Table 2,** as shown below, is the analysis of this data. All of the crash rates for this corridor are below the average for the following: property damage only (PDO) crash rate, the injury crash rate, the fatal crash rate, the total crash rate, and the injury crash rate.

Table 2. I-580 Crash Rates

| Crash Type | NDOT PRINCIPAL ARTERIAL INTERSTATE (2015) | I580 WA MP 14.90 to WA MP 23.31 | I580 WA MP 14.90 to WA MP 18.01 | I580 WA MP 18.01 to WA MP 23.31 |
|------------|---|---------------------------------|---------------------------------|---------------------------------|
| Fatal      | 0.0062                                    | 0.0000                          | 0.0000                          | 0.0000                          |
| Injury     | 0.7176                                    | 0.1478                          | 0.2277                          | 0.2773                          |
| PDO        | 1.3422                                    | 0.3346                          | 0.5195                          | 0.6265                          |

|  |               |               |               |               |
|--|---------------|---------------|---------------|---------------|
| <b>Total</b>   | <b>2.0661</b> | <b>0.4824</b> | <b>0.7472</b> | <b>0.9038</b> |
| <b>Serious Injury<br/>(Subset of<br/>Injury Crashes)</b> | <b>0.0146</b> | <b>0.0024</b> | <b>0.0029</b> | <b>0.0047</b> |

Crash rates per million vehicle-miles

### 1.3 Existing Corridor Crash Data Analysis I-80

The crash data along I 80 was evaluated and analyzed from the CA/NV Stateline to USA Parkway (WA MP 0.00 to WA MP 32.32) and was broken into two sections. Each section of was then broken in to two segments, the first section was from the NV/CA Stateline to the western limits of Keystone Interchange (WA MP 0.00 to WA MP 8.94) and the second section was from the eastern limits of E. McCarran Interchange to USA Parkway Interchange (WA MP 17.71 to WA MP 32.32), excluded the section between the westerly limits of Keystone Interchange and the easterly limits of E. McCarran Interchange.

**Figures 3 and 4.** As shown below, is the number of crashes along the corridor for the number of fatal crashes, the number of injury crashes, the number of property damage only (PDO) crashes and the total number of crashes.

**Figure 3. I 80 Crashes**

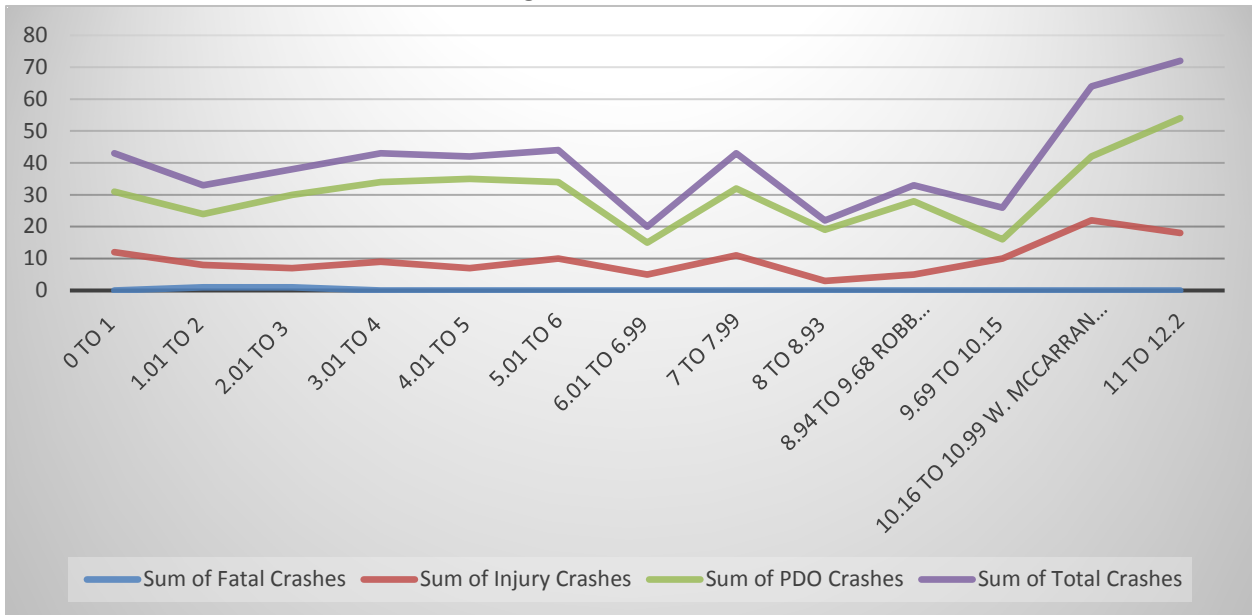
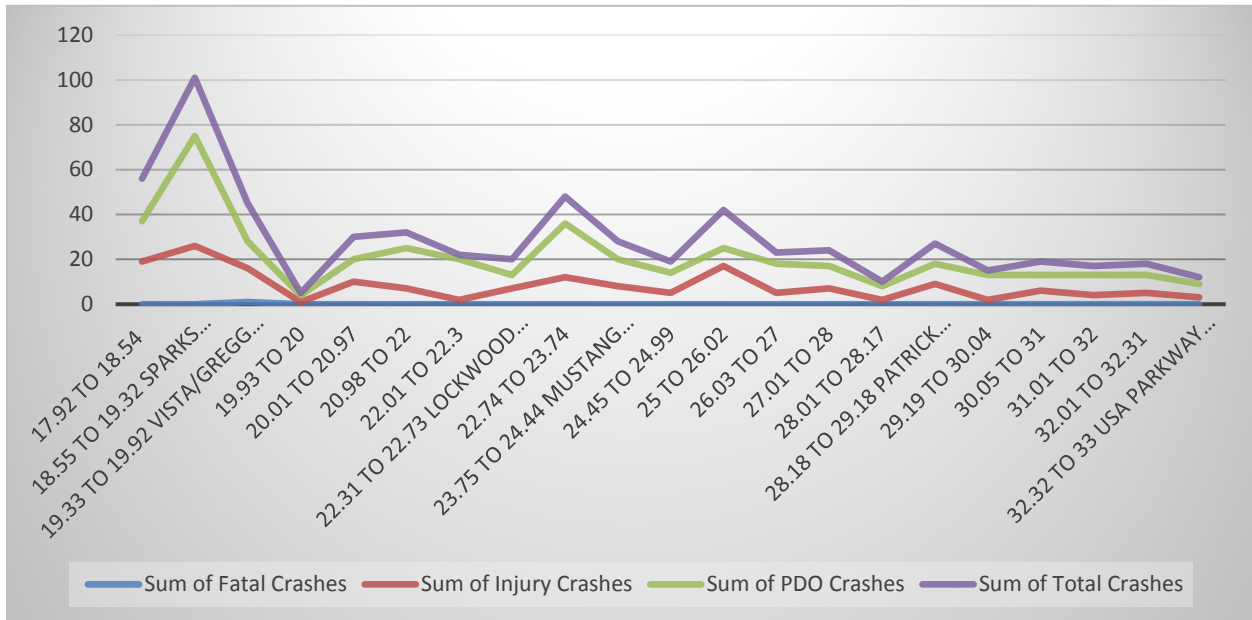


FIGURE 4. I 80 CRASHES



1. The first section of I-80 corridor had a total of 523 crashes, two fatal crashes with two fatalities, three serious injury crashes with three serious injuries. The segments listed below show the predominant crash types.
  - a. Segment one had a total of 328 crashes, two fatal crashes with two fatalities, three serious injury crashes with three serious injury. The predominant crash types, descending by the number of crashes are Non-Collision (212), Rear-End (38), and Sideswipe Same Direction (38). The Non-Collision crashes were 1.20 times higher in the eastbound direction, the Rear-End crashes were 1.10 times higher in the westbound direction and the Sideswipe Same Direction crashes were 1.66 times higher in the eastbound direction.
  - b. Segment two had a total of 195 crashes, one severe injury crash with one severe injury. The predominant crash types, descending by the number of crashes are Non-Collision (84), Rear-End (59), and Sideswipe Same Direction (33). The Non-Collision crashes were 1.40 times higher in the eastbound direction, Rear-End crashes were 3.50 times higher in the westbound direction and the Sideswipe Same Direction crashes were 1.50 times higher in the eastbound direction

**Table 4**, as shown below, is the analysis of this data. All of the crash rates for this corridor are below the average for the following: property damage only (PDO) crash rate, the injury crash rate, the fatal crash rate, the total crash rate, and the injury crash rate.

Table 4. I-80 Crash Rates

| Crash Type                                | NDOT PRINCIPAL ARTERIAL INTERSTATE (2015) | I80 WA MP 0.00 to WA MP 12.20 | I80 WA MP 0.00 to WA MP 8.94 | I80 WA MP 8.94 to WA MP 12.20 |
|---|---|-------------------------------|------------------------------|-------------------------------|
| Fatal                                     | 0.0062                                    | 0.0021                        | 0.0038                       | 0.0000                        |
| Injury                                    | 0.7176                                    | 0.1354                        | 0.1376                       | 0.1771                        |
| PDO                                       | 1.3422                                    | 0.4200                        | 0.4855                       | 0.4508                        |
| Total                                     | 2.0661                                    | 0.5575                        | 0.6269                       | 0.6279                        |
| Serious Injury (Subset of Injury Crashes) | 0.0146                                    | 0.0032                        | 0.0038                       | 0.0032                        |

2. The second section of I-80 corridor had a total of 613 crashes, two fatal crashes with two fatalities, nine serious injury crashes with nine serious injuries. The segments listed below show the predominant crash types.
  - a. Segment one had a total of 311 crashes, two fatal crashes with two fatalities, three serious injury crashes with three serious injuries. The predominant crash types, descending by the number of crashes are Non-Collision (147), Rear-End (92), and Sideswipe Same Direction (43). The Non-Collision crashes were 1.07 times higher in the westbound direction, the Rear-End crashes were 2.24 times higher in the eastbound direction and the Sideswipe Same Direction were 1.57 times higher in the westbound direction.
  - b. Segment two had a total of 302 crashes, six severe injury crashes with six severe injuries. The predominant crash types, descending by the number of crashes are Non-Collision (192), Rear-End (50), and Sideswipe Same Direction (42). The Non-Collision crashes were 1.11 times higher in the westbound direction, the Rear-End crashes were 1.33 times higher in the eastbound direction.

**Table 5**, as shown below, is the analysis of this data. All of the crash rates for this corridor are below the average for the following: property damage only (PDO) crash rate, the injury crash rate, the fatal crash rate, the total crash rate, and the injury crash rate.

Table 5. I-80 Crash Rates

| Crash Type                                      | NDOT PRINCIPAL<br>ARTERIAL<br>INTERSTATE (2015) | I-80<br>WA MP 17.71 to<br>WA MP 32.32 | I-80<br>WA MP 17.91 to<br>WA MP 22.73 | I-80<br>WA MP 22.73 to<br>WA MP 32.32 |
|---|---|---------------------------------------|---------------------------------------|---------------------------------------|
| Fatal   | 0.0062  | 0.0009                                | 0.0021                                | 0.0000                                |
| Injury  | 0.7176  | 0.2369                                | 0.2669                                | 0.2585                                |
| PDO   | 1.3422  | 0.4034                                | 0.4720                                | 0.4282                                |
| <i>Total</i>                                    | <i>2.0661</i>                                   | <i>0.5672</i>                         | <i>0.6642</i>                         | <i>0.5960</i>                         |
| Serious Injury<br>(Subset of<br>Injury Crashes) | 0.0146  | 0.0083                                | 0.0064                                | 0.0118                                |

*Crash rates per million vehicle-miles*

## Crash Modification Factors and Crash Reduction Factors

**CMF ID: 8336** – Install an additional lane.

|  |                           |       |
|--|---------------------------|-------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.74  |
|  | Adjusted Standard Error   | -     |
|  | Unadjusted Standard Error | 0.098 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 26    |
|  | Adjusted Standard Error   | -     |
|  | Unadjusted Standard Error | 9.8   |

**CMF ID: 7440** – Add continuous auxiliary lane for weaving between entrance ramp and exit ramp.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.79 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 21   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |

**CMF ID: 75** – Install changeable crash ahead warning signs.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.56 |
|  | Adjusted Standard Error   | 0.17 |
|  | Unadjusted Standard Error | 0.09 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 44   |
|  | Adjusted Standard Error   | 17   |
|  | Unadjusted Standard Error | 9    |

**CMF ID: 3140** – Convert a Type I exit ramp to a Type III exit ramp.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.79 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 0.07 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 21   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 7    |

**CMF ID: 474** – Extend acceleration lane by approximately 98 feet (30 m).

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.89 |
|  | Adjusted Standard Error   | 0.05 |
|  | Unadjusted Standard Error | 0.03 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 11   |
|  | Adjusted Standard Error   | 5    |
|  | Unadjusted Standard Error | 3    |

**CMF ID: 842** – Install acceleration and deceleration lanes.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.74 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 26   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |



**CMF ID: 477** – Provide long ramp instead of a short ramp.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.62 |
|  | Adjusted Standard Error   | 0.1  |
|  | Unadjusted Standard Error | 0.06 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 38   |
|  | Adjusted Standard Error   | 10   |
|  | Unadjusted Standard Error | 6    |

**CMF ID: 5436** – Install ramp meter.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.64 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 0.07 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 36   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 7    |

**CMF ID: 8730** – Install variable speed limits.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.71 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 0.05 |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 29   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | 5    |

**CMF ID: 5285** – Widen paved shoulder from three feet to eight feet.

|  |                           |      |
|--|---------------------------|------|
| <b>Crash Modification Factor (CMF)</b> | Value                     | 0.71 |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |
| <b>Crash Reduction Factor (CRF)</b>    | Value                     | 29   |
|  | Adjusted Standard Error   | -    |
|  | Unadjusted Standard Error | -    |

## I-580 Crash Data: Crash Severity

| Row Labels                                 | Sum of Fatal Crashes | Sum of Fatalities | Sum of Injury Crashes | Sum of Injuries | Sum of PDO Crashes | Sum of Total Crashes |
|--|----------------------|-------------------|-----------------------|-----------------|--------------------|----------------------|
| 14.9 TO 15.42 North half of Mt. Rose       | 0                    | 0                 | 14                    | 27              | 33                 | 47                   |
| 15.43 TO 15.91                             | 0                    | 0                 | 9                     | 10              | 15                 | 24                   |
| 15.92 TO 16.56 S Virginia Exit 57          | 0                    | 0                 | 15                    | 21              | 28                 | 43                   |
| 16.57 TO 17.38 Damonte Ranch               | 0                    | 0                 | 31                    | 40              | 77                 | 108                  |
| 17.39 TO 18                                | 0                    | 0                 | 9                     | 11              | 25                 | 34                   |
| 18.01 TO 18.29 S Meadows                   | 0                    | 0                 | 6                     | 8               | 11                 | 17                   |
| 18.3 TO 18.65                              | 0                    | 0                 | 17                    | 19              | 29                 | 46                   |
| 18.66 TO 19.59 S Virginia Exit 61          | 0                    | 0                 | 19                    | 25              | 63                 | 82                   |
| 19.6 TO 20.42                              | 0                    | 0                 | 22                    | 30              | 59                 | 81                   |
| 20.43 TO 21.39 Neil Off/Meadowood Mall On  | 0                    | 0                 | 51                    | 71              | 108                | 159                  |
| 21.4 TO 21.95 S Virginia Exit 63           | 0                    | 0                 | 36                    | 50              | 73                 | 109                  |
| 21.96 TO 22.26                             | 0                    | 0                 | 20                    | 26              | 56                 | 76                   |
| 22.27 TO 22.79 Moana Interchange           | 0                    | 0                 | 61                    | 83              | 126                | 187                  |
| 22.8 TO 23.3                               | 0                    | 0                 | 61                    | 90              | 137                | 198                  |
| 23.31 TO 23.94 Plumb/Villanova Interchange | 0                    | 0                 | 53                    | 71              | 128                | 181                  |
| 23.95 TO 24.17                             | 1                    | 2                 | 20                    | 25              | 49                 | 70                   |
| 24.18 TO 24.73 Mill Interchange            | 1                    | 1                 | 48                    | 66              | 124                | 173                  |
| 24.74 TO 25.17 Glendale Interchange        | 2                    | 2                 | 105                   | 139             | 246                | 353                  |
| 25.18 TO 25.33                             | 0                    | 0                 | 58                    | 82              | 143                | 201                  |
| 25.34 TO 25.81                             | 0                    | 0                 | 49                    | 63              | 113                | 162                  |

## I-580 Crash Data: Crash Type

| Row Labels                                 | Rear - End | Non - Collision | Sideswipe Same Dir. | Angle | Backing | Rear-To-Rear | Head-On | Sideswipe Opposite Dir. |
|--|------------|-----------------|---------------------|-------|---------|--------------|---------|-------------------------|
| 14.9 TO 15.42 North half of Mt. Rose       | 5          | 28              | 4                   | 10    | 0       | 0            | 0       | 0                       |
| 15.43 TO 15.91                             | 2          | 17              | 0                   | 5     | 0       | 0            | 0       | 0                       |
| 15.92 TO 16.56 S Virginia Exit 57          | 7          | 24              | 4                   | 8     | 0       | 0            | 0       | 0                       |
| 16.57 TO 17.38 Damonte Ranch               | 23         | 58              | 19                  | 3     | 2       | 0            | 0       | 0                       |
| 17.39 TO 18                                | 4          | 23              | 4                   | 3     | 0       | 0            | 0       | 0                       |
| 18.01 TO 18.29 S Meadows                   | 5          | 11              | 1                   | 0     | 0       | 0            | 0       | 0                       |
| 18.3 TO 18.65                              | 14         | 22              | 7                   | 1     | 0       | 0            | 0       | 0                       |
| 18.66 TO 19.59 S Virginia Exit 61          | 18         | 45              | 11                  | 7     | 0       | 0            | 0       | 0                       |
| 19.6 TO 20.42                              | 23         | 43              | 10                  | 5     | 0       | 0            | 0       | 0                       |
| 20.43 TO 21.39 Neil Off/Meadowood Mall On  | 71         | 56              | 24                  | 5     | 0       | 0            | 0       | 0                       |
| 21.4 TO 21.95 S Virginia Exit 63           | 54         | 37              | 12                  | 3     | 1       | 0            | 0       | 0                       |
| 21.96 TO 22.26                             | 39         | 23              | 7                   | 7     | 0       | 0            | 0       | 0                       |
| 22.27 TO 22.79 Moana Interchange           | 125        | 36              | 13                  | 8     | 0       | 0            | 0       | 0                       |
| 22.8 TO 23.3                               | 105        | 50              | 34                  | 7     | 1       | 0            | 0       | 0                       |
| 23.31 TO 23.94 Plumb/Villanova Interchange | 91         | 50              | 32                  | 5     | 0       | 0            | 0       | 0                       |
| 23.95 TO 24.17                             | 33         | 18              | 14                  | 1     | 0       | 0            | 1       | 0                       |
| 24.18 TO 24.73 Mill Interchange            | 82         | 45              | 37                  | 5     | 0       | 1            | 0       | 0                       |
| 24.74 TO 25.17 Glendale Interchange        | 147        | 107             | 77                  | 20    | 1       | 0            | 0       | 0                       |
| 25.18 TO 25.33                             | 85         | 63              | 42                  | 9     | 1       | 1            | 0       | 0                       |
| 25.34 TO 25.81                             | 49         | 64              | 36                  | 10    | 1       | 1            | 0       | 0                       |

## 2015 FUNCTIONAL CLASSIFICATION CRASH RATES

| RURAL                    | TOTAL AVM            | TOTAL P.D.O CRASHES | P.D.O CRASH RATE | TOTAL INJURY CRASHES | INJURY CRASH RATE | TOTAL FATAL CRASHES | FATAL CRASH RATE | TOTAL TRAFFIC CRASHES | CRASH RATE    |
|--------------------------|----------------------|---------------------|------------------|----------------------|-------------------|---------------------|------------------|-----------------------|---------------|
| RURAL INTERSTATE         | 2,105,755,628        | 702                 | 0.3334           | 292                  | 0.1387            | 24                  | 0.0114           | 1,018                 | 0.4834        |
| PRINCIPAL ARTERIAL RURAL | 1,462,952,197        | 628                 | 0.4293           | 282                  | 0.1928            | 26                  | 0.0178           | 936                   | 0.6398        |
| MINOR ARTERIAL RURAL     | 387,570,625          | 352                 | 0.9082           | 147                  | 0.3793            | 9                   | 0.0232           | 508                   | 1.3107        |
| MAJOR COLLECTOR ARTERIAL | 333,613,843          | 256                 | 0.7674           | 141                  | 0.4226            | 12                  | 0.0360           | 409                   | 1.2260        |
| MINOR COLLECTOR ARTERIAL | 138,852,081          | 54                  | 0.3889           | 25                   | 0.1800            | 0                   | 0.0000           | 79                    | 0.5690        |
| LOCAL RURAL              | 555,772,172          | 132                 | 0.2375           | 21                   | 0.0378            | 5                   | 0.0090           | 158                   | 0.2843        |
| <b>TOTAL</b>             | <b>4,984,516,546</b> | <b>2,124</b>        | <b>3.0647</b>    | <b>908</b>           | <b>1.3512</b>     | <b>76</b>           | <b>0.0152</b>    | <b>3,108</b>          | <b>0.6235</b> |

| URBAN   | TOTAL AVM             | TOTAL P.D.O CRASHES | P.D.O CRASH RATE | TOTAL INJURY CRASHES | INJURY CRASH RATE | TOTAL FATAL CRASHES | FATAL CRASH RATE | TOTAL TRAFFIC CRASHES | CRASH RATE    |
|---|-----------------------|---------------------|------------------|----------------------|-------------------|---------------------|------------------|-----------------------|---------------|
| PRINCIPAL ARTERIAL RURAL                                    | 4,165,409,383         | 5,591               | 1.3422           | 2,989                | 0.7176            | 26                  | 0.0062           | 8,606                 | 2.0661        |
| URBAN PRINCIPAL ARTERIAL RURAL OTHER FREEWAYS & EXPRESSWAYS | 1,685,547,772         | 1,647               | 0.9771           | 959                  | 0.5690            | 3                   | 0.0018           | 2,609                 | 1.5479        |
| PRINCIPAL ARTERIAL-OTHER                                    | 3,109,165,192         | 3,897               | 1.2534           | 4,377                | 1.4078            | 60                  | 0.0193           | 8,334                 | 2.6805        |
| MINOR ARTERIAL URBAN  | 4,620,220,005         | 4,569               | 0.9889           | 6,251                | 1.3530            | 90                  | 0.0195           | 10,910                | 2.3614        |
| MAJOR COLLECTOR URBAN                                       | 44,797,658            | 24                  | 0.5357           | 15                   | 0.3348            | 2                   | 0.0446           | 41                    | 0.9152        |
| MINOR COLLECTOR URBAN                                       | 1,915,590,872         | 1,701               | 0.8880           | 1,839                | 0.9600            | 21                  | 0.0110           | 3,561                 | 1.8590        |
| LOCAL URBAN   | 4,553,609,348         | 2,227               | 0.4891           | 1,360                | 0.2987            | 19                  | 0.0042           | 3,606                 | 0.7919        |
| <b>TOTAL</b>  | <b>20,094,340,230</b> | <b>19,656</b>       | <b>6.4744</b>    | <b>17,790</b>        | <b>5.6409</b>     | <b>221</b>          | <b>0.0110</b>    | <b>37,667</b>         | <b>1.8745</b> |

|                    |                       |               |               |               |               |            |               |               |               |
|--------------------|-----------------------|---------------|---------------|---------------|---------------|------------|---------------|---------------|---------------|
| <b>GRAND TOTAL</b> | <b>25,078,856,776</b> | <b>21,780</b> | <b>0.8685</b> | <b>18,698</b> | <b>0.7456</b> | <b>297</b> | <b>0.0118</b> | <b>40,775</b> | <b>1.6259</b> |
|--------------------|-----------------------|---------------|---------------|---------------|---------------|------------|---------------|---------------|---------------|

| RURAL                    | TOTAL INJURIES | INJURY RATE   | TOTAL A INJURIES | 100M A INJURY RATE | TOTAL FATALITIES | 100M FATALITY RATE | FATALITY RATE |
|--------------------------|----------------|---------------|------------------|--------------------|------------------|--------------------|---------------|
| RURAL INTERSTATE         | 466            | 0.2213        | 30               | 1.42               | 27               | 1.28               | 0.0128        |
| PRINCIPAL ARTERIAL RURAL | 460            | 0.3144        | 56               | 3.83               | 33               | 2.26               | 0.0226        |
| MINOR ARTERIAL RURAL     | 228            | 0.5883        | 17               | 4.39               | 11               | 2.84               | 0.0284        |
| MAJOR COLLECTOR ARTERIAL | 188            | 0.5635        | 24               | 7.19               | 13               | 3.90               | 0.0390        |
| MINOR COLLECTOR ARTERIAL | 31             | 0.2233        | 3                | 2.16               | 0                | 0.00               | 0.0000        |
| LOCAL RURAL              | 80             | 0.1439        | 8                | 1.44               | 5                | 0.90               | 0.0090        |
| <b>TOTAL</b>             | <b>1,453</b>   | <b>0.2915</b> | <b>138</b>       | <b>2.77</b>        | <b>89</b>        | <b>1.79</b>        | <b>0.0179</b> |

| URBAN   | TOTAL INJURIES | INJURY RATE   | TOTAL A INJURIES | A INJURY RATE | TOTAL FATALITIES | 100M FATALITY RATE | FATALITY RATE |
|---|----------------|---------------|------------------|---------------|------------------|--------------------|---------------|
| PRINCIPAL ARTERIAL RURAL                                    | 4,453          | 1.0690        | 61               | 1.46          | 27               | 0.65               | 0.0065        |
| URBAN PRINCIPAL ARTERIAL RURAL OTHER FREEWAYS & EXPRESSWAYS | 1,403          | 0.8324        | 24               | 1.42          | 4                | 0.24               | 0.0024        |
| PRINCIPAL ARTERIAL-OTHER                                    | 6,943          | 2.2331        | 225              | 7.24          | 66               |                    | 0.0212        |
| MINOR ARTERIAL URBAN  | 10,264         | 2.2215        | 341              | 7.38          | 91               | 1.97               | 0.0197        |
| MAJOR COLLECTOR URBAN                                       | 21             | 0.4688        | 2                | 4.46          | 2                |                    | 0.0446        |
| MINOR COLLECTOR URBAN                                       | 2,834          | 1.4794        | 130              | 6.79          | 23               | 1.20               | 0.0120        |
| LOCAL URBAN   | 1,819          | 0.3995        | 176              | 3.87          | 24               | 0.53               | 0.0053        |
| <b>TOTAL</b>  | <b>27,737</b>  | <b>1.3803</b> | <b>959</b>       | <b>4.77</b>   | <b>237</b>       | <b>1.18</b>        | <b>0.0118</b> |

|                    |               |               |             |             |            |             |               |
|--------------------|---------------|---------------|-------------|-------------|------------|-------------|---------------|
| <b>GRAND TOTAL</b> | <b>29,190</b> | <b>1.1639</b> | <b>1097</b> | <b>4.37</b> | <b>326</b> | <b>1.30</b> | <b>0.0130</b> |
|--------------------|---------------|---------------|-------------|-------------|------------|-------------|---------------|

### Crash Data, Disc Dr. (Pyramid to Vista), Washoe County

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street  | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type    |
|-----------|----------------|------------|-------------|----------------|-----------|-------------------|------------|---------|----------------------|-------------|---------------|
| 1083972   | Fatal Crash    | 4/22/2016  | 10:07:00 PM | SR445          | N         | Disc Dr.          | 2          | 1       | No Data              | K           | Rear-end      |
| 947545    | Injury Crash   | 1/1/2015   | 5:33:00 PM  | SR445          | S         | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Rear-end      |
| 951954    | Injury Crash   | 3/1/2015   | 12:46:00 PM | SR445          | N         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 954322    | Injury Crash   | 6/1/2015   | 6:20:00 PM  | SR445          | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 957100    | Injury Crash   | 5/2/2015   | 1:03:00 PM  | SR445          | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 960211    | Injury Crash   | 9/5/2015   | 10:16:00 AM | SR445          | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Angle         |
| 972960    | Injury Crash   | 7/28/2015  | 6:38:00 PM  | Galleria Pkwy. | N         | Disc Dr.          | No Data    | 3       | No Data              | C           | Angle         |
| 973286    | Injury Crash   | 9/3/2015   | 3:44:00 PM  | Galleria Pkwy  | E         | Shoppers Way      | No Data    | 1       | No Data              | C           | Angle         |
| 973671    | Injury Crash   | 10/19/2015 | 8:28:00 PM  | SR445          | No Data   | Disc Dr.          | No Data    | 2       | No Data              | C           | Angle         |
| 976114    | Injury Crash   | 12/1/2015  | 9:25:00 PM  | SR445          | No Data   | Disc Dr.          | No Data    | 2       | No Data              | C           | Angle         |
| 977441    | Injury Crash   | 12/19/2015 | 10:18:00 PM | SR445          | N         | Disc Dr.          | No Data    | 2       | No Data              | B           | Rear-end      |
| 979004    | Injury Crash   | 4/27/2015  | 8:09:00 AM  | Disc Dr.       | E         | Sparks Blvd.      | No Data    | 2       | No Data              | C           | Rear-end      |
| 980740    | Injury Crash   | 8/30/2015  | 6:11:00 PM  | Vista Blvd.    | S         | Disc Dr.          | No Data    | 2       | No Data              | B           | Rear-end      |
| 980811    | Injury Crash   | 9/29/2015  | 4:36:00 PM  | Vista Blvd.    | N         | Disc Dr.          | No Data    | 2       | No Data              | B           | Angle         |
| 982045    | Injury Crash   | 12/12/2015 | 5:27:00 PM  | Disc Dr.       | No Data   | Galleria Pkwy.    | No Data    | 1       | No Data              | C           | Angle         |
| 982058    | Injury Crash   | 12/18/2015 | 9:51:00 PM  | Disc Dr.       | No Data   | SR445             | No Data    | 1       | No Data              | C           | Rear-end      |
| 982068    | Injury Crash   | 12/23/2015 | 10:11:00 AM | Disc Dr.       | E         | SR445             | No Data    | 1       | No Data              | C           | Angle         |
| 982649    | Injury Crash   | 1/1/2016   | 7:45:00 AM  | Disc Dr.       | No Data   | Sparks Blvd.      | No Data    | 1       | No Data              | C           | Non-collision |
| 983701    | Injury Crash   | 1/4/2016   | 1:00:00 PM  | Vista Blvd.    | No Data   | Disc Dr.          | No Data    | 2       | No Data              | B           | Rear-end      |
| 989243    | Injury Crash   | 3/23/2016  | 11:25:00 AM | Sparks Blvd.   | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Angle         |
| 1004062   | Injury Crash   | 7/8/2016   | 3:02:00 PM  | Disc Dr.       | E         | SR445             | No Data    | 2       | No Data              | C           | Rear-end      |
| 1006316   | Injury Crash   | 7/17/2016  | 6:34:00 PM  | Disc Dr.       | W         | Sparks Blvd.      | No Data    | 1       | No Data              | C           | Angle         |
| 1006942   | Injury Crash   | 7/11/2016  | 2:38:00 AM  | Disc Dr.       | No Data   | Harrier Way       | No Data    | 1       | No Data              | B           | Non-collision |
| 1007619   | Injury Crash   | 8/10/2016  | 6:39:00 AM  | Disc Dr.       | No Data   | Sparks Blvd.      | No Data    | 1       | No Data              | C           | Rear-end      |
| 1013507   | Injury Crash   | 10/12/2016 | 4:52:00 PM  | Disc Dr.       | E         | SR445             | No Data    | 2       | No Data              | C           | Rear-end      |
| 1013937   | Injury Crash   | 11/1/2016  | 7:06:00 AM  | Vista Blvd.    | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Non-collision |
| 1014206   | Injury Crash   | 10/20/2016 | 6:44:00 AM  | Disc Dr.       | W         | Vista Blvd.       | No Data    | 1       | No Data              | C           | Rear-End      |
| 1014228   | Injury Crash   | 11/25/2016 | 6:39:00 PM  | SR445          | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 1014532   | Injury Crash   | 10/7/2016  | 1:16:00 PM  | SR445          | No Data   | Disc Dr.          | No Data    | 3       | No Data              | B           | Angle         |
| 1021212   | Injury Crash   | 5/14/2016  | 1:28:00 PM  | SR445          | N         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 1033035   | Injury Crash   | 2/25/2017  | 4:40:00 PM  | Vista Blvd.    | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 1035386   | Injury Crash   | 2/13/2017  | 6:32:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 1035871   | Injury Crash   | 2/19/2017  | 7:05:00 AM  | Sparks Blvd.   | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|------------------|------------|---------|----------------------|-------------|-----------------------|
| 1039468   | Injury Crash         | 3/22/2017  | 12:51:00 AM | SR445          | S         | Disc Dr.         | No Data    | 1       | No Data              | C           | Rear-end              |
| 1043016   | Injury Crash         | 5/5/2017   | 12:40:00 PM | Disc Dr.       | E         | SR445            | No Data    | 1       | No Data              | C           | Rear-end              |
| 1050711   | Injury Crash         | 6/9/2017   | 1:54:00 PM  | Disc Dr.       | E         | Harrier Way      | No Data    | 1       | No Data              | B           | Non-Collision         |
| 1051818   | Injury Crash         | 6/22/2017  | 4:58:00 PM  | Vista Blvd.    | N         | Disc Dr.         | No Data    | 2       | No Data              | B           | Angle                 |
| 1052501   | Injury Crash         | 4/1/2017   | 9:06:00 AM  | Disc Dr.       | E         | SR445            | No Data    | 1       | No Data              | C           | Non-Collision         |
| 1053673   | Injury Crash         | 4/27/2017  | 10:07:00 PM | Disc Dr.       | No Data   | Galleria Pkwy.   | No Data    | 1       | No Data              | C           | Angle                 |
| 1053755   | Injury Crash         | 6/10/2017  | 6:10:00 PM  | Disc Dr.       | E         | SR445            | No Data    | 2       | No Data              | C           | Rear-end              |
| 1054633   | Injury Crash         | 6/1/2017   | 1:05:00 PM  | Vista Blvd.    | S         | Disc Dr.         | No Data    | 1       | No Data              | C           | Angle                 |
| 1065973   | Injury Crash         | 9/30/2017  | 4:49:00 PM  | Disc Dr.       | E         | SR445            | No Data    | 2       | No Data              | C           | Sideswipe, Overtaking |
| 1066301   | Injury Crash         | 8/27/2017  | 4:48:00 PM  | Sparks Blvd.   | E         | Disc Dr.         | No Data    | 1       | No Data              | C           | Rear-end              |
| 1067357   | Injury Crash         | 10/3/2017  | 4:00:00 PM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | 1       | No Data              | C           | Rear-end              |
| 1072228   | Injury Crash         | 11/30/2017 | 9:15:00 AM  | Vista Blvd.    | N         | Disc Dr.         | No Data    | 1       | No Data              | A           | Non-collision         |
| 1075420   | Injury Crash         | 9/29/2017  | 3:26:00 PM  | SR445          | No Data   | Disc Dr.         | No Data    | 1       | No Data              | C           | Non-collision         |
| 1079527   | Injury Crash         | 11/27/2017 | 2:30:00 PM  | Vista Blvd.    | No Data   | Disc Dr.         | No Data    | 1       | No Data              | C           | Rear-end              |
| 1082976   | Injury Crash         | 12/9/2017  | 2:23:00 PM  | Disc Dr.       | No Data   | Galleria Pkwy.   | No Data    | 3       | No Data              | C           | Rear-end              |
| 1083466   | Injury Crash         | 10/21/2017 | 12:25:00 PM | Disc Dr.       | W         | Sparks Blvd.     | No Data    | 1       | No Data              | B           | Non-collision         |
| 947337    | Property Damage Only | 1/30/2015  | 10:11:00 AM | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 954155    | Property Damage Only | 2/17/2015  | 12:01:00 PM | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 955145    | Property Damage Only | 5/14/2015  | 11:01:00 PM | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 956906    | Property Damage Only | 2/5/2015   | 4:20:00 PM  | Sparks Blvd.   | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 956997    | Property Damage Only | 6/21/2015  | 10:20:00 AM | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 959793    | Property Damage Only | 7/28/2015  | 5:30:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 959821    | Property Damage Only | 7/30/2015  | 11:27:00 AM | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 960244    | Property Damage Only | 8/9/2015   | 1:06:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 960609    | Property Damage Only | 8/26/2015  | 5:48:00 PM  | SR445          | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 961376    | Property Damage Only | 10/10/2015 | 9:38:00 AM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 973000    | Property Damage Only | 7/12/2015  | 9:16:00 PM  | Disc Dr.       | W         | Galleria Pkwy.   | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 973061    | Property Damage Only | 5/6/2015   | 2:49:00 PM  | Disc Dr.       | No Data   | Galleria Pkwy.   | No Data    | No Data | PDO                  | No Data     | Head-on               |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|------------------|------------|---------|----------------------|-------------|-----------------------|
| 974661    | Property Damage Only | 2/24/2016  | 11:27:00 AM | Disc Dr.       | No Data   | Galleria Pkwy.   | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 978080    | Property Damage Only | 1/8/2016   | 7:07:00 AM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 978913    | Property Damage Only | 1/15/2015  | 2:11:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 979160    | Property Damage Only | 3/19/2015  | 3:00:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 979875    | Property Damage Only | 3/6/2015   | 6:41:00 PM  | Disc Dr.       | W         | Vista Blvd.      | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 980766    | Property Damage Only | 8/22/2015  | 5:25:00 PM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 980838    | Property Damage Only | 9/15/2015  | 11:53:00 AM | Disc Dr.       | W         | Vista Blvd.      | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 980962    | Property Damage Only | 10/1/2015  | 6:30:00 PM  | Vista Blvd.    | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 982009    | Property Damage Only | 11/27/2015 | 3:28:00 PM  | Vista Blvd.    | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 982038    | Property Damage Only | 12/10/2015 | 4:53:00 PM  | Disc Dr.       | E         | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 982048    | Property Damage Only | 12/13/2015 | 11:52:00 AM | Disc Dr.       | E         | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 982306    | Property Damage Only | 12/17/2015 | 5:30:00 PM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983442    | Property Damage Only | 3/1/2016   | 2:38:00 PM  | SR445          | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983671    | Property Damage Only | 1/5/2016   | 6:09:00 AM  | Disc Dr.       | W         | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Non-Collision         |
| 983697    | Property Damage Only | 3/3/2016   | 5:12:00 PM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 983704    | Property Damage Only | 1/8/2016   | 8:39:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Non-Collision         |
| 984558    | Property Damage Only | 11/18/2015 | 8:00:00 AM  | Disc Dr.       | E         | SR445            | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 987245    | Property Damage Only | 3/23/2016  | 4:00:00 PM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 989200    | Property Damage Only | 4/13/2016  | 7:40:00 AM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-End              |
| 991320    | Property Damage Only | 4/18/2016  | 7:33:00 AM  | Disc Dr.       | W         | Vista Blvd.      | No Data    | No Data | PDO                  | No Data     | Rear-End              |
| 992054    | Property Damage Only | 3/31/2016  | 3:57:00 PM  | SR445          | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 992217    | Property Damage Only | 3/7/2016   | 7:50:00 AM  | Disc Dr.       | W         | Vista Blvd       | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 992258    | Property Damage Only | 4/15/2016  | 6:41:00 PM  | Disc Dr.       | E         | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Angle                 |



| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type              |
|-----------|----------------------|------------|-------------|----------------|-----------|------------------|------------|---------|----------------------|-------------|-------------------------|
| 993303    | Property Damage Only | 3/16/2016  | 10:25:00 AM | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 993504    | Property Damage Only | 2/20/2016  | 8:27:00 AM  | Disc Dr.       | W         | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 1003974   | Property Damage Only | 6/11/2016  | 3:56:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Sideswiping, Overtaking |
| 1008461   | Property Damage Only | 8/25/2016  | 7:45:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 1008574   | Property Damage Only | 8/25/2016  | 8:50:00 AM  | Vista Blvd.    | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1008835   | Property Damage Only | 8/4/2016   | 9:14:00 PM  | Galleria Pkwy. | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 1011793   | Property Damage Only | 9/9/2016   | 4:09:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 1012285   | Property Damage Only | 9/2/2016   | 5:10:00 PM  | SR445          | S         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1012348   | Property Damage Only | 9/14/2016  | 7:35:00 AM  | Disc Dr.       | No Data   | SR445            | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1012871   | Property Damage Only | 12/2/2016  | 9:07:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1013213   | Property Damage Only | 10/7/2016  | 1:52:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1013602   | Property Damage Only | 11/18/2016 | 12:21:00 AM | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 1013828   | Property Damage Only | 12/1/2016  | 4:59:00 PM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 1014201   | Property Damage Only | 12/5/2016  | 6:47:00 PM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 1014345   | Property Damage Only | 12/18/2016 | 5:55:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking   |
| 1014692   | Property Damage Only | 10/11/2016 | 7:07:00 AM  | Vista Blvd.    | N         | Disc Dr.         | No Data    | No Data | PDO                  | No Data     | Head-on                 |
| 1030618   | Property Damage Only | 1/4/2017   | 1:01:00 AM  | Disc Dr.       | E         | Harrier Way      | No Data    | No Data | PDO                  | O           | Non-collision           |
| 1030979   | Property Damage Only | 1/12/2017  | 5:18:00 PM  | Disc Dr.       | W         | Vista Blvd.      | No Data    | No Data | PDO                  | O           | Rear-end                |
| 1032107   | Property Damage Only | 1/21/2017  | 8:25:00 PM  | Disc Dr.       | No Data   | Galleria Pkwy.   | No Data    | No Data | PDO                  | O           | Non-collision           |
| 1036045   | Property Damage Only | 2/16/2017  | 7:25:00 AM  | Disc Dr.       | W         | Vista Blvd.      | No Data    | No Data | PDO                  | O           | Angle                   |
| 1036593   | Property Damage Only | 2/22/2017  | 9:55:00 PM  | Sparks Blvd.   | S         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Non-collision           |
| 1037499   | Property Damage Only | 2/8/2017   | 5:08:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end                |
| 1046044   | Property Damage Only | 4/16/2017  | 3:51:00 PM  | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Angle                   |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|------------------|------------|---------|----------------------|-------------|-----------------------|
| 1049503   | Property Damage Only | 3/23/2017  | 12:45:00 PM | SR445          | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1050756   | Property Damage Only | 5/23/2017  | 3:25:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1051187   | Property Damage Only | 5/24/2017  | 3:09:00 PM  | Sparks Blvd.   | S         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-End              |
| 1051753   | Property Damage Only | 5/11/2017  | 6:00:00 PM  | Disc Dr.       | No Data   | Harrier Way      | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1052140   | Property Damage Only | 4/28/2017  | 12:45:00 AM | Disc Dr.       | E         | Harrier Way      | No Data    | No Data | PDO                  | N           | Non-collision         |
| 1053240   | Property Damage Only | 5/27/2017  | 12:36:00 PM | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Angle                 |
| 1053414   | Property Damage Only | 5/30/2017  | 12:44:00 PM | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1053608   | Property Damage Only | 7/7/2017   | 7:04:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1053892   | Property Damage Only | 6/13/2017  | 2:43:00 PM  | Vista Blvd.    | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Angle                 |
| 1054074   | Property Damage Only | 4/13/2017  | 4:38:00 PM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Angle                 |
| 1065921   | Property Damage Only | 10/3/2017  | 4:43:00 PM  | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1069971   | Property Damage Only | 8/13/2017  | 8:12:00 AM  | Disc Dr.       | E         | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Angle                 |
| 1070129   | Property Damage Only | 8/25/2017  | 11:50:00 AM | Disc Dr.       | No Data   | Vista Blvd.      | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1070616   | Property Damage Only | 7/25/2017  | 6:27:00 PM  | Disc Dr.       | No Data   | Vista Blvd.      | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1073379   | Property Damage Only | 10/23/2017 | 5:15:00 PM  | Sparks Blvd.   | N         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-End              |
| 1074685   | Property Damage Only | 12/23/2017 | 2:20:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Angle                 |
| 1075833   | Property Damage Only | 12/3/2017  | 12:18:00 PM | Vista Blvd.    | S         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1076991   | Property Damage Only | 10/25/2017 | 7:30:00 AM  | Vista Blvd     | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1077866   | Property Damage Only | 10/26/2017 | 9:19:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1079585   | Property Damage Only | 10/19/2017 | 3:29:00 AM  | Disc Dr.       | W         | Sparks Blvd.     | No Data    | No Data | PDO                  | N           | Non-collision         |
| 1079790   | Property Damage Only | 11/1/2017  | 11:40:00 AM | Sparks Blvd.   | No Data   | Disc Dr.         | No Data    | No Data | PDO                  | N           | Rear-end              |
| 1082106   | Property Damage Only | 11/13/2017 | 1:25:00 AM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1082710   | Property Damage Only | 12/12/2017 | 7:27:00 AM  | Disc Dr.       | No Data   | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Rear-end              |

### Crash Data, Pyramid (Queen Way to Sparks Blvd.), Washoe County

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street   | Direction | Secondary Street  | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type    |
|-----------|----------------|------------|-------------|------------------|-----------|-------------------|------------|---------|----------------------|-------------|---------------|
| 1083972   | Fatal Crash    | 4/22/2016  | 10:07:00 PM | SR445            | N         | Disc Dr.          | 2          | 1       | No Data              | K           | Rear-end      |
| 1084521   | Fatal Crash    | 11/18/2017 | 5:51:00 PM  | SR445            | N         | Spring Ridge Dr.  | 1          | No Data | No Data              | K           | Non-collision |
| 944775    | Injury Crash   | 1/1/2015   | 10:29:00 AM | SR445            | S         | Mile Marker 5     | No Data    | 1       | No Data              | C           | Rear-end      |
| 945695    | Injury Crash   | 1/11/2015  | 5:40:00 PM  | SR445            | S         | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Rear-end      |
| 947545    | Injury Crash   | 1/1/2015   | 5:33:00 PM  | SR445            | S         | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Rear-end      |
| 951948    | Injury Crash   | 3/5/2015   | 11:04:00 AM | SR445            | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Non-collision |
| 951954    | Injury Crash   | 3/1/2015   | 12:46:00 PM | SR445            | N         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 952130    | Injury Crash   | 3/8/2015   | 6:52:00 AM  | SR445            | S         | Golden View Dr.   | No Data    | 1       | No Data              | C           | Angle         |
| 952240    | Injury Crash   | 3/5/2015   | 2:46:00 PM  | SR445            | No Data   | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Angle         |
| 952547    | Injury Crash   | 1/5/2015   | 10:01:00 AM | SR445            | No Data   | Queen Way         | No Data    | 1       | No Data              | B           | Non-collision |
| 953531    | Injury Crash   | 7/7/2015   | 12:21:00 PM | SR445            | S         | Sparks Blvd.      | No Data    | 2       | No Data              | C           | Rear-end      |
| 954322    | Injury Crash   | 6/1/2015   | 6:20:00 PM  | SR445            | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 954969    | Injury Crash   | 4/3/2015   | 10:46:00 AM | SR445            | S         | Sparks Blvd.      | No Data    | 1       | No Data              | C           | Rear-end      |
| 955391    | Injury Crash   | 7/22/2015  | 6:15:00 PM  | SR445            | S         | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Rear-end      |
| 955400    | Injury Crash   | 3/24/2015  | 4:46:00 PM  | SR445            | N         | Shoppers Way      | No Data    | 2       | No Data              | C           | Rear-end      |
| 956087    | Injury Crash   | 5/20/2015  | 8:50:00 AM  | SR445            | N         | Queen Way         | No Data    | 3       | No Data              | C           | Rear-end      |
| 956489    | Injury Crash   | 7/14/2015  | 5:57:00 PM  | SR445            | No Data   | Queen Way         | No Data    | 1       | No Data              | C           | Angle         |
| 956591    | Injury Crash   | 6/20/2015  | 5:46:00 AM  | SR445            | N         | Disc Dr.          | No Data    | 1       | No Data              | C           | Backing       |
| 957100    | Injury Crash   | 5/2/2015   | 1:03:00 PM  | SR445            | S         | Disc Dr.          | No Data    | 1       | No Data              | C           | Rear-end      |
| 957103    | Injury Crash   | 6/8/2015   | 7:21:00 AM  | SR445            | N         | Queen Way         | No Data    | 1       | No Data              | C           | Angle         |
| 960211    | Injury Crash   | 9/5/2015   | 10:16:00 AM | SR445            | No Data   | Disc Dr.          | No Data    | 1       | No Data              | C           | Angle         |
| 960235    | Injury Crash   | 9/23/2015  | 6:19:00 PM  | SR445            | N         | N Los Altos Pkwy. | No Data    | 1       | No Data              | U           | Rear-end      |
| 960297    | Injury Crash   | 8/23/2015  | 7:30:00 AM  | SR445            | N         | Golden View Dr.   | No Data    | 2       | No Data              | U           | Rear-end      |
| 960360    | Injury Crash   | 9/14/2015  | 7:53:00 AM  | SR445            | S         | Disc Dr.          | No Data    | 1       | No Data              | U           | Rear-end      |
| 973671    | Injury Crash   | 10/19/2015 | 8:28:00 PM  | SR445            | No Data   | Disc Dr.          | No Data    | 2       | No Data              | C           | Angle         |
| 973835    | Injury Crash   | 10/28/2015 | 8:57:00 AM  | SR445            | N         | N Los Altos Pkwy. | No Data    | 1       | No Data              | C           | Rear-end      |
| 974442    | Injury Crash   | 1/9/2016   | 5:28:00 PM  | Spring Ridge Dr. | No Data   | SR445             | No Data    | 2       | No Data              | C           | Rear-end      |
| 975724    | Injury Crash   | 11/15/2015 | 5:27:00 PM  | SR445            | No Data   | Queen Way         | No Data    | 1       | No Data              | C           | Angle         |
| 976071    | Injury Crash   | 11/30/2015 | 7:20:00 AM  | SR445            | N         | Sparks Blvd.      | No Data    | 1       | No Data              | C           | Rear-end      |
| 976114    | Injury Crash   | 12/1/2015  | 9:25:00 PM  | SR445            | No Data   | Disc Dr.          | No Data    | 2       | No Data              | C           | Angle         |

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type    |
|-----------|----------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|---------------|
| 976131    | Injury Crash   | 12/2/2015  | 7:03:00 PM  | SR445                | S         | Golden View Dr.      | No Data    | 1       | No Data              | C           | Angle         |
| 976161    | Injury Crash   | 12/4/2015  | 3:23:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 3       | No Data              | B           | Rear-end      |
| 976175    | Injury Crash   | 12/5/2015  | 4:42:00 PM  | SR445                | S         | Golden View Dr.      | No Data    | 1       | No Data              | C           | Non-collision |
| 976323    | Injury Crash   | 12/12/2015 | 9:56:00 AM  | SR445                | No Data   | N Los Altos Pkwy     | No Data    | 1       | No Data              | C           | Angle         |
| 977441    | Injury Crash   | 12/19/2015 | 10:18:00 PM | SR445                | N         | Disc Dr.             | No Data    | 2       | No Data              | B           | Rear-end      |
| 977509    | Injury Crash   | 12/22/2015 | 3:59:00 PM  | SR445                | No Data   | Queen Way            | No Data    | 1       | No Data              | C           | Angle         |
| 977887    | Injury Crash   | 1/2/2016   | 11:17:00 AM | SR445                | N         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end      |
| 977901    | Injury Crash   | 1/3/2016   | 4:15:00 PM  | SR445                | N         | Mile Marker 5        | No Data    | 4       | No Data              | A           | Rear-end      |
| 978285    | Injury Crash   | 1/18/2016  | 2:37:00 PM  | SR445                | S         | Queen Way            | No Data    | 2       | No Data              | C           | Rear-end      |
| 979715    | Injury Crash   | 4/13/2015  | 6:03:00 PM  | N Los Altos Pkwy.    | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end      |
| 982058    | Injury Crash   | 12/18/2015 | 9:51:00 PM  | Disc DR.             | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end      |
| 982068    | Injury Crash   | 12/23/2015 | 10:11:00 AM | Disc Dr.             | E         | SR445                | No Data    | 1       | No Data              | C           | Angle         |
| 982081    | Injury Crash   | 12/29/2015 | 10:45:00 AM | N Los Altos Pkwy.    | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end      |
| 982902    | Injury Crash   | 1/29/2016  | 6:52:00 AM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Angle         |
| 983081    | Injury Crash   | 2/3/2016   | 9:59:00 AM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | 2       | No Data              | C           | Rear-end      |
| 983225    | Injury Crash   | 2/14/2016  | 3:47:00 PM  | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Angle         |
| 983243    | Injury Crash   | 2/16/2016  | 11:08:00 PM | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Angle         |
| 983295    | Injury Crash   | 2/17/2016  | 10:18:00 PM | SR445                | S         | Golden View Dr.      | No Data    | 1       | No Data              | C           | Angle         |
| 983395    | Injury Crash   | 2/26/2016  | 11:08:00 AM | SR445                | N         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | C           | Rear-end      |
| 986345    | Injury Crash   | 2/28/2016  | 11:13:00 AM | SR445                | N         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end      |
| 986809    | Injury Crash   | 3/10/2016  | 5:12:00 PM  | SR445                | S         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end      |
| 987252    | Injury Crash   | 4/20/2016  | 12:27:00 PM | SR445                | N         | Golden View Dr.      | No Data    | 1       | No Data              | C           | Rear-end      |
| 987972    | Injury Crash   | 4/20/2016  | 8:17:00 PM  | SR445                | S         | Golden View Dr.      | No Data    | 1       | No Data              | C           | Rear-end      |
| 989266    | Injury Crash   | 3/27/2016  | 10:45:00 AM | SR445                | N         | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle         |
| 989932    | Injury Crash   | 5/4/2016   | 8:46:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle         |
| 989951    | Injury Crash   | 4/2/2016   | 12:42:00 PM | SR445                | N         | N Los Altos Pkwy.    | No Data    | 2       | No Data              | C           | Angle         |
| 990626    | Injury Crash   | 4/23/2016  | 10:30:00 PM | SR445                | No Data   | Highland Ranch Pkwy. | No Data    | 1       | No Data              | C           | Non-collision |
| 993222    | Injury Crash   | 5/4/2016   | 5:54:00 PM  | N Los Altos Pkwy.    | E         | SR445                | No Data    | 1       | No Data              | C           | Head-on       |
| 996889    | Injury Crash   | 5/25/2016  | 5:46:00 AM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | 2       | No Data              | U           | Head-on       |

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 999234    | Injury Crash   | 6/2/2016   | 3:58:00 PM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Sideswipe, Overtaking |
| 1001016   | Injury Crash   | 7/4/2016   | 2:41:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-end              |
| 1001831   | Injury Crash   | 6/23/2016  | 3:50:00 PM  | SR445                | S         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Non-collision         |
| 1004062   | Injury Crash   | 7/8/2016   | 3:02:00 PM  | Disc Dr.             | E         | SR445                | No Data    | 2       | No Data              | C           | Rear-end              |
| 1006090   | Injury Crash   | 8/7/2016   | 10:56:00 PM | SR445                | S         | Disc Dr.             | No Data    | 2       | No Data              | C           | Rear-end              |
| 1008556   | Injury Crash   | 8/22/2016  | 1:13:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | B           | Rear-end              |
| 1008744   | Injury Crash   | 8/25/2016  | 10:53:00 PM | SR445                | N         | N Los Altos Pkwy     | No Data    | 1       | No Data              | C           | Angle                 |
| 1010639   | Injury Crash   | 9/17/2016  | 5:32:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | 2       | No Data              | B           | Rear-end              |
| 1011871   | Injury Crash   | 9/11/2016  | 7:20:00 AM  | SR445                | N         | Mile Marker 5        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1012043   | Injury Crash   | 9/1/2016   | 4:59:00 PM  | SR445                | S         | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end              |
| 1012593   | Injury Crash   | 9/17/2016  | 3:01:00 PM  | Farr Ln.             | No Data   | SR880                | No Data    | 1       | No Data              | C           | Non-collision         |
| 1012959   | Injury Crash   | 10/29/2016 | 7:00:00 AM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Non-collision         |
| 1013116   | Injury Crash   | 12/16/2016 | 12:00:00 PM | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end              |
| 1013419   | Injury Crash   | 10/7/2016  | 3:06:00 PM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Rear-End              |
| 1013507   | Injury Crash   | 10/12/2016 | 4:52:00 PM  | Disc Dr.             | E         | SR445                | No Data    | 2       | No Data              | C           | Rear-end              |
| 1013698   | Injury Crash   | 11/28/2016 | 4:35:00 PM  | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | 2       | No Data              | C           | Angle                 |
| 1013705   | Injury Crash   | 12/9/2016  | 11:42:00 AM | SR445                | S         | N Los Altos Pkwy.    | No Data    | 3       | No Data              | C           | Rear-end              |
| 1013727   | Injury Crash   | 10/7/2016  | 11:14:00 AM | N Los Altos Pkwy.    | E         | SR445                | No Data    | 1       | No Data              | B           | Non-Collision         |
| 1013802   | Injury Crash   | 12/25/2016 | 1:30:00 PM  | Highland Ranch Pkwy. | No Data   | SR445                | No Data    | 1       | No Data              | B           | Rear-end              |
| 1013978   | Injury Crash   | 12/5/2016  | 9:05:00 AM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | C           | Rear-end              |
| 1014228   | Injury Crash   | 11/25/2016 | 6:39:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-end              |
| 1014410   | Injury Crash   | 11/20/2016 | 3:27:00 PM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Rear-end              |
| 1014532   | Injury Crash   | 10/7/2016  | 1:16:00 PM  | SR445                | No Data   | Disc Dr.             | No Data    | 3       | No Data              | B           | Angle                 |
| 1020563   | Injury Crash   | 5/14/2016  | 11:59:00 AM | SR445                | N         | Queen Way            | No Data    | 3       | No Data              | C           | Angle                 |
| 1020580   | Injury Crash   | 9/21/2016  | 6:55:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-End              |
| 1021212   | Injury Crash   | 5/14/2016  | 1:28:00 PM  | SR445                | N         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-end              |
| 1033201   | Injury Crash   | 2/13/2017  | 7:31:00 AM  | SR445                | N         | Spring Ridge Dr.     | No Data    | 2       | No Data              | C           | Rear-End              |
| 1033785   | Injury Crash   | 3/2/2017   | 7:50:00 AM  | SR445                | N         | SR659                | No Data    | 2       | No Data              | C           | Rear-End              |
| 1034135   | Injury Crash   | 2/10/2017  | 10:57:00 AM | SR445                | S         | Golden View Dr.      | No Data    | 1       | No Data              | B           | Rear-end              |

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1034188   | Injury Crash   | 3/11/2017  | 4:59:00 PM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Angle                 |
| 1039468   | Injury Crash   | 3/22/2017  | 12:51:00 AM | SR445                | S         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-end              |
| 1042659   | Injury Crash   | 4/13/2017  | 9:27:00 AM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1043016   | Injury Crash   | 5/5/2017   | 12:40:00 PM | Disc Dr.             | E         | SR445                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1049522   | Injury Crash   | 5/4/2017   | 4:53:00 PM  | N Los Altos Pkwy.    | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1049593   | Injury Crash   | 5/18/2017  | 6:13:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Angle                 |
| 1049740   | Injury Crash   | 4/28/2017  | 2:55:00 PM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | A           | Rear-end              |
| 1051098   | Injury Crash   | 4/2/2017   | 1:46:00 PM  | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | 1       | No Data              | C           | Rear-end              |
| 1051488   | Injury Crash   | 6/16/2017  | 12:45:00 PM | SR445                | S         | Mile Marker 4        | No Data    | 4       | No Data              | B           | Rear-end              |
| 1053755   | Injury Crash   | 6/10/2017  | 6:10:00 PM  | Disc Dr.             | E         | SR445                | No Data    | 2       | No Data              | C           | Rear-end              |
| 1062557   | Injury Crash   | 6/17/2017  | 6:52:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Sideswipe, Overtaking |
| 1063974   | Injury Crash   | 7/31/2017  | 5:11:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 3       | No Data              | C           | Rear-end              |
| 1065911   | Injury Crash   | 8/24/2017  | 8:28:00 AM  | N Los Altos Pkwy.    | No Data   | SR445                | No Data    | 2       | No Data              | C           | Angle                 |
| 1065973   | Injury Crash   | 9/30/2017  | 4:49:00 PM  | Disc Dr.             | E         | SR445                | No Data    | 2       | No Data              | C           | Sideswipe, Overtaking |
| 1066116   | Injury Crash   | 9/25/2017  | 4:26:00 PM  | SR445                | N         | Spring Ridge Dr.     | No Data    | 2       | No Data              | B           | Rear-end              |
| 1066204   | Injury Crash   | 9/28/2017  | 1:34:00 PM  | SR445                | N         | Shoppers Way         | No Data    | 3       | No Data              | C           | Rear-end              |
| 1066361   | Injury Crash   | 9/18/2017  | 6:08:00 PM  | SR445                | N         | Disc Dr.             | No Data    | 1       | No Data              | B           | Non-collision         |
| 1066616   | Injury Crash   | 9/26/2017  | 10:57:00 AM | SR445                | No Data   | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle                 |
| 1067114   | Injury Crash   | 9/4/2017   | 8:12:00 AM  | SR445                | N         | Mile Marker 5        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1068367   | Injury Crash   | 9/5/2017   | 8:46:00 AM  | SR445                | N         | Mile Marker 5        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1069843   | Injury Crash   | 7/24/2017  | 10:40:00 AM | N Los Altos Pkwy.    | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1070860   | Injury Crash   | 2/25/2015  | 5:16:00 PM  | SR445                | N         | Queen Way            | No Data    | 1       | No Data              | C           | Rear-end              |
| 1070892   | Injury Crash   | 9/24/2015  | 1:00:00 AM  | SR445                | S         | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Non-collision         |
| 1073669   | Injury Crash   | 11/19/2017 | 8:33:00 AM  | SR445                | No Data   | Los Altos Pkwy       | No Data    | 1       | No Data              | C           | Rear-end              |
| 1074886   | Injury Crash   | 11/16/2017 | 5:13:00 PM  | SR445                | S         | Sparks Blvd          | No Data    | 1       | No Data              | C           | Rear-end              |
| 1075171   | Injury Crash   | 12/13/2017 | 9:16:00 AM  | SR445                | N         | SR880                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1075228   | Injury Crash   | 11/7/2017  | 7:24:00 AM  | SR445                | N         | Los Altos Pkwy.      | No Data    | 2       | No Data              | C           | Rear-end              |
| 1075420   | Injury Crash   | 9/29/2017  | 3:26:00 PM  | SR445                | No Data   | Disc Dr.             | No Data    | 1       | No Data              | C           | Non-Collision         |
| 1075561   | Injury Crash   | 11/26/2017 | 7:25:00 AM  | SR445                | N         | Los Altos Pkwy.      | No Data    | 1       | No Data              | C           | Rear-end              |
| 1077407   | Injury Crash   | 10/10/2017 | 1:20:00 PM  | SR445                | S         | Los Altos Pkwy.      | No Data    | 2       | No Data              | C           | Angle                 |
| 1079232   | Injury Crash   | 11/29/2017 | 4:57:00 PM  | SR445                | S         | Disc Dr.             | No Data    | 1       | No Data              | C           | Rear-end              |
| 1080071   | Injury Crash   | 12/17/2017 | 4:11:00 PM  | SR445                | S         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | C           | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1082250   | Injury Crash         | 11/13/2017 | 12:37:00 PM | SR445                | S         | Los Altos Pkwy.      | No Data    | 3       | No Data              | B           | Head-on               |
| 1083198   | Injury Crash         | 12/21/2017 | 1:08:00 PM  | SR445                | S         | Los Altos Pkwy.      | No Data    | 1       | No Data              | C           | Rear-end              |
| 945158    | Property Damage Only | 3/10/2015  | 7:29:00 PM  | SR445                | S         | Mile Marker 3        | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 945561    | Property Damage Only | 2/16/2015  | 12:03:00 PM | SR445                | No Data   | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 945691    | Property Damage Only | 2/15/2015  | 12:00:00 PM | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 945949    | Property Damage Only | 1/9/2015   | 12:16:00 PM | SR445                | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 946139    | Property Damage Only | 2/2/2015   | 3:30:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 946452    | Property Damage Only | 1/20/2015  | 4:45:00 PM  | SR445                | S         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 947337    | Property Damage Only | 1/30/2015  | 10:11:00 AM | SR445                | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 947385    | Property Damage Only | 2/10/2015  | 5:51:00 PM  | Queen Way            | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Head-on               |
| 947788    | Property Damage Only | 2/3/2015   | 6:07:00 PM  | SR445                | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 952021    | Property Damage Only | 3/6/2015   | 8:51:00 PM  | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 952051    | Property Damage Only | 2/25/2015  | 8:00:00 AM  | SR445                | S         | Kiley Pkwy.          | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 952910    | Property Damage Only | 5/6/2015   | 7:25:00 AM  | SR445                | S         | MM 4                 | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 953305    | Property Damage Only | 3/23/2015  | 12:23:00 PM | SR445                | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 953661    | Property Damage Only | 4/10/2015  | 11:06:00 AM | Highland Ranch Pkwy. | W         | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 954155    | Property Damage Only | 2/17/2015  | 12:01:00 PM | SR445                | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 955145    | Property Damage Only | 5/14/2015  | 11:01:00 PM | SR445                | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 955469    | Property Damage Only | 7/17/2015  | 10:42:00 AM | SR445                | No Data   | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 955721    | Property Damage Only | 7/13/2015  | 3:17:00 PM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 955888    | Property Damage Only | 5/21/2015  | 7:00:00 PM  | SR445                | N         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 955931    | Property Damage Only | 4/10/2015  | 2:34:00 PM  | SR445                | N         | Shoppers Way         | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 956603    | Property Damage Only | 5/2/2015   | 4:20:00 PM  | SR445                | N         | Mile Marker 4        | No Data    | No Data | PDO                  | No Data     | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street    | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type              |
|-----------|----------------------|------------|-------------|-------------------|-----------|----------------------|------------|---------|----------------------|-------------|-------------------------|
| 956997    | Property Damage Only | 6/21/2015  | 10:20:00 AM | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 959661    | Property Damage Only | 3/1/2015   | 9:17:00 AM  | SR445             | S         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 959793    | Property Damage Only | 7/28/2015  | 5:30:00 PM  | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 959821    | Property Damage Only | 7/30/2015  | 11:27:00 AM | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960233    | Property Damage Only | 9/17/2015  | 9:15:00 PM  | SR445             | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960244    | Property Damage Only | 8/9/2015   | 1:06:00 PM  | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 960374    | Property Damage Only | 9/24/2015  | 7:39:00 AM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960400    | Property Damage Only | 9/24/2015  | 9:01:00 PM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 960410    | Property Damage Only | 8/6/2015   | 12:41:00 PM | SR445             | N         | Mile Marker 5        | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960450    | Property Damage Only | 9/29/2015  | 6:05:00 PM  | SR445             | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 960470    | Property Damage Only | 8/24/2015  | 9:42:00 AM  | SR445             | S         | Mile Marker 5        | No Data    | No Data | PDO                  | No Data     | Angle                   |
| 960475    | Property Damage Only | 9/7/2015   | 8:15:00 AM  | SR445             | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960518    | Property Damage Only | 9/15/2015  | 4:14:00 PM  | N Los Altos Pkwy. | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 960609    | Property Damage Only | 8/26/2015  | 5:48:00 PM  | SR445             | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 961376    | Property Damage Only | 10/10/2015 | 9:38:00 AM  | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Sideswiping, Overtaking |
| 973665    | Property Damage Only | 10/6/2015  | 4:45:00 PM  | SR445             | S         | Mile Marker 6        | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 973680    | Property Damage Only | 10/20/2015 | 7:26:00 AM  | SR445             | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 973761    | Property Damage Only | 10/24/2015 | 5:18:00 PM  | SR445             | N         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 973812    | Property Damage Only | 10/27/2015 | 3:02:00 PM  | SR445             | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 974097    | Property Damage Only | 11/11/2015 | 1:29:00 PM  | SR445             | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 975773    | Property Damage Only | 11/17/2015 | 1:25:00 PM  | SR445             | S         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end                |
| 975859    | Property Damage Only | 11/20/2015 | 6:55:00 PM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision           |
| 977479    | Property Damage Only | 12/21/2015 | 12:30:00 PM | SR445             | No Data   | Queen Way            | No Data    | No Data | PDO                  | No Data     | Angle                   |



| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street    | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|-------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 977489    | Property Damage Only | 12/21/2015 | 6:37:00 PM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 977652    | Property Damage Only | 12/27/2015 | 7:44:00 AM  | SR445             | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Sideswipe, overtaking |
| 977753    | Property Damage Only | 12/29/2015 | 1:55:00 PM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 977772    | Property Damage Only | 12/30/2015 | 12:05:00 PM | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 977847    | Property Damage Only | 12/31/2015 | 12:25:00 AM | SR445             | N         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 978080    | Property Damage Only | 1/8/2016   | 7:07:00 AM  | SR445             | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 978526    | Property Damage Only | 6/14/2015  | 10:16:00 PM | Sparks Blvd.      | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 978588    | Property Damage Only | 7/8/2015   | 1:20:00 PM  | N Los Altos Pkwy. | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 978672    | Property Damage Only | 6/8/2015   | 12:28:00 PM | SR445             | E         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 978973    | Property Damage Only | 1/11/2015  | 11:18:00 AM | N Los Altos Pkwy. | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 979203    | Property Damage Only | 1/29/2015  | 3:00:00 PM  | SR445             | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 979354    | Property Damage Only | 5/14/2015  | 1:30:00 AM  | Farr Ln.          | S         | SR880                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 979378    | Property Damage Only | 7/22/2015  | 6:26:00 PM  | Sparks Blvd.      | No Data   | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 979922    | Property Damage Only | 2/20/2015  | 9:54:00 AM  | N Los Altos Pkwy. | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 980403    | Property Damage Only | 9/10/2015  | 8:03:00 AM  | N Los Altos Pkwy. | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-to-rear          |
| 980418    | Property Damage Only | 8/20/2015  | 12:17:00 PM | N Los Altos Pkwy. | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 982049    | Property Damage Only | 12/14/2015 | 4:24:00 PM  | N Los Altos Pkwy. | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 982306    | Property Damage Only | 12/17/2015 | 5:30:00 PM  | SR445             | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983128    | Property Damage Only | 2/7/2016   | 1:18:00 PM  | SR445             | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 983228    | Property Damage Only | 2/14/2016  | 4:00:00 PM  | SR445             | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983333    | Property Damage Only | 2/19/2016  | 12:22:00 PM | SR445             | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983351    | Property Damage Only | 2/22/2016  | 7:15:00 AM  | SR445             | N         | Mile Marker 5        | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 983442    | Property Damage Only | 3/1/2016   | 2:38:00 PM  | SR445             | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type    |
|-----------|----------------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|---------------|
| 983678    | Property Damage Only | 2/27/2016  | 12:09:00 PM | Sparks Blvd.         | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-Collision |
| 983687    | Property Damage Only | 1/6/2016   | 4:56:00 AM  | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 983712    | Property Damage Only | 1/14/2016  | 7:20:00 AM  | Queen Way            | S         | SR445                | No Data    | No Data | PDO                  | No Data     | Angle         |
| 983943    | Property Damage Only | 4/9/2015   | 2:04:00 AM  | Golden View Dr.      | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 984091    | Property Damage Only | 2/17/2015  | 12:17:00 PM | SR445                | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 984453    | Property Damage Only | 9/19/2015  | 5:47:00 PM  | SR445                | No Data   | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 984490    | Property Damage Only | 11/15/2015 | 3:20:00 PM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | No Data | PDO                  | No Data     | Angle         |
| 984558    | Property Damage Only | 11/18/2015 | 8:00:00 AM  | Disc Dr.             | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 985728    | Property Damage Only | 4/6/2016   | 4:55:00 PM  | SR445                | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 986629    | Property Damage Only | 3/16/2016  | 1:45:00 PM  | SR445                | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 986699    | Property Damage Only | 4/7/2016   | 5:24:00 AM  | SR445                | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle         |
| 986719    | Property Damage Only | 4/20/2016  | 7:33:00 AM  | SR445                | S         | Kiley Pkwy.          | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 986845    | Property Damage Only | 4/7/2016   | 3:40:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle         |
| 986901    | Property Damage Only | 4/10/2016  | 7:43:00 AM  | SR445                | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 987245    | Property Damage Only | 3/23/2016  | 4:00:00 PM  | SR445                | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 988091    | Property Damage Only | 3/17/2016  | 2:55:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle         |
| 989200    | Property Damage Only | 4/13/2016  | 7:40:00 AM  | SR445                | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 990370    | Property Damage Only | 4/17/2016  | 10:47:00 AM | SR445                | N         | Spring Ridge Dr.     | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 992012    | Property Damage Only | 4/2/2016   | 3:28:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 992054    | Property Damage Only | 3/31/2016  | 3:57:00 PM  | SR445                | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle         |
| 993303    | Property Damage Only | 3/16/2016  | 10:25:00 AM | SR445                | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 993332    | Property Damage Only | 4/21/2016  | 1:56:00 PM  | SR445                | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 997108    | Property Damage Only | 5/29/2016  | 3:26:00 PM  | N Los Altos Pkwy.    | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end      |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street  | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|-------------------|------------|---------|----------------------|-------------|-----------------------|
| 998799    | Property Damage Only | 6/6/2016   | 3:34:00 PM  | SR445          | N         | Sparks Blvd.      | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1000778   | Property Damage Only | 7/21/2016  | 5:53:00 PM  | SR445          | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1001084   | Property Damage Only | 6/26/2016  | 11:25:00 AM | SR445          | N         | Golden View Dr.   | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1001319   | Property Damage Only | 6/25/2016  | 2:05:00 PM  | Sparks Blvd.   | E         | SR445             | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 1001388   | Property Damage Only | 6/27/2016  | 7:45:00 AM  | SR445          | No Data   | Sparks Blvd.      | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1001576   | Property Damage Only | 7/18/2016  | 5:38:00 PM  | SR445          | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1002205   | Property Damage Only | 6/19/2016  | 2:04:00 PM  | SR445          | S         | Disc Dr.          | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1002788   | Property Damage Only | 6/26/2016  | 8:43:00 AM  | SR445          | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1003084   | Property Damage Only | 7/22/2016  | 7:48:00 PM  | SR445          | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1003332   | Property Damage Only | 6/30/2016  | 2:25:00 AM  | SR445          | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1004403   | Property Damage Only | 8/1/2016   | 11:00:00 PM | SR445          | No Data   | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1004818   | Property Damage Only | 8/7/2016   | 7:30:00 AM  | SR445          | N         | Golden View Dr.   | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1006121   | Property Damage Only | 8/14/2016  | 11:39:00 PM | SR445          | N         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1007921   | Property Damage Only | 8/18/2016  | 3:40:00 PM  | SR445          | S         | Kiley Pkwy.       | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1008461   | Property Damage Only | 8/25/2016  | 7:45:00 PM  | SR445          | N         | Disc Dr.          | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1010605   | Property Damage Only | 9/19/2016  | 7:40:00 AM  | SR445          | S         | Mile Marker 5     | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1010812   | Property Damage Only | 9/12/2016  | 1:45:00 PM  | SR445          | N         | N Los Altos Pkwy  | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1010860   | Property Damage Only | 8/31/2016  | 5:30:00 PM  | SR445          | N         | Mile Marker 3     | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1011159   | Property Damage Only | 8/31/2016  | 7:25:00 AM  | SR445          | N         | Disc Dr.          | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1011306   | Property Damage Only | 9/13/2016  | 2:25:00 PM  | SR445          | S         | N Los Altos Pkwy  | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 1011971   | Property Damage Only | 9/23/2016  | 1:49:00 PM  | SR445          | N         | Queen Way         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1012285   | Property Damage Only | 9/2/2016   | 5:10:00 PM  | SR445          | S         | Disc DR.          | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1012348   | Property Damage Only | 9/14/2016  | 7:35:00 AM  | Disc Dr.       | No Data   | SR445             | No Data    | No Data | PDO                  | No Data     | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1012771   | Property Damage Only | 11/7/2016  | 2:36:00 PM  | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1012915   | Property Damage Only | 12/5/2016  | 4:27:00 PM  | SR445          | S         | Spring Ridge Dr.     | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1013086   | Property Damage Only | 10/30/2016 | 3:21:00 PM  | SR445          | S         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013213   | Property Damage Only | 10/7/2016  | 1:52:00 PM  | SR445          | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013269   | Property Damage Only | 10/8/2016  | 5:00:00 AM  | Sparks Blvd.   | S         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1013414   | Property Damage Only | 10/30/2016 | 8:06:00 AM  | SR445          | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013431   | Property Damage Only | 10/11/2016 | 5:16:00 PM  | SR445          | S         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013447   | Property Damage Only | 12/12/2016 | 5:37:00 PM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013602   | Property Damage Only | 11/18/2016 | 12:21:00 AM | SR445          | N         | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013651   | Property Damage Only | 11/14/2016 | 8:20:00 AM  | SR445          | S         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013867   | Property Damage Only | 12/10/2016 | 1:57:00 PM  | SR445          | S         | Golden View Dr.      | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014093   | Property Damage Only | 12/22/2016 | 8:17:00 PM  | SR445          | No Data   | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014110   | Property Damage Only | 12/15/2016 | 4:47:00 PM  | SR445          | S         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Non-Collision         |
| 1014181   | Property Damage Only | 12/28/2016 | 3:14:00 PM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014201   | Property Damage Only | 12/5/2016  | 6:47:00 PM  | SR445          | No Data   | Disc Dr.             | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014266   | Property Damage Only | 10/19/2016 | 5:16:00 PM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014346   | Property Damage Only | 11/13/2016 | 10:17:00 AM | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 1014455   | Property Damage Only | 11/28/2016 | 3:25:00 PM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014518   | Property Damage Only | 12/11/2016 | 4:32:00 PM  | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014519   | Property Damage Only | 10/7/2016  | 7:20:00 AM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014680   | Property Damage Only | 10/21/2016 | 9:30:00 AM  | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Backing               |
| 1019938   | Property Damage Only | 9/16/2016  | 2:00:00 PM  | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1021176   | Property Damage Only | 2/21/2015  | 8:00:00 AM  | SR445          | No Data   | Queen Way            | No Data    | No Data | PDO                  | No Data     | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street    | Direction | Secondary Street  | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|-------------------|-----------|-------------------|------------|---------|----------------------|-------------|-----------------------|
| 1029363   | Property Damage Only | 1/17/2017  | 9:57:00 PM  | N Los Altos Pkwy. | E         | SR445             | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1029753   | Property Damage Only | 1/16/2017  | 7:10:00 AM  | SR445             | N         | Mile Marker 4     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1029870   | Property Damage Only | 1/28/2017  | 10:18:00 AM | SR445             | S         | Queen Way         | No Data    | No Data | PDO                  | O           | Non-Collision         |
| 1029907   | Property Damage Only | 1/8/2017   | 3:25:00 PM  | SR445             | No Data   | N Los Altos Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1030752   | Property Damage Only | 1/3/2017   | 10:39:00 PM | SR445             | S         | Kiley Pkwy.       | No Data    | No Data | PDO                  | O           | Angle                 |
| 1032276   | Property Damage Only | 1/23/2017  | 12:38:00 PM | SR445             | N         | Mile Marker 2     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1032776   | Property Damage Only | 2/15/2017  | 6:16:00 PM  | SR445             | N         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1033730   | Property Damage Only | 3/12/2017  | 4:21:00 AM  | SR445             | S         | Sparks Blvd.      | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1033998   | Property Damage Only | 3/1/2017   | 5:02:00 PM  | SR445             | N         | Queen Way         | No Data    | No Data | PDO                  | O           | Unknown               |
| 1043097   | Property Damage Only | 5/21/2017  | 10:30:00 AM | SR445             | N         | Queen Way         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1046044   | Property Damage Only | 4/16/2017  | 3:51:00 PM  | SR445             | No Data   | Disc Dr.          | No Data    | No Data | PDO                  | O           | Angle                 |
| 1046240   | Property Damage Only | 5/8/2017   | 4:36:00 PM  | SR445             | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1049503   | Property Damage Only | 3/23/2017  | 12:45:00 PM | SR445             | No Data   | Disc Dr.          | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1050788   | Property Damage Only | 6/22/2017  | 4:06:00 AM  | SR445             | N         | Queen Way         | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1051069   | Property Damage Only | 6/7/2017   | 3:05:00 PM  | SR445             | S         | N Los Altos Pkwy  | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1051299   | Property Damage Only | 6/30/2017  | 8:09:00 AM  | SR445             | S         | Disc Dr.          | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1052150   | Property Damage Only | 7/1/2017   | 4:57:00 PM  | SR445             | N         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | O           | Non-Collision         |
| 1052231   | Property Damage Only | 6/1/2017   | 6:30:00 PM  | SR445             | S         | N Los Altos Pkwy. | No Data    | No Data | PDO                  | O           | Angle                 |
| 1053026   | Property Damage Only | 6/26/2017  | 12:27:00 PM | SR445             | N         | Queen Way         | No Data    | No Data | PDO                  | O           | Angle                 |
| 1053102   | Property Damage Only | 5/23/2017  | 6:30:00 AM  | SR445             | No Data   | Sparks Blvd.      | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1053308   | Property Damage Only | 4/9/2017   | 4:33:00 PM  | Kiley Pkwy.       | E         | SR445             | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1053858   | Property Damage Only | 6/30/2017  | 9:29:00 AM  | SR445             | S         | Disc Dr.          | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1053885   | Property Damage Only | 6/3/2017   | 11:05:00 AM | SR445             | S         | Disc Dr.          | No Data    | No Data | PDO                  | O           | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1063429   | Property Damage Only | 8/14/2017  | 4:31:00 PM  | SR445          | No Data   | Queen Way            | No Data    | No Data | PDO                  | O           | Angle                 |
| 1064409   | Property Damage Only | 8/1/2017   | 1:35:00 PM  | SR445          | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1064573   | Property Damage Only | 7/13/2017  | 6:30:00 PM  | SR445          | N         | Spring Ridge Dr.     | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1066205   | Property Damage Only | 9/22/2017  | 12:33:00 PM | SR445          | S         | Disc Dr.             | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1066561   | Property Damage Only | 10/13/2017 | 2:01:00 PM  | SR445          | N         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1066635   | Property Damage Only | 9/5/2017   | 6:00:00 PM  | SR445          | No Data   | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1067151   | Property Damage Only | 7/22/2017  | 5:46:00 PM  | Sparks Blvd.   | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1067320   | Property Damage Only | 9/14/2017  | 2:38:00 PM  | SR445          | N         | SR880                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1067952   | Property Damage Only | 9/7/2017   | 9:24:00 PM  | SR445          | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1068354   | Property Damage Only | 9/18/2017  | 7:03:00 AM  | SR445          | S         | N Los Altos Pkwy.    | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1068639   | Property Damage Only | 9/28/2017  | 6:48:00 AM  | SR445          | S         | Disc Dr.             | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1069654   | Property Damage Only | 9/22/2017  | 7:30:00 PM  | SR445          | N         | Queen Way            | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1069821   | Property Damage Only | 10/15/2017 | 7:42:00 AM  | SR445          | S         | Spring Ridge Dr.     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1073287   | Property Damage Only | 11/26/2017 | 5:51:00 PM  | SR445          | N         | SR880                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1074529   | Property Damage Only | 11/30/2017 | 7:44:00 AM  | SR445          | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1074685   | Property Damage Only | 12/23/2017 | 2:20:00 PM  | SR445          | N         | Disc Dr.             | No Data    | No Data | PDO                  | O           | Angle                 |
| 1075019   | Property Damage Only | 11/30/2017 | 7:15:00 PM  | SR445          | S         | Disc Dr.             | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075261   | Property Damage Only | 11/17/2017 | 11:18:00 AM | SR445          | N         | SR880                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075415   | Property Damage Only | 12/15/2017 | 10:00:00 PM | SR445          | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075441   | Property Damage Only | 11/17/2017 | 12:18:00 PM | SR445          | N         | SR880                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075582   | Property Damage Only | 10/23/2017 | 10:17:00 AM | SR445          | N         | SR880                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075592   | Property Damage Only | 12/8/2017  | 1:32:00 AM  | Sparks Blvd.   | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1075765   | Property Damage Only | 10/22/2017 | 6:30:00 PM  | SR445          | N         | Disc DR.             | No Data    | No Data | PDO                  | O           | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|------------------|------------|---------|----------------------|-------------|-----------------------|
| 1076603   | Property Damage Only | 12/6/2017  | 5:14:00 PM  | SR445          | S         | Sparks Blvd.     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1077866   | Property Damage Only | 10/26/2017 | 9:19:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1080048   | Property Damage Only | 10/9/2017  | 4:21:00 PM  | SR445          | N         | Disc Dr.         | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1080469   | Property Damage Only | 11/13/2017 | 11:39:00 AM | SR445          | N         | SR880            | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1082015   | Property Damage Only | 12/8/2017  | 5:30:00 PM  | SR445          | No Data   | Mile Marker 3    | No Data    | No Data | PDO                  | O           | Angle                 |
| 1083627   | Property Damage Only | 11/3/2017  | 3:55:00 PM  | SR445          | N         | Los Altos Pkwy.  | No Data    | No Data | PDO                  | O           | Non-collision         |

### Crash Data, Pyramid (Sparks Blvd. to Calle de la Platta), Washoe County

| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type              |
|-----------|----------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-------------------------|
| 948096    | Injury Crash   | 2/16/2015  | 6:57:00 PM  | SR445                | No Data   | Calle de la Platta   | No Data    | 3       | No Data              | C           | Rear-end                |
| 952642    | Injury Crash   | 3/22/2015  | 7:45:00 AM  | SR445                | N         | Mile Marker 5        | No Data    | 1       | No Data              | C           | Rear-end                |
| 952801    | Injury Crash   | 4/28/2015  | 7:27:00 PM  | SR445                | S         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end                |
| 953255    | Injury Crash   | 6/16/2015  | 5:56:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | 1       | No Data              | C           | Rear-end                |
| 953531    | Injury Crash   | 7/7/2015   | 12:21:00 PM | SR445                | S         | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Rear-end                |
| 954969    | Injury Crash   | 4/3/2015   | 10:46:00 AM | SR445                | S         | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Rear-end                |
| 955355    | Injury Crash   | 3/20/2015  | 4:07:00 PM  | SR445                | S         | Eagle Canyon Dr.     | No Data    | 1       | No Data              | B           | Non-collision           |
| 955629    | Injury Crash   | 7/22/2015  | 1:53:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | 2       | No Data              | C           | Rear-end                |
| 959822    | Injury Crash   | 5/8/2015   | 12:35:00 PM | Egyptian Dr.         | W         | SR445                | No Data    | 1       | No Data              | C           | Rear-end                |
| 960385    | Injury Crash   | 9/3/2015   | 8:15:00 AM  | SR445                | N         | La Posada Dr.        | No Data    | 2       | No Data              | C           | Sideswiping, Overtaking |
| 960405    | Injury Crash   | 8/27/2015  | 10:35:00 PM | SR445                | N         | Mile Marker 9        | No Data    | 3       | No Data              | U           | Rear-end                |
| 961172    | Injury Crash   | 9/30/2015  | 5:06:00 PM  | SR445                | S         | Tierra Del Sol Pkwy. | No Data    | 2       | No Data              | U           | Angle                   |
| 965204    | Injury Crash   | 10/12/2015 | 8:20:00 PM  | SR445                | S         | Eagle Canyon Dr.     | No Data    | 1       | No Data              | C           | Rear-end                |
| 976071    | Injury Crash   | 11/30/2015 | 7:20:00 AM  | SR445                | N         | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Rear-end                |
| 982116    | Injury Crash   | 11/30/2015 | 10:29:00 AM | Calle de la Platta   | E         | SR445                | No Data    | 1       | No Data              | B           | Non-collision           |
| 982119    | Injury Crash   | 12/7/2015  | 9:35:00 AM  | Sky Ranch Blvd.      | No Data   | SR445                | No Data    | 1       | No Data              | C           | Rear-end                |
| 983075    | Injury Crash   | 2/3/2016   | 6:20:00 AM  | SR445                | No Data   | Calle de la Platta   | No Data    | 1       | No Data              | C           | Angle                   |
| 983395    | Injury Crash   | 2/26/2016  | 11:08:00 AM | SR445                | N         | Highland Ranch Pkwy  | No Data    | 2       | No Data              | C           | Rear-end                |
| 984404    | Injury Crash   | 7/9/2015   | 6:20:00 PM  | Sky Ranch Blvd.      | No Data   | SR445                | No Data    | 2       | No Data              | C           | Rear-end                |
| 985347    | Injury Crash   | 4/15/2016  | 12:20:00 AM | SR445                | N         | David James Blvd.    | No Data    | 2       | No Data              | B           | Non-collision           |
| 989266    | Injury Crash   | 3/27/2016  | 10:45:00 AM | SR445                | N         | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle                   |
| 989932    | Injury Crash   | 5/4/2016   | 8:46:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle                   |
| 990626    | Injury Crash   | 4/23/2016  | 10:30:00 PM | SR445                | No Data   | Highland Ranch Pkwy. | No Data    | 1       | No Data              | C           | Non-collision           |
| 996357    | Injury Crash   | 5/21/2016  | 11:18:00 AM | SR445                | No Data   | Eagle Canyon Dr.     | No Data    | 1       | No Data              | B           | Angle                   |
| 996571    | Injury Crash   | 8/26/2016  | 4:36:00 AM  | SR445                | No Data   | Lazy Five Pkwy.      | No Data    | 1       | No Data              | A           | Non-collision           |
| 996889    | Injury Crash   | 5/25/2016  | 5:46:00 AM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | 2       | No Data              | U           | Head-on                 |
| 999587    | Injury Crash   | 6/14/2016  | 12:54:00 PM | SR445                | No Data   | Lazy Five Pkwy.      | No Data    | 1       | No Data              | B           | Non-collision           |
| 1003249   | Injury Crash   | 7/25/2016  | 1:41:00 PM  | SR445                | No Data   | Sunset Springs Ln.   | No Data    | 1       | No Data              | B           | Angle                   |
| 1007226   | Injury Crash   | 8/7/2016   | 9:46:00 AM  | SR445                | N         | Lazy Five Pkwy.      | No Data    | 1       | No Data              | C           | Non-Collision           |



| OBJECT ID | Crash Severity | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1011177   | Injury Crash   | 9/6/2016   | 8:15:00 AM  | SR445                | S         | Mile Marker 6        | No Data    | 1       | No Data              | B           | Rear-End              |
| 1012702   | Injury Crash   | 9/29/2016  | 9:03:00 AM  | SR445                | S         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-End              |
| 1012799   | Injury Crash   | 11/27/2016 | 5:19:00 PM  | SR445                | S         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-End              |
| 1013802   | Injury Crash   | 12/25/2016 | 1:30:00 PM  | Highland Ranch Pkwy. | No Data   | SR445                | No Data    | 1       | No Data              | B           | Rear-end              |
| 1013978   | Injury Crash   | 12/5/2016  | 9:05:00 AM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | C           | Rear-end              |
| 1014107   | Injury Crash   | 10/14/2016 | 7:57:00 PM  | SR445                | No Data   | Calle de la Platta   | No Data    | 6       | No Data              | C           | Angle                 |
| 1021123   | Injury Crash   | 5/14/2016  | 7:49:00 AM  | SR445                | N         | Lazy Five Pkwy.      | No Data    | 1       | No Data              | C           | Non-collision         |
| 1029189   | Injury Crash   | 1/16/2017  | 4:55:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | 2       | No Data              | C           | Rear-end              |
| 1032088   | Injury Crash   | 1/17/2017  | 6:55:00 AM  | SR445                | S         | Calle de la Platta   | No Data    | 3       | No Data              | C           | Rear-end              |
| 1032225   | Injury Crash   | 1/17/2017  | 6:55:00 AM  | SR445                | S         | Calle de la Platta   | No Data    | 2       | No Data              | C           | Rear-end              |
| 1033576   | Injury Crash   | 2/16/2017  | 11:39:00 AM | SR445                | N         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1034174   | Injury Crash   | 3/14/2017  | 6:59:00 AM  | SR445                | N         | Mile Marker 9        | No Data    | 2       | No Data              | B           | Angle                 |
| 1039780   | Injury Crash   | 3/9/2017   | 3:46:00 PM  | SR445                | No Data   | Eagle Canyon Dr.     | No Data    | 1       | No Data              | B           | Rear-end              |
| 1042659   | Injury Crash   | 4/13/2017  | 9:27:00 AM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | 1       | No Data              | C           | Rear-end              |
| 1042942   | Injury Crash   | 4/9/2017   | 8:35:00 AM  | SR445                | S         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1043500   | Injury Crash   | 4/17/2017  | 8:20:00 AM  | SR445                | N         | Mile Marker 9        | No Data    | 1       | No Data              | B           | Non-collision         |
| 1045028   | Injury Crash   | 5/3/2017   | 5:30:00 PM  | SR445                | No Data   | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1047999   | Injury Crash   | 4/24/2017  | 3:39:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | 1       | No Data              | C           | Angle                 |
| 1049534   | Injury Crash   | 4/13/2017  | 2:48:00 PM  | SR445                | S         | Robert Banks Blvd.   | No Data    | 5       | No Data              | C           | Rear-end              |
| 1049593   | Injury Crash   | 5/18/2017  | 6:13:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Angle                 |
| 1049740   | Injury Crash   | 4/28/2017  | 2:55:00 PM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | 2       | No Data              | A           | Rear-end              |
| 1062557   | Injury Crash   | 6/17/2017  | 6:52:00 PM  | SR445                | No Data   | Sparks Blvd.         | No Data    | 1       | No Data              | C           | Sideswipe, Overtaking |
| 1063417   | Injury Crash   | 8/6/2017   | 5:57:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | 1       | No Data              | C           | Rear-end              |
| 1064115   | Injury Crash   | 8/12/2017  | 10:54:00 AM | SR445                | S         | Tierra Del Sol Pkwy. | No Data    | 1       | No Data              | B           | Non-collision         |
| 1064683   | Injury Crash   | 8/13/2017  | 12:06:00 PM | SR445                | N         | Mile Marker 7        | No Data    | 1       | No Data              | B           | Angle                 |
| 1066616   | Injury Crash   | 9/26/2017  | 10:57:00 AM | SR445                | No Data   | Sparks Blvd.         | No Data    | 2       | No Data              | C           | Angle                 |
| 1066992   | Injury Crash   | 8/24/2017  | 2:59:00 PM  | SR445                | S         | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end              |
| 1067923   | Injury Crash   | 9/1/2017   | 8:34:00 PM  | SR445                | N         | Eagle Canyon Dr.     | No Data    | 1       | No Data              | C           | Rear-end              |
| 1069135   | Injury Crash   | 9/9/2017   | 5:56:00 PM  | SR445                | S         | Calle de la Platta   | No Data    | 1       | No Data              | C           | Angle                 |
| 1069423   | Injury Crash   | 9/11/2017  | 2:33:00 PM  | SR445                | N         | Eagle Canyon Rd.     | No Data    | 2       | No Data              | C           | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street       | Dir     | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type    |
|-----------|----------------------|------------|-------------|----------------------|---------|----------------------|------------|---------|----------------------|-------------|---------------|
| 1071498   | Injury Crash         | 10/6/2017  | 7:26:00 PM  | SR445                | N       | David James Blvd.    | No Data    | 1       | No Data              | C           | Rear-end      |
| 1080071   | Injury Crash         | 12/17/2017 | 4:11:00 PM  | SR445                | S       | Highland Ranch Pkwy. | No Data    | 2       | No Data              | C           | Rear-end      |
| 1083267   | Injury Crash         | 11/16/2017 | 6:51:00 AM  | SR445                | S       | La Posada Dr.        | No Data    | 1       | No Data              | C           | Rear-end      |
| 944579    | Property Damage Only | 1/7/2015   | 6:20:00 PM  | SR445                | S       | Mile Marker 8        | No Data    | No Data | PDO                  | No Data     | Angle         |
| 945092    | Property Damage Only | 3/9/2015   | 5:10:00 PM  | SR445                | S       | Mile Marker 7        | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 945561    | Property Damage Only | 2/16/2015  | 12:03:00 PM | SR445                | No Data | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 946264    | Property Damage Only | 1/29/2015  | 3:57:00 PM  | SR445                | S       | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 952494    | Property Damage Only | 5/7/2015   | 10:10:00 AM | SR445                | N       | Erin Dr.             | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 953661    | Property Damage Only | 4/10/2015  | 11:06:00 AM | Highland Ranch Pkwy. | W       | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 953926    | Property Damage Only | 5/14/2015  | 7:32:00 AM  | SR445                | No Data | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 954066    | Property Damage Only | 7/10/2015  | 2:20:00 AM  | SR445                | N       | Mile Marker 7        | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 954238    | Property Damage Only | 7/3/2015   | 5:36:00 PM  | SR445                | N       | Sunset Springs Ln.   | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 954593    | Property Damage Only | 5/17/2015  | 7:17:00 AM  | SR445                | S       | Sky Ranch Blvd.      | No Data    | No Data | PDO                  | No Data     | Angle         |
| 954924    | Property Damage Only | 6/2/2015   | 7:15:00 AM  | SR445                | N       | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 955469    | Property Damage Only | 7/17/2015  | 10:42:00 AM | SR445                | No Data | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 955721    | Property Damage Only | 7/13/2015  | 3:17:00 PM  | SR445                | N       | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle         |
| 955926    | Property Damage Only | 4/28/2015  | 7:39:00 AM  | SR445                | S       | Mile Marker 6        | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 956046    | Property Damage Only | 6/23/2015  | 5:59:00 PM  | SR445                | S       | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | No Data     | Angle         |
| 956321    | Property Damage Only | 5/18/2015  | 7:42:00 AM  | SR445                | No Data | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 956534    | Property Damage Only | 6/14/2015  | 11:16:00 AM | Sunset Springs Ln.   | E       | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end      |
| 956873    | Property Damage Only | 5/29/2015  | 2:30:00 PM  | SR445                | No Data | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Angle         |
| 958541    | Property Damage Only | 9/27/2015  | 4:55:00 PM  | Sunset Springs Ln.   | E       | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision |
| 959047    | Property Damage Only | 3/8/2015   | 5:30:00 PM  | SR445                | No Data | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Angle         |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 960233    | Property Damage Only | 9/17/2015  | 9:15:00 PM  | SR445                | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 960348    | Property Damage Only | 8/3/2015   | 6:09:00 PM  | SR445                | S         | Dolores Dr.          | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 960384    | Property Damage Only | 9/24/2015  | 7:33:00 AM  | Eagle Canyon Dr.     | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 960450    | Property Damage Only | 9/29/2015  | 6:05:00 PM  | SR445                | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 960488    | Property Damage Only | 9/21/2015  | 4:06:00 PM  | SR445                | N         | Calle de la Platta   | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 960498    | Property Damage Only | 8/18/2015  | 3:45:00 PM  | SR445                | No Data   | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 965244    | Property Damage Only | 10/14/2015 | 7:57:00 PM  | SR445                | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 973665    | Property Damage Only | 10/6/2015  | 4:45:00 PM  | SR445                | S         | Mile Marker 6        | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 973778    | Property Damage Only | 10/26/2015 | 12:21:00 AM | SR445                | S         | Mile Marker 7        | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 973904    | Property Damage Only | 11/1/2015  | 9:17:00 AM  | Erin Dr.             | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 975944    | Property Damage Only | 11/24/2015 | 12:48:00 PM | SR445                | S         | Mile Marker 7        | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 977517    | Property Damage Only | 12/22/2015 | 7:09:00 PM  | SR445                | No Data   | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 978526    | Property Damage Only | 6/14/2015  | 10:16:00 PM | Sparks Blvd.         | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 978672    | Property Damage Only | 6/8/2015   | 12:28:00 PM | SR445                | E         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 979378    | Property Damage Only | 7/22/2015  | 6:26:00 PM  | Sparks Blvd.         | No Data   | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 982132    | Property Damage Only | 12/17/2015 | 1:40:00 PM  | SR445                | No Data   | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983074    | Property Damage Only | 2/3/2016   | 6:25:00 AM  | SR445                | No Data   | Erin Dr.             | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 983678    | Property Damage Only | 2/27/2016  | 12:09:00 PM | Sparks Blvd.         | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 983975    | Property Damage Only | 2/24/2015  | 5:58:00 PM  | Calle de la Platta   | W         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 984169    | Property Damage Only | 9/25/2015  | 12:56:00 PM | La Posada Dr.        | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 984453    | Property Damage Only | 9/19/2015  | 5:47:00 PM  | SR445                | No Data   | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 984490    | Property Damage Only | 11/15/2015 | 3:20:00 PM  | Highland Ranch Pkwy. | W         | SR445                | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 987272    | Property Damage Only | 3/19/2016  | 12:00:00 PM | SR445                | S         | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Rear-end              |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street     | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|--------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 987804    | Property Damage Only | 5/4/2016   | 9:26:00 PM  | SR445              | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 993633    | Property Damage Only | 4/7/2016   | 3:00:00 PM  | SR445              | No Data   | LA Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 995073    | Property Damage Only | 5/21/2016  | 11:59:00 AM | SR445              | N         | Mile Marker 7        | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 997610    | Property Damage Only | 5/28/2016  | 8:37:00 PM  | SR445              | No Data   | Dolores Dr.          | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 998082    | Property Damage Only | 6/2/2016   | 2:46:00 PM  | SR445              | N         | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 998799    | Property Damage Only | 6/6/2016   | 3:34:00 PM  | SR445              | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1000415   | Property Damage Only | 6/19/2016  | 7:30:00 AM  | SR445              | N         | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1001319   | Property Damage Only | 6/25/2016  | 2:05:00 PM  | Sparks Blvd.       | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 1001388   | Property Damage Only | 6/27/2016  | 7:45:00 AM  | SR445              | No Data   | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1003463   | Property Damage Only | 7/15/2016  | 3:00:00 PM  | SR445              | E         | Mile Marker 6.38     | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1005349   | Property Damage Only | 8/14/2016  | 3:12:00 PM  | SR445              | No Data   | Calle de la Platta   | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1011426   | Property Damage Only | 9/2/2016   | 2:10:00 PM  | SR445              | S         | Mile Marker 8        | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1012793   | Property Damage Only | 10/19/2016 | 5:21:00 PM  | SR445              | No Data   | Calle de la Platta   | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |
| 1012880   | Property Damage Only | 10/7/2016  | 11:00:00 AM | SR445              | S         | David James Blvd.    | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013269   | Property Damage Only | 10/8/2016  | 5:00:00 AM  | Sparks Blvd        | S         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1013414   | Property Damage Only | 10/30/2016 | 8:06:00 AM  | SR445              | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1013618   | Property Damage Only | 10/29/2016 | 3:32:00 PM  | SR445              | N         | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1014093   | Property Damage Only | 12/22/2016 | 8:17:00 PM  | SR445              | No Data   | Sparks Blvd.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014141   | Property Damage Only | 11/27/2016 | 5:21:00 PM  | SR445              | S         | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014191   | Property Damage Only | 11/17/2016 | 2:05:00 PM  | SR445              | N         | Calle de la Plata    | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014335   | Property Damage Only | 12/8/2016  | 6:43:00 PM  | SR445              | No Data   | La Posada Dr.        | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1014354   | Property Damage Only | 10/23/2016 | 7:05:00 AM  | Robert Banks Blvd. | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1014397   | Property Damage Only | 12/15/2016 | 4:42:00 PM  | SR445              | S         | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | No Data     | Non-collision         |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street       | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1020637   | Property Damage Only | 5/12/2016  | 4:05:00 PM  | SR445                | No Data   | Egyptian Dr.         | No Data    | No Data | PDO                  | No Data     | Angle                 |
| 1032327   | Property Damage Only | 1/11/2017  | 4:45:00 AM  | SR445                | N         | Erin Dr.             | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1036451   | Property Damage Only | 2/21/2017  | 7:41:00 AM  | Egyptian Dr.         | No Data   | SR445                | No Data    | No Data | PDO                  | O           | Backing               |
| 1036467   | Property Damage Only | 3/13/2017  | 6:15:00 PM  | SR445                | S         | La Posada Dr.        | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1040092   | Property Damage Only | 3/6/2017   | 7:06:00 AM  | SR445                | W         | Calle de la Platta   | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1044666   | Property Damage Only | 4/11/2017  | 11:08:00 AM | SR445                | N         | Sky Ranch Blvd.      | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1050087   | Property Damage Only | 5/19/2017  | 4:16:00 AM  | SR445                | S         | Sunset Springs Ln.   | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1052950   | Property Damage Only | 7/5/2017   | 6:15:00 AM  | SR445                | N         | Mile Marker 8        | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1053102   | Property Damage Only | 5/23/2017  | 6:30:00 AM  | SR445                | No Data   | Sparks Blvd.         | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1062588   | Property Damage Only | 7/5/2017   | 4:40:00 PM  | SR445                | N         | Sunset Springs Ln.   | No Data    | No Data | PDO                  | O           | Angle                 |
| 1064446   | Property Damage Only | 8/16/2017  | 3:22:00 PM  | SR445                | No Data   | Sky Ranch Blvd.      | No Data    | No Data | PDO                  | O           | Angle                 |
| 1064972   | Property Damage Only | 8/7/2017   | 6:44:00 AM  | SR445                | S         | La Posada Dr.        | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1065406   | Property Damage Only | 8/16/2017  | 3:00:00 PM  | SR445                | N         | Mile Marker 7        | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1066915   | Property Damage Only | 9/24/2017  | 4:45:00 PM  | Tierra Del Sol Pkwy. | E         | SR445                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1066931   | Property Damage Only | 9/18/2017  | 7:44:00 PM  | SR445                | No Data   | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | O           | Angle                 |
| 1067151   | Property Damage Only | 7/22/2017  | 5:46:00 PM  | Sparks Blvd.         | No Data   | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1067952   | Property Damage Only | 9/7/2017   | 9:24:00 PM  | SR445                | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1067999   | Property Damage Only | 9/24/2017  | 5:36:00 PM  | SR445                | S         | Tierra Del Sol Pkwy. | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1068015   | Property Damage Only | 10/7/2017  | 10:21:00 PM | Dolores Dr.          | No Data   | SR445                | No Data    | No Data | PDO                  | O           | Non-Collision         |
| 1070420   | Property Damage Only | 8/30/2017  | 7:01:00 AM  | Eagle Canyon Dr.     | W         | SR445                | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1070742   | Property Damage Only | 8/30/2017  | 2:42:00 PM  | Eagle Canyon Dr.     | W         | SR445                | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1070870   | Property Damage Only | 4/16/2015  | 7:25:00 PM  | SR445                | N         | Sparks Blvd          | No Data    | No Data | PDO                  | No Data     | Rear-end              |
| 1070885   | Property Damage Only | 9/21/2015  | 7:33:00 PM  | SR445                | S         | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | No Data     | Sideswipe, Overtaking |

| OBJECT ID | Crash Severity       | Crash Date | Crash Time  | Primary Street | Direction | Secondary Street     | Fatalities | Injured | Property Damage Only | Injury Type | Crash Type            |
|-----------|----------------------|------------|-------------|----------------|-----------|----------------------|------------|---------|----------------------|-------------|-----------------------|
| 1073217   | Property Damage Only | 11/25/2017 | 4:23:00 PM  | SR445          | S         | La Posada Dr.        | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1073655   | Property Damage Only | 11/13/2017 | 12:28:00 PM | SR445          | S         | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1074529   | Property Damage Only | 11/30/2017 | 7:44:00 AM  | SR445          | N         | Sparks Blvd.         | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |
| 1075096   | Property Damage Only | 12/19/2017 | 6:46:00 AM  | SR445          | No Data   | Tierra Del Sol Pkwy. | No Data    | No Data | PDO                  | O           | Non-Collision         |
| 1075108   | Property Damage Only | 10/21/2017 | 8:10:00 PM  | SR445          | N         | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1075415   | Property Damage Only | 12/15/2017 | 10:00:00 PM | SR445          | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1075592   | Property Damage Only | 12/8/2017  | 1:32:00 AM  | Sparks Blvd.   | E         | SR445                | No Data    | No Data | PDO                  | No Data     | Non-collision         |
| 1076884   | Property Damage Only | 11/28/2017 | 7:25:00 AM  | SR445          | N         | Highland Ranch Pkwy. | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1076898   | Property Damage Only | 11/27/2017 | 10:03:00 PM | SR445          | No Data   | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | O           | Angle                 |
| 1080004   | Property Damage Only | 11/27/2017 | 8:39:00 AM  | SR445          | S         | Eagle Canyon Dr.     | No Data    | No Data | PDO                  | O           | Rear-end              |
| 1080754   | Property Damage Only | 10/7/2017  | 2:51:00 AM  | SR445          | N         | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | O           | Non-collision         |
| 1082484   | Property Damage Only | 10/24/2017 | 7:35:00 AM  | SR445          | S         | Lazy Five Pkwy.      | No Data    | No Data | PDO                  | O           | Angle                 |
| 1082764   | Property Damage Only | 11/12/2017 | 2:54:00 PM  | SR445          | S         | Calle de la Plata    | No Data    | No Data | PDO                  | O           | Sideswipe, Overtaking |

**SUB-SECTION D - TRANSFORMING ECONOMIES**

**Overall Economic Development**

| Total Score | Ranking | Score       |
|-------------|---------|-------------|
| 100         | HIGH    | 50          |
|             | MEDUIM  | 45.1 - 82.4 |
|             | LOW     | 36          |

NDOT seeks to promote the expansion and diversity of Nevada's economy. Points are awarded to those projects that have a greater potential to promote economic development.

**D1 - Truck Percentage**

| Maximum Score | Percentage Scoring System |       |       |
|---------------|---------------------------|-------|-------|
|               | Min.                      | Max.  | Score |
| 25.0          | 0.00%                     | 0.90% | 0     |
|               | 1.00%                     | 2.90% | 6.25  |
|               | 3.00%                     | 4.90% | 12.5  |
|               | 5.00%                     | 9.90% | 18.75 |
|               | 10.00%                    | Above | 25    |

Description

Points are awarded based on the percentage of trucks the project roadway carries. This criterion will better reflect low volume roads that are vital to isolated economic generators within the state such as mining and agriculture.

$$\text{Truck \%} = \text{Truck AADT} / \text{Total Vehicular AADT}$$

**D2 - Freight Reliability**

| Maximum Score | Travel time Index (TTI) |      |       |
|---------------|-------------------------|------|-------|
|               | Max.                    | Min. | Score |
| 25.0          | Greater than 2.61       | 2.6  | 25    |
|               | 2.59                    | 1.8  | 16.6  |
|               | 1.79                    | 1.2  | 8.3   |
|               | 1.19                    | 1    | 0.0   |

Description

Travel time index (TTI) is the ratio of the actual travel time that would occur under uncongested conditions. A TTI of 1.0 means the facility is totally uncongested. A TTI of 1.2 means that the travel time is 20 percent higher than it would be for uncongested conditions. The values shown in this table are the Planning Time Index (PTI) which are the 95th percentile travel times divided by the uncongested travel time. New alignments will be considered uncongested; score will be rated as zero.

| D3 - Support Economic Development   |   |       |
|---|---|-------|
| Maximum Score   | Scoring System  |       |
|   | Criteria  | Score |
| 50.0  | Project may negatively impact economic generator access along the alignment.  | 0     |
|   | Project continues to support and maintain existing access to economic generators.                                       | 12.5  |
|   | Project may impact a select number of economic generator access, but it enhances the overall alignment corridor access. | 25    |
|   | Project enhances existing access and improves connectivity along the alignment.   | 37.5  |
|   | Project provides new connections to both existing economic generators and new development areas.                        | 50    |
| Description   |   |       |
| Points are awarded to projects based on impacts or improvements to existing economic generators such as but not limited to, shopping centers, recreational facilities, commercial office space, industrial complexes, tourist attractions, etc. |   |       |



| Study          | Location                             | Description  | Transforming Economies   |                     |                              |                      |                          |             |
|----------------|--------------------------------------|--|--|---------------------|------------------------------|----------------------|--------------------------|-------------|
|                |                                      |  | Truck Percentage   | Freight Reliability | Support Economic Development | Total Economic Score | Weighted Economies Score |             |
|                |                                      |  | 25.0%  | 25.0%               | 50.0%                        | 100.0%               | 25.0%                    |             |
| <b>Roadway</b> |                                      |  |  |                     |                              |                      |                          |             |
| 1              | US 395                               | Widen US-395 from Clear Acre Lane to Red Rock Drive (MP 27.06 to 35.81)  | 25   | 25.0                | 12.5                         | 62.5                 | <b>15.6</b>              |             |
| 2              | I-80 East                            | Widen I-80 from McCarran Boulevard to USA Parkway (MP 17.56 to 32.75)  | 25   | 16.6                | 25.0                         | 66.6                 | <b>16.7</b>              |             |
| 3              | I-580                                | New Auxiliary Lanes between interchanges:<br>1. NB I-580 Moana Ln to Virginia St (MP 22.56 to 21.51)<br>2. NB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51)<br>3. SB I-580 Moana Ln to Virginia St/Kietzke Ln (MP 22.56 to 21.51)<br>4. SB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP20.72 to21.51) | 12.5   | 25.0                | 12.5                         | 50.0                 | <b>12.5</b>              |             |
| 4              | I-80 West                            | Widen EB I-80 Robb Drive to Keystone Avenue (MP 9.23 to 12.48)   | 18.75  | 8.3                 | 12.5                         | 39.6                 | <b>9.9</b>               |             |
| 5              | <b>EDAWN La Posada Study</b>         | La Posada Alternatives   | Potential roadway connection from La Posada to USA Parkway                     | 0.0                 | 0.0                          | 37.5                 | 37.5                     | <b>9.4</b>  |
| 6              | <b>Sparks TMSA Study</b>             | La Posada  |  |                     |                              |                      |                          |             |
| 7              | <b>NDOT South Meadows Evaluation</b> | South Meadows Connector  | New alignment from South Meadows to USA Parkway                                | 0.0                 | 0.0                          | 50.0                 | 50.0                     | <b>12.5</b> |
| 8              | <b>Pyramid/US 395 Connector</b>      | Connection between Pyramid and US 395 (Overall)  | New alignment currently under EIS study  | 0.0                 | 0.0                          | 37.5                 | 37.5                     | <b>9.4</b>  |
| 9              |                                      | Phase 1  | Widen Pyramid Hwy between Queen Way and Sparks Blvd. (MP 1.97 to 5.44)         | 0.0                 | 25.0                         | 12.5                 | 37.5                     | <b>9.4</b>  |
| 10             |                                      | Phase 2  | Widen Disc Dr. from Pyramid hwy. to Vista Blvd.                                | 0.0                 | 0.0                          | 12.5                 | 12.5                     | <b>3.1</b>  |
| 11             |                                      | Phase 3  | Construct new US 395 Connector from Parr interchange to Pyramid Highway        | 0.0                 | 0.0                          | 37.5                 | 37.5                     | <b>9.4</b>  |
| 12             |                                      | Phase 4  | Add new direct connect Ramps at US395 w/ widening of US395                     | 0.0                 | 0.0                          | 12.5                 | 12.5                     | <b>3.1</b>  |
| 13             |                                      | Phase 5  | Widen Pyramid highway from Sparks Blvd. to Calle De La Plata (MP 5.44 to 9.75) | 0.0                 | 25.0                         | 12.5                 | 37.5                     | <b>9.4</b>  |
| 14             |                                      | Phase 6  | New interchange near Sun Valley local improvements                             | 0.0                 | 0.0                          | 37.5                 | 37.5                     | <b>9.4</b>  |

| Study          | Location                              | Description                          | Transforming Economies   |                     |                              |                      |                         |             |
|----------------|---------------------------------------|--------------------------------------|--|---------------------|------------------------------|----------------------|-------------------------|-------------|
|                |                                       |                                      | Truck Percentage   | Freight Reliability | Support Economic Development | Total Economic Score | Weighted Economic Score |             |
|                |                                       |                                      | 25.0%  | 25.0%               | 50.0%                        | 100.0%               | 25.0%                   |             |
| <b>Roadway</b> |                                       |                                      |  |                     |                              |                      |                         |             |
|                | SEC Alignment Studies                 |                                      |  |                     |                              |                      |                         |             |
|                | <b>Storey County Land Use</b>         |                                      |  |                     |                              |                      |                         |             |
| 15             |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange  | 25                  | 16.6                         | 25                   | 66.6                    | <b>16.7</b> |
| 16             |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange  | 25                  | 8.3                          | 25                   | 58.3                    | <b>14.6</b> |
| 17             |                                       | Vanpooling                           | See transit column below   |                     |                              |                      |                         |             |
| 18             |                                       | TRIC internal transit/rail           | NDOT currently studying as part of inter-county regional transit study |                     |                              |                      |                         |             |
| 19             | <b>Reno Spaghetti Bowl</b>            | I-80/I-580/US 395 System Interchange | Reconstruct Interchange (MP 25.0)                                      | 12.5                | 25.0                         | 12.5                 | 50.0                    | <b>12.5</b> |
| 20             | <b>NDOT Autonomous Vehicles Grant</b> | I-80                                 | Feasibility of a pilot AV corridor project                             | 25                  | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
|                | <b>2009 I-80 Corridor Study</b>       |                                      |  |                     |                              |                      |                         |             |
|                |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange (MP 28.1)                                      |                     |                              |                      |                         |             |
|                |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange (MP 22.5)                                      |                     |                              |                      |                         |             |
|                |                                       | Patrick/I-80 Interchange             | Construct Roundabout ramp termini                                      |                     |                              |                      |                         |             |
|                |                                       | Lockwood/I-80 Interchange            | Construct Roundabout ramp termini                                      |                     |                              |                      |                         |             |
| 21             |                                       | Eastbound I-80 - McCarran to Sparks  | Add auxiliary lanes (MP 16.5 to 17.6)                                  | 25.0                | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
| 22             |                                       | Eastbound I-80 McCarran to Vista     | Widen to 3 lanes (MP 17.6 to 19.7)                                     | 25.0                | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
|                |                                       | Eastbound I-80 Vista to Lockwood     | Add auxiliary lane   |                     |                              |                      |                         |             |
|                |                                       | Eastbound I-80 Vista to Patrick      | Widen to 3 lanes   |                     |                              |                      |                         |             |
| 23             |                                       | Westbound I-80 Sparks to McCarran    | Add auxiliary lane (MP 16.5 to 17.6)                                   | 25.0                | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
| 24             |                                       | Westbound I-80 Vista to McCarran     | Widen to 3 lanes (MP 17.6 to 19.7)                                     | 25.0                | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
|                |                                       | Westbound Lockwood to Vista          | Add auxiliary lane   |                     |                              |                      |                         |             |
|                |                                       | Westbound Patrick to Vista           | Widen to 3 lanes   |                     |                              |                      |                         |             |
| 25             |                                       | Install ITS backbone                 | E. McCarran to Wadsworth   | 25.0                | 8.3                          | 12.5                 | 45.8                    | <b>11.5</b> |
| <b>Freight</b> |                                       |                                      |  |                     |                              |                      |                         |             |
|                | <b>Nevada State Freight Plan</b>      |                                      |  |                     |                              |                      |                         |             |

| Study                           | Location  | Description                                 | Transforming Economies  |                     |                              |                      |                         |      |
|---------------------------------|---|---|---|---------------------|------------------------------|----------------------|-------------------------|------|
|                                 |   |   | Truck Percentage  | Freight Reliability | Support Economic Development | Total Economic Score | Weighted Economic Score |      |
|                                 |   |   | 25.0%   | 25.0%               | 50.0%                        | 100.0%               | 25.0%                   |      |
| <b>Roadway</b>                  |   |   |   |                     |                              |                      |                         |      |
| 26                              |   | I-80 Safety Improvements                    | Eastern Truckee Canyon (USA Parkway interchange improvements) | 25                  | 16.6                         | 12.5                 | 54.1                    | 13.5 |
| 27                              |   | I-80 USA Parkway Interchange                | New interchange with possible direct connect system           | 25                  | 16.6                         | 25.0                 | 66.6                    | 16.7 |
| 28                              |   | Lockwood Interchange                        | New interchange including bridge over the Truckee             |                     |                              |                      |                         |      |
|                                 | <b>NDOT Statewide Truck Parking Implementation Plan</b> |   |   |                     |                              |                      |                         |      |
| <b>Other</b>                    |   |   |   |                     |                              |                      |                         |      |
| 29                              | McCarran SMP  | McCarran Interchange                        | Construct new interchange at McCarran Boulevard               | 18.8                | 8.3                          | 25.0                 | 52.1                    | 13.0 |
| 30                              | City of Sparks  | Sparks Interchange                          | Construct new interchange at Sparks Blvd.                     | 18.8                | 8.3                          | 25.0                 | 52.1                    | 13.0 |
| 31                              | City of Sparks  | Vista Interchange                           | Construct new interchange at Vista Blvd.                      | 18.8                | 8.3                          | 25.0                 | 52.1                    | 13.0 |
| 32                              | RTC   | Clean Water Way                             | Clean Water bypass (from Veterans Pkwy to I-80)(Eastbound)    | 0.0                 | 0.0                          | 25.0                 | 25.0                    | 6.3  |
| 33                              | I--80 Reversible lanes                                  | Vista to USA                                | Reversible lanes from Vista to USA Pkwy                       | 25                  | 8.3                          | 12.5                 | 45.8                    | 11.5 |
| 34                              | Eagle Canyon Alignment                                  | Lemmon Valley to Spanish Springs            | New alignment from Spanish Springs to Lemmon Valley (8.2 mi)  | 0                   | 0.0                          | 25.0                 | 25.0                    | 6.3  |
| <b>Transit/Rideshare</b>        |   |   |   |                     |                              |                      |                         |      |
|                                 | RTC Commuter Rail                                       |   |   |                     |                              |                      |                         |      |
|                                 | TESLA Park and Ride                                     |   |   |                     |                              |                      |                         |      |
|                                 | RTC Vanpool   |   |   |                     |                              |                      |                         |      |
| <b>Operational Agency Plans</b> |   |   |   |                     |                              |                      |                         |      |
|                                 |   | NDOT Inter-County and Regional Transit Plan |   |                     |                              |                      |                         |      |
|                                 |   | EDWAN Transit Management Association        |   |                     |                              |                      |                         |      |

### TMCs

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105+04954 | AM PEAK | I-580                       | NORTHBOUND | 108        | 0.434419   | 1.161   | 1.217   | 1.521   | 62.9      |
| 105+04953 | AM PEAK | I-580                       | NORTHBOUND | 106        | 0.127841   | 1.146   | 1.177   | 1.404   | 63.7      |
| 105P04954 | AM PEAK | I-580                       | NORTHBOUND | 109        | 0.595534   | 1.138   | 1.177   | 1.352   | 64.1      |
| 105P04953 | AM PEAK | I-580                       | NORTHBOUND | 107        | 0.300153   | 1.135   | 1.177   | 1.377   | 64.3      |
| 105-04954 | AM PEAK | I-580                       | SOUTHBOUND | 187        | 0.346632   | 1.323   | 1.420   | 1.972   | 53.7      |
| 105N04954 | AM PEAK | I-580                       | SOUTHBOUND | 188        | 0.568946   | 1.209   | 1.246   | 1.479   | 58.7      |
| 105-04953 | AM PEAK | I-580                       | SOUTHBOUND | 189        | 0.274273   | 1.208   | 1.246   | 1.543   | 58.8      |
| 105N04953 | AM PEAK | I-580                       | SOUTHBOUND | 190        | 0.455024   | 1.172   | 1.203   | 1.420   | 60.6      |
| 105+04996 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 348        | 0.162619   | 1.559   | 1.763   | 3.526   | 43.0      |
| 105P04995 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 347        | 0.498886   | 1.403   | 1.489   | 2.680   | 47.7      |
| 105+04995 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 346        | 0.119974   | 1.271   | 1.333   | 1.838   | 53.5      |
| 105P04992 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 341        | 0.881881   | 1.264   | 1.167   | 1.892   | 55.4      |
| 105+04994 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 344        | 0.227521   | 1.225   | 1.321   | 1.707   | 57.1      |
| 105+04993 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 342        | 1.145367   | 1.223   | 1.186   | 1.750   | 57.3      |
| 105P04994 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 345        | 0.595199   | 1.220   | 1.302   | 1.643   | 56.6      |
| 105+04992 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 340        | 0.931535   | 1.188   | 1.169   | 1.380   | 58.1      |
| 105P04993 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 343        | 0.655049   | 1.153   | 1.167   | 1.458   | 60.7      |
| 105P04991 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 339        | 0.302546   | 1.123   | 1.153   | 1.283   | 60.5      |
| 105+04991 | AM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 338        | 1.155197   | 1.105   | 1.153   | 1.259   | 61.5      |
| 105P05182 | AM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 367        | 0.205581   | 1.106   | 1.123   | 1.197   | 66.0      |
| 105+05183 | AM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 368        | 4.039421   | 1.094   | 1.106   | 1.197   | 66.7      |
| 105+05182 | AM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 366        | 4.236706   | 1.090   | 1.091   | 1.180   | 66.1      |
| 105P05183 | AM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 369        | 0.513128   | 1.071   | 1.109   | 1.183   | 66.3      |
| 105N05000 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 834        | 0.673927   | 1.818   | 2.444   | 3.882   | 36.3      |
| 105-05000 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 833        | 0.693593   | 1.686   | 1.861   | 3.941   | 39.7      |
| 105N05001 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 832        | 0.628548   | 1.501   | 1.367   | 3.350   | 44.6      |
| 105-05001 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 831        | 0.264219   | 1.243   | 1.172   | 1.744   | 54.7      |
| 105N05002 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 830        | 0.455011   | 1.150   | 1.153   | 1.417   | 59.1      |
| 105-05002 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 829        | 2.34529    | 1.123   | 1.113   | 1.232   | 61.4      |
| 105N05003 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 828        | 0.217492   | 1.122   | 1.113   | 1.211   | 61.5      |
| 105-05003 | AM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 827        | 1.260768   | 1.121   | 1.113   | 1.211   | 61.6      |
| 105+05002 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 360        | 0.22621    | 1.165   | 1.131   | 1.327   | 59.2      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105+05001 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 358        | 0.664687   | 1.161   | 1.169   | 1.468   | 59.4      |
| 105P05001 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 359        | 0.671839   | 1.153   | 1.113   | 1.255   | 59.8      |
| 105P05002 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 361        | 0.474367   | 1.153   | 1.131   | 1.255   | 59.9      |
| 105+05000 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 356        | 0.282767   | 1.152   | 1.153   | 1.417   | 59.0      |
| 105P05000 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 357        | 0.537362   | 1.133   | 1.133   | 1.308   | 60.0      |
| 105+05003 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 362        | 2.435694   | 1.121   | 1.111   | 1.186   | 62.4      |
| 105P05003 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 363        | 0.374494   | 1.117   | 1.111   | 1.186   | 62.7      |
| 105+05004 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 364        | 1.001389   | 1.096   | 1.111   | 1.186   | 63.8      |
| 105P05004 | AM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 365        | 0.241508   | 1.082   | 1.094   | 1.167   | 64.7      |
| 105-05004 | AM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 825        | 4.237694   | 1.135   | 1.109   | 1.183   | 62.5      |
| 105N05004 | AM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 826        | 0.199647   | 1.133   | 1.129   | 1.207   | 61.8      |
| 105N05182 | AM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 824        | 0.208917   | 1.100   | 1.129   | 1.207   | 63.6      |
| 105N05183 | AM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 822        | 0.513762   | 1.090   | 1.109   | 1.183   | 65.1      |
| 105-05182 | AM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 823        | 4.056869   | 1.069   | 1.109   | 1.164   | 66.4      |
| 105-04995 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 843        | 0.281928   | 1.180   | 1.241   | 1.396   | 56.8      |
| 105N04996 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 842        | 0.490113   | 1.165   | 1.222   | 1.404   | 56.6      |
| 105-04992 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 849        | 1.134139   | 1.161   | 1.218   | 1.426   | 57.7      |
| 105N04995 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 844        | 0.513656   | 1.155   | 1.193   | 1.333   | 58.9      |
| 105N04992 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 850        | 0.594646   | 1.151   | 1.236   | 1.360   | 59.1      |
| 105-04993 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 847        | 0.299283   | 1.150   | 1.193   | 1.511   | 59.2      |
| 105-04991 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 851        | 0.754487   | 1.140   | 1.193   | 1.360   | 59.6      |
| 105N04994 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 846        | 0.613343   | 1.126   | 1.172   | 1.333   | 60.4      |
| 105-04994 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 845        | 0.089714   | 1.124   | 1.172   | 1.308   | 60.5      |
| 105N04991 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 852        | 0.668887   | 1.112   | 1.150   | 1.255   | 62.1      |
| 105N04993 | AM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 848        | 0.623111   | 1.099   | 1.153   | 1.236   | 61.9      |
| 105P21025 | AM PEAK | NV-445                      | NORTHBOUND |            | 0.033187   | 1.869   | 2.037   | 5.000   | 29.4      |
| 105P21024 | AM PEAK | NV-445                      | NORTHBOUND |            | 0.153056   | 1.739   | 2.000   | 3.529   | 34.5      |
| 105+21024 | AM PEAK | NV-445                      | NORTHBOUND |            | 1.684972   | 1.361   | 1.526   | 2.000   | 42.6      |
| 105+21025 | AM PEAK | NV-445                      | NORTHBOUND |            | 2.275038   | 1.291   | 1.357   | 1.839   | 44.2      |
| 105N21024 | AM PEAK | NV-445                      | SOUTHBOUND |            | 0.060006   | 2.105   | 2.400   | 5.455   | 28.5      |
| 105N21025 | AM PEAK | NV-445                      | SOUTHBOUND |            | 0.063324   | 2.058   | 2.391   | 5.000   | 26.7      |
| 105N21023 | AM PEAK | NV-445                      | SOUTHBOUND |            | 0.05373    | 1.946   | 2.292   | 5.500   | 28.3      |
| 105-21022 | AM PEAK | NV-445                      | SOUTHBOUND |            | 1.935335   | 1.833   | 2.042   | 4.900   | 26.7      |

| TMC       | PERIOD  | SEGMENT                           | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105-21023 | AM PEAK | NV-445                            | SOUTHBOUND |            | 1.762152   | 1.620   | 1.706   | 3.222   | 35.8      |
| 105-21024 | AM PEAK | NV-445                            | SOUTHBOUND |            | 2.287608   | 1.475   | 1.553   | 2.458   | 40.0      |
| 105+04962 | AM PEAK | US-395                            | NORTHBOUND | 124        | 1.086026   | 1.236   | 1.308   | 1.545   | 55.0      |
| 105P04962 | AM PEAK | US-395                            | NORTHBOUND | 125        | 0.719411   | 1.222   | 1.321   | 1.591   | 57.3      |
| 105+04964 | AM PEAK | US-395                            | NORTHBOUND | 128        | 0.178228   | 1.210   | 1.296   | 1.591   | 57.9      |
| 105P04963 | AM PEAK | US-395                            | NORTHBOUND | 127        | 0.293492   | 1.193   | 1.296   | 1.522   | 58.7      |
| 105+04963 | AM PEAK | US-395                            | NORTHBOUND | 126        | 1.19238    | 1.192   | 1.296   | 1.522   | 58.7      |
| 105+04965 | AM PEAK | US-395                            | NORTHBOUND | 130        | 0.420842   | 1.162   | 1.183   | 1.365   | 61.1      |
| 105P04964 | AM PEAK | US-395                            | NORTHBOUND | 129        | 0.696004   | 1.156   | 1.207   | 1.400   | 60.6      |
| 105+04967 | AM PEAK | US-395                            | NORTHBOUND | 134        | 1.269772   | 1.153   | 1.186   | 1.346   | 60.7      |
| 105+04966 | AM PEAK | US-395                            | NORTHBOUND | 132        | 1.06621    | 1.143   | 1.148   | 1.296   | 61.2      |
| 105P04965 | AM PEAK | US-395                            | NORTHBOUND | 131        | 0.666812   | 1.135   | 1.164   | 1.291   | 62.6      |
| 105P04966 | AM PEAK | US-395                            | NORTHBOUND | 133        | 0.638291   | 1.118   | 1.169   | 1.302   | 61.7      |
| 105N04962 | AM PEAK | US-395                            | SOUTHBOUND | 172        | 0.781212   | 2.665   | 3.500   | 7.778   | 26.3      |
| 105-04962 | AM PEAK | US-395                            | SOUTHBOUND | 171        | 0.968015   | 2.176   | 2.840   | 6.455   | 32.6      |
| 105N04963 | AM PEAK | US-395                            | SOUTHBOUND | 170        | 0.37035    | 2.129   | 2.483   | 7.200   | 33.8      |
| 105-04963 | AM PEAK | US-395                            | SOUTHBOUND | 169        | 0.416232   | 1.775   | 1.651   | 4.733   | 40.0      |
| 105N04964 | AM PEAK | US-395                            | SOUTHBOUND | 168        | 0.586885   | 1.530   | 1.489   | 3.182   | 45.8      |
| 105N04965 | AM PEAK | US-395                            | SOUTHBOUND | 166        | 0.484825   | 1.503   | 1.346   | 3.182   | 46.6      |
| 105-04964 | AM PEAK | US-395                            | SOUTHBOUND | 167        | 0.573525   | 1.473   | 1.468   | 2.875   | 46.9      |
| 105-04965 | AM PEAK | US-395                            | SOUTHBOUND | 165        | 1.265055   | 1.351   | 1.207   | 2.258   | 51.8      |
| 105N04966 | AM PEAK | US-395                            | SOUTHBOUND | 164        | 0.405637   | 1.253   | 1.148   | 1.429   | 55.9      |
| 105-04966 | AM PEAK | US-395                            | SOUTHBOUND | 163        | 1.455568   | 1.233   | 1.167   | 1.489   | 56.7      |
| 105N04967 | AM PEAK | US-395                            | SOUTHBOUND | 162        | 0.51969    | 1.137   | 1.164   | 1.315   | 62.5      |
| 105+04961 | AM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 122        | 0.184976   | 1.238   | 1.314   | 1.675   | 54.1      |
| 105+04960 | AM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 120        | 0.08642    | 1.238   | 1.375   | 1.650   | 53.3      |
| 105P04960 | AM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 121        | 0.502584   | 1.229   | 1.340   | 1.595   | 54.5      |
| 105P04961 | AM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 123        | 0.463624   | 1.183   | 1.264   | 1.457   | 56.7      |
| 105+04955 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 110        | 0.336354   | 1.200   | 1.286   | 1.636   | 60.0      |
| 105P04959 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 119        | 0.744632   | 1.192   | 1.283   | 1.511   | 57.1      |
| 105+04957 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 114        | 0.119987   | 1.184   | 1.246   | 1.578   | 59.9      |
| 105+04959 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 118        | 0.212142   | 1.179   | 1.259   | 1.478   | 57.7      |
| 105+04958 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 116        | 0.3243     | 1.178   | 1.246   | 1.479   | 60.3      |
| 105P04958 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 117        | 0.339405   | 1.161   | 1.228   | 1.429   | 60.3      |
| 105P04955 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 111        | 0.39239    | 1.152   | 1.220   | 1.440   | 62.5      |
| 105+04956 | AM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 112        | 0.170715   | 1.149   | 1.200   | 1.412   | 62.7      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105P04956 | AM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 113        | 0.260914   | 1.141   | 1.183   | 1.420   | 62.2      |
| 105P04957 | AM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 115        | 0.275323   | 1.133   | 1.183   | 1.365   | 62.6      |
| 105-04961 | AM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 173        | 1.146802   | 2.620   | 3.450   | 7.667   | 26.3      |
| 105N04961 | AM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 174        | 0.346539   | 2.358   | 2.957   | 5.667   | 28.8      |
| 105-04960 | AM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 175        | 0.225185   | 2.030   | 2.429   | 4.533   | 33.5      |
| 105N04960 | AM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 176        | 0.231666   | 1.950   | 2.194   | 4.250   | 34.9      |
| 105-04959 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 177        | 0.332732   | 1.777   | 2.061   | 3.400   | 38.3      |
| 105N04959 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 178        | 0.629412   | 1.563   | 1.634   | 2.680   | 42.9      |
| 105-04958 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 179        | 0.125871   | 1.474   | 1.558   | 2.481   | 45.5      |
| 105N04958 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 180        | 0.413255   | 1.389   | 1.478   | 2.125   | 49.0      |
| 105-04957 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 181        | 0.038985   | 1.384   | 1.458   | 2.059   | 50.6      |
| 105N04957 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 182        | 0.578341   | 1.275   | 1.296   | 1.707   | 54.9      |
| 105N04955 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 186        | 0.398734   | 1.238   | 1.268   | 1.578   | 57.3      |
| 105-04956 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 183        | 0.208402   | 1.230   | 1.273   | 1.591   | 56.9      |
| 105-04955 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 185        | 0.170324   | 1.213   | 1.224   | 1.479   | 58.5      |
| 105N04956 | AM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 184        | 0.246436   | 1.209   | 1.224   | 1.479   | 58.7      |
| 105+04954 | MIDDAY  | I-580                       | NORTHBOUND | 108        | 0.434419   | 1.214   | 1.281   | 1.622   | 60.1      |
| 105+04953 | MIDDAY  | I-580                       | NORTHBOUND | 106        | 0.127841   | 1.208   | 1.217   | 1.521   | 60.4      |
| 105P04953 | MIDDAY  | I-580                       | NORTHBOUND | 107        | 0.300153   | 1.197   | 1.217   | 1.490   | 61.0      |
| 105P04954 | MIDDAY  | I-580                       | NORTHBOUND | 109        | 0.595534   | 1.178   | 1.217   | 1.404   | 62.0      |
| 105-04954 | MIDDAY  | I-580                       | SOUTHBOUND | 187        | 0.346632   | 1.247   | 1.315   | 1.821   | 56.9      |
| 105-04953 | MIDDAY  | I-580                       | SOUTHBOUND | 189        | 0.274273   | 1.205   | 1.268   | 1.614   | 58.9      |
| 105N04954 | MIDDAY  | I-580                       | SOUTHBOUND | 188        | 0.568946   | 1.199   | 1.224   | 1.511   | 59.2      |
| 105N04953 | MIDDAY  | I-580                       | SOUTHBOUND | 190        | 0.455024   | 1.157   | 1.203   | 1.449   | 61.4      |
| 105+04996 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 348        | 0.162619   | 1.330   | 1.340   | 2.481   | 50.4      |
| 105P04995 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 347        | 0.498886   | 1.260   | 1.288   | 1.971   | 53.2      |
| 105+04995 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 346        | 0.119974   | 1.164   | 1.193   | 1.388   | 58.4      |
| 105+04994 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 344        | 0.227521   | 1.144   | 1.186   | 1.400   | 61.2      |
| 105P04994 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 345        | 0.595199   | 1.142   | 1.190   | 1.353   | 60.4      |
| 105+04993 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 342        | 1.145367   | 1.132   | 1.148   | 1.250   | 61.8      |
| 105P04992 | MIDDAY  | I-80 EB Robb Drive to I-590 | EASTBOUND  | 341        | 0.881881   | 1.119   | 1.129   | 1.207   | 62.5      |

| TMC       | PERIOD | SEGMENT                     | DIRECTION | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|--------|-----------------------------|-----------|------------|------------|---------|---------|---------|-----------|
| 105P04993 | MIDDAY | I-80 EB Robb Drive to I-590 | EASTBOUND | 343        | 0.655049   | 1.116   | 1.148   | 1.273   | 62.7      |
| 105+04992 | MIDDAY | I-80 EB Robb Drive to I-590 | EASTBOUND | 340        | 0.931535   | 1.100   | 1.150   | 1.255   | 62.7      |
| 105+04991 | MIDDAY | I-80 EB Robb Drive to I-590 | EASTBOUND | 338        | 1.155197   | 1.086   | 1.133   | 1.214   | 62.6      |
| 105P04991 | MIDDAY | I-80 EB Robb Drive to I-590 | EASTBOUND | 339        | 0.302546   | 1.085   | 1.133   | 1.214   | 62.6      |
| 105P05182 | MIDDAY | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 367        | 0.205581   | 1.081   | 1.123   | 1.177   | 67.5      |
| 105+05183 | MIDDAY | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 368        | 4.039421   | 1.073   | 1.106   | 1.159   | 68.1      |
| 105+05182 | MIDDAY | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 366        | 4.236706   | 1.066   | 1.108   | 1.161   | 67.6      |
| 105P05183 | MIDDAY | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 369        | 0.513128   | 1.061   | 1.092   | 1.145   | 66.9      |
| 105N05000 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 834        | 0.673927   | 1.241   | 1.294   | 1.833   | 53.2      |
| 105-05000 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 833        | 0.693593   | 1.186   | 1.264   | 1.595   | 56.5      |
| 105N05001 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 832        | 0.628548   | 1.125   | 1.155   | 1.367   | 59.5      |
| 105-05001 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 831        | 0.264219   | 1.088   | 1.133   | 1.236   | 62.5      |
| 105N05003 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 828        | 0.217492   | 1.076   | 1.113   | 1.190   | 64.1      |
| 105N05002 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 830        | 0.455011   | 1.074   | 1.115   | 1.193   | 63.3      |
| 105-05003 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 827        | 1.260768   | 1.073   | 1.113   | 1.190   | 64.3      |
| 105-05002 | MIDDAY | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 829        | 2.34529    | 1.069   | 1.113   | 1.169   | 64.5      |
| 105+05001 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 358        | 0.664687   | 1.121   | 1.169   | 1.380   | 61.5      |
| 105+05000 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 356        | 0.282767   | 1.108   | 1.153   | 1.283   | 61.4      |
| 105P05001 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 359        | 0.671839   | 1.107   | 1.113   | 1.211   | 62.3      |
| 105P05000 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 357        | 0.537362   | 1.094   | 1.133   | 1.236   | 62.1      |
| 105+05002 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 360        | 0.22621    | 1.089   | 1.113   | 1.255   | 63.4      |
| 105P05002 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 361        | 0.474367   | 1.082   | 1.113   | 1.190   | 63.8      |
| 105+05004 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 364        | 1.001389   | 1.078   | 1.111   | 1.167   | 65.0      |
| 105P05003 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 363        | 0.374494   | 1.076   | 1.111   | 1.167   | 65.1      |
| 105+05003 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 362        | 2.435694   | 1.072   | 1.111   | 1.167   | 65.3      |
| 105P05004 | MIDDAY | I-80 McCarran to EXIT 23    | EASTBOUND | 365        | 0.241508   | 1.063   | 1.094   | 1.148   | 65.9      |
| 105N05004 | MIDDAY | I-80 McCarran to EXIT 23    | WESTBOUND | 826        | 0.199647   | 1.087   | 1.129   | 1.207   | 64.4      |
| 105-05004 | MIDDAY | I-80 McCarran to EXIT 23    | WESTBOUND | 825        | 4.237694   | 1.082   | 1.109   | 1.183   | 65.6      |
| 105N05182 | MIDDAY | I-80 McCarran to EXIT 23    | WESTBOUND | 824        | 0.208917   | 1.077   | 1.111   | 1.186   | 65.0      |
| 105N05183 | MIDDAY | I-80 McCarran to EXIT 23    | WESTBOUND | 822        | 0.513762   | 1.063   | 1.109   | 1.164   | 66.8      |
| 105-05182 | MIDDAY | I-80 McCarran to EXIT 23    | WESTBOUND | 823        | 4.056869   | 1.061   | 1.092   | 1.164   | 66.9      |



| TMC       | PERIOD | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|--------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105-04992 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 849        | 1.134139   | 1.151   | 1.218   | 1.396   | 58.2      |
| 105N04992 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 850        | 0.594646   | 1.146   | 1.236   | 1.360   | 59.3      |
| 105-04993 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 847        | 0.299283   | 1.142   | 1.172   | 1.478   | 59.5      |
| 105N04996 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 842        | 0.490113   | 1.141   | 1.179   | 1.320   | 57.9      |
| 105-04995 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 843        | 0.281928   | 1.135   | 1.196   | 1.314   | 59.0      |
| 105-04991 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 851        | 0.754487   | 1.128   | 1.193   | 1.333   | 60.3      |
| 105N04995 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 844        | 0.513656   | 1.121   | 1.172   | 1.283   | 60.6      |
| 105N04991 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 852        | 0.668887   | 1.113   | 1.150   | 1.255   | 62.0      |
| 105N04994 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 846        | 0.613343   | 1.110   | 1.153   | 1.308   | 61.2      |
| 105-04994 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 845        | 0.089714   | 1.099   | 1.153   | 1.236   | 61.9      |
| 105N04993 | MIDDAY | I-80 WB Robb Drive to I-590 | WESTBOUND  | 848        | 0.623111   | 1.086   | 1.133   | 1.214   | 62.6      |
| 105P21025 | MIDDAY | NV-445                      | NORTHBOUND |            | 0.033187   | 1.916   | 2.115   | 5.000   | 28.7      |
| 105P21024 | MIDDAY | NV-445                      | NORTHBOUND |            | 0.153056   | 1.584   | 1.667   | 3.750   | 37.9      |
| 105+21024 | MIDDAY | NV-445                      | NORTHBOUND |            | 1.684972   | 1.333   | 1.415   | 2.000   | 43.5      |
| 105+21025 | MIDDAY | NV-445                      | NORTHBOUND |            | 2.275038   | 1.267   | 1.357   | 1.727   | 45.0      |
| 105N21024 | MIDDAY | NV-445                      | SOUTHBOUND |            | 0.060006   | 2.019   | 2.143   | 5.455   | 29.7      |
| 105N21025 | MIDDAY | NV-445                      | SOUTHBOUND |            | 0.063324   | 2.005   | 2.292   | 5.500   | 27.4      |
| 105N21023 | MIDDAY | NV-445                      | SOUTHBOUND |            | 0.05373    | 1.730   | 1.833   | 4.231   | 31.8      |
| 105-21022 | MIDDAY | NV-445                      | SOUTHBOUND |            | 1.935335   | 1.683   | 1.750   | 4.083   | 29.1      |
| 105-21023 | MIDDAY | NV-445                      | SOUTHBOUND |            | 1.762152   | 1.417   | 1.487   | 2.320   | 40.9      |
| 105-21024 | MIDDAY | NV-445                      | SOUTHBOUND |            | 2.287608   | 1.372   | 1.439   | 2.034   | 43.0      |
| 105+04964 | MIDDAY | US-395                      | NORTHBOUND | 128        | 0.178228   | 1.192   | 1.250   | 1.489   | 58.7      |
| 105P04962 | MIDDAY | US-395                      | NORTHBOUND | 125        | 0.719411   | 1.189   | 1.273   | 1.522   | 58.9      |
| 105+04962 | MIDDAY | US-395                      | NORTHBOUND | 124        | 1.086026   | 1.182   | 1.259   | 1.478   | 57.5      |
| 105+04963 | MIDDAY | US-395                      | NORTHBOUND | 126        | 1.19238    | 1.167   | 1.250   | 1.458   | 60.0      |
| 105P04963 | MIDDAY | US-395                      | NORTHBOUND | 127        | 0.293492   | 1.164   | 1.250   | 1.458   | 60.1      |
| 105+04965 | MIDDAY | US-395                      | NORTHBOUND | 130        | 0.420842   | 1.158   | 1.183   | 1.340   | 61.3      |
| 105P04964 | MIDDAY | US-395                      | NORTHBOUND | 129        | 0.696004   | 1.154   | 1.186   | 1.321   | 60.7      |
| 105P04965 | MIDDAY | US-395                      | NORTHBOUND | 131        | 0.666812   | 1.138   | 1.145   | 1.268   | 62.4      |
| 105+04967 | MIDDAY | US-395                      | NORTHBOUND | 134        | 1.269772   | 1.138   | 1.167   | 1.296   | 61.5      |
| 105+04966 | MIDDAY | US-395                      | NORTHBOUND | 132        | 1.06621    | 1.137   | 1.148   | 1.250   | 61.6      |
| 105P04966 | MIDDAY | US-395                      | NORTHBOUND | 133        | 0.638291   | 1.114   | 1.150   | 1.255   | 62.0      |
| 105-04963 | MIDDAY | US-395                      | SOUTHBOUND | 169        | 0.416232   | 1.239   | 1.224   | 1.511   | 57.3      |
| 105N04964 | MIDDAY | US-395                      | SOUTHBOUND | 168        | 0.586885   | 1.164   | 1.186   | 1.321   | 60.1      |
| 105-04966 | MIDDAY | US-395                      | SOUTHBOUND | 163        | 1.455568   | 1.151   | 1.186   | 1.321   | 60.8      |
| 105N04962 | MIDDAY | US-395                      | SOUTHBOUND | 172        | 0.781212   | 1.147   | 1.148   | 1.228   | 61.0      |
| 105-04962 | MIDDAY | US-395                      | SOUTHBOUND | 171        | 0.968015   | 1.143   | 1.145   | 1.246   | 62.1      |
| 105-04965 | MIDDAY | US-395                      | SOUTHBOUND | 165        | 1.265055   | 1.130   | 1.148   | 1.228   | 62.0      |
| 105N04963 | MIDDAY | US-395                      | SOUTHBOUND | 170        | 0.37035    | 1.130   | 1.161   | 1.263   | 63.7      |
| 105-04964 | MIDDAY | US-395                      | SOUTHBOUND | 167        | 0.573525   | 1.127   | 1.150   | 1.255   | 61.2      |

| TMC       | PERIOD | SEGMENT                           | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|--------|-----------------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105N04967 | MIDDAY | US-395                            | SOUTHBOUND | 162        | 0.51969    | 1.125   | 1.145   | 1.246   | 63.1      |
| 105N04965 | MIDDAY | US-395                            | SOUTHBOUND | 166        | 0.484825   | 1.124   | 1.148   | 1.228   | 62.3      |
| 105N04966 | MIDDAY | US-395                            | SOUTHBOUND | 164        | 0.405637   | 1.114   | 1.148   | 1.228   | 62.8      |
| 105+04961 | MIDDAY | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 122        | 0.184976   | 1.222   | 1.288   | 1.675   | 54.8      |
| 105+04960 | MIDDAY | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 120        | 0.08642    | 1.208   | 1.294   | 1.500   | 54.6      |
| 105P04960 | MIDDAY | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 121        | 0.502584   | 1.201   | 1.264   | 1.489   | 55.8      |
| 105P04961 | MIDDAY | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 123        | 0.463624   | 1.157   | 1.241   | 1.396   | 57.9      |
| 105+04955 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 110        | 0.336354   | 1.209   | 1.286   | 1.600   | 59.5      |
| 105+04957 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 114        | 0.119987   | 1.197   | 1.246   | 1.543   | 59.3      |
| 105P04959 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 119        | 0.744632   | 1.188   | 1.259   | 1.447   | 57.2      |
| 105+04959 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 118        | 0.212142   | 1.182   | 1.236   | 1.417   | 57.5      |
| 105+04958 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 116        | 0.3243     | 1.181   | 1.246   | 1.420   | 60.1      |
| 105+04956 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 112        | 0.170715   | 1.165   | 1.220   | 1.385   | 61.8      |
| 105P04955 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 111        | 0.39239    | 1.165   | 1.220   | 1.412   | 61.8      |
| 105P04958 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 117        | 0.339405   | 1.164   | 1.228   | 1.346   | 60.1      |
| 105P04956 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 113        | 0.260914   | 1.158   | 1.203   | 1.420   | 61.3      |
| 105P04957 | MIDDAY | US-395 NB<br>Moana to I-80        | NORTHBOUND | 115        | 0.275323   | 1.142   | 1.183   | 1.340   | 62.2      |
| 105N04960 | MIDDAY | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 176        | 0.231666   | 1.239   | 1.308   | 1.511   | 54.9      |
| 105-04960 | MIDDAY | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 175        | 0.225185   | 1.225   | 1.283   | 1.511   | 55.5      |
| 105-04961 | MIDDAY | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 173        | 1.146802   | 1.158   | 1.169   | 1.302   | 59.6      |
| 105N04961 | MIDDAY | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 174        | 0.346539   | 1.157   | 1.214   | 1.333   | 58.8      |
| 105-04959 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 177        | 0.332732   | 1.297   | 1.417   | 1.659   | 52.4      |
| 105-04958 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 179        | 0.125871   | 1.263   | 1.340   | 1.634   | 53.1      |
| 105-04957 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 181        | 0.038985   | 1.238   | 1.321   | 1.628   | 56.5      |
| 105N04959 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 178        | 0.629412   | 1.224   | 1.314   | 1.558   | 54.7      |
| 105N04958 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 180        | 0.413255   | 1.211   | 1.283   | 1.545   | 56.1      |
| 105N04957 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 182        | 0.578341   | 1.166   | 1.207   | 1.373   | 60.1      |
| 105N04955 | MIDDAY | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 186        | 0.398734   | 1.162   | 1.183   | 1.392   | 61.1      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105-04956 | MIDDAY  | US-395 SB Moana to I-80     | SOUTHBOUND | 183        | 0.208402   | 1.159   | 1.207   | 1.400   | 60.4      |
| 105-04955 | MIDDAY  | US-395 SB Moana to I-80     | SOUTHBOUND | 185        | 0.170324   | 1.140   | 1.164   | 1.315   | 62.3      |
| 105N04956 | MIDDAY  | US-395 SB Moana to I-80     | SOUTHBOUND | 184        | 0.246436   | 1.137   | 1.183   | 1.291   | 62.4      |
| 105P04953 | PM PEAK | I-580                       | NORTHBOUND | 107        | 0.300153   | 1.940   | 2.704   | 4.563   | 37.6      |
| 105+04953 | PM PEAK | I-580                       | NORTHBOUND | 106        | 0.127841   | 1.924   | 2.607   | 4.867   | 37.9      |
| 105+04954 | PM PEAK | I-580                       | NORTHBOUND | 108        | 0.434419   | 1.609   | 1.921   | 2.920   | 45.4      |
| 105P04954 | PM PEAK | I-580                       | NORTHBOUND | 109        | 0.595534   | 1.458   | 1.521   | 2.607   | 50.1      |
| 105-04954 | PM PEAK | I-580                       | SOUTHBOUND | 187        | 0.346632   | 1.342   | 1.420   | 2.367   | 52.9      |
| 105N04954 | PM PEAK | I-580                       | SOUTHBOUND | 188        | 0.568946   | 1.270   | 1.340   | 2.088   | 55.9      |
| 105-04953 | PM PEAK | I-580                       | SOUTHBOUND | 189        | 0.274273   | 1.256   | 1.365   | 1.868   | 56.5      |
| 105N04953 | PM PEAK | I-580                       | SOUTHBOUND | 190        | 0.455024   | 1.187   | 1.246   | 1.543   | 59.8      |
| 105+04996 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 348        | 0.162619   | 1.353   | 1.396   | 2.233   | 49.5      |
| 105P04995 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 347        | 0.498886   | 1.318   | 1.340   | 2.094   | 50.8      |
| 105+04995 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 346        | 0.119974   | 1.220   | 1.236   | 1.478   | 55.7      |
| 105P04994 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 345        | 0.595199   | 1.185   | 1.211   | 1.438   | 58.2      |
| 105+04994 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 344        | 0.227521   | 1.180   | 1.228   | 1.489   | 59.3      |
| 105+04993 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 342        | 1.145367   | 1.156   | 1.167   | 1.321   | 60.6      |
| 105P04993 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 343        | 0.655049   | 1.150   | 1.167   | 1.373   | 60.9      |
| 105P04992 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 341        | 0.881881   | 1.145   | 1.148   | 1.250   | 61.1      |
| 105+04992 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 340        | 0.931535   | 1.130   | 1.150   | 1.278   | 61.1      |
| 105P04991 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 339        | 0.302546   | 1.120   | 1.172   | 1.283   | 60.7      |
| 105+04991 | PM PEAK | I-80 EB Robb Drive to I-590 | EASTBOUND  | 338        | 1.155197   | 1.112   | 1.172   | 1.283   | 61.2      |
| 105+05182 | PM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 366        | 4.236706   | 1.090   | 1.125   | 1.180   | 66.0      |
| 105P05182 | PM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 367        | 0.205581   | 1.090   | 1.141   | 1.217   | 67.0      |
| 105+05183 | PM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 368        | 4.039421   | 1.080   | 1.123   | 1.197   | 67.6      |
| 105P05183 | PM PEAK | I-80 EXIT 23 to EXIT 32     | EASTBOUND  | 369        | 0.513128   | 1.069   | 1.109   | 1.183   | 66.4      |
| 105N05000 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 834        | 0.673927   | 1.616   | 2.276   | 3.143   | 40.8      |
| 105-05000 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 833        | 0.693593   | 1.562   | 1.861   | 3.526   | 42.9      |
| 105N05001 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 832        | 0.628548   | 1.361   | 1.340   | 2.913   | 49.2      |
| 105-05001 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 831        | 0.264219   | 1.230   | 1.193   | 1.789   | 55.3      |
| 105N05002 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 830        | 0.455011   | 1.177   | 1.153   | 1.478   | 57.8      |
| 105-05003 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 827        | 1.260768   | 1.164   | 1.113   | 1.232   | 59.3      |
| 105-05002 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 829        | 2.34529    | 1.142   | 1.113   | 1.278   | 60.4      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105N05003 | PM PEAK | I-80 EXIT 23 to EXIT 32     | WESTBOUND  | 828        | 0.217492   | 1.133   | 1.113   | 1.232   | 60.9      |
| 105+05002 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 360        | 0.22621    | 1.246   | 1.150   | 1.438   | 55.4      |
| 105P05002 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 361        | 0.474367   | 1.242   | 1.131   | 1.302   | 55.6      |
| 105P05001 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 359        | 0.671839   | 1.240   | 1.150   | 1.408   | 55.6      |
| 105+05001 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 358        | 0.664687   | 1.225   | 1.232   | 1.605   | 56.3      |
| 105+05000 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 356        | 0.282767   | 1.217   | 1.308   | 1.545   | 55.9      |
| 105P05000 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 357        | 0.537362   | 1.194   | 1.236   | 1.447   | 57.0      |
| 105+05003 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 362        | 2.435694   | 1.191   | 1.129   | 1.207   | 58.8      |
| 105+05004 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 364        | 1.001389   | 1.163   | 1.129   | 1.228   | 60.2      |
| 105P05003 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 363        | 0.374494   | 1.148   | 1.129   | 1.207   | 61.0      |
| 105P05004 | PM PEAK | I-80 McCarran to EXIT 23    | EASTBOUND  | 365        | 0.241508   | 1.104   | 1.129   | 1.186   | 63.4      |
| 105N05182 | PM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 824        | 0.208917   | 1.247   | 1.111   | 1.228   | 56.1      |
| 105-05182 | PM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 823        | 4.056869   | 1.233   | 1.092   | 1.203   | 57.6      |
| 105N05183 | PM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 822        | 0.513762   | 1.216   | 1.109   | 1.203   | 58.4      |
| 105-05004 | PM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 825        | 4.237694   | 1.202   | 1.109   | 1.268   | 59.1      |
| 105N05004 | PM PEAK | I-80 McCarran to EXIT 23    | WESTBOUND  | 826        | 0.199647   | 1.198   | 1.129   | 1.273   | 58.4      |
| 105N04996 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 842        | 0.490113   | 1.202   | 1.245   | 1.467   | 54.9      |
| 105-04995 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 843        | 0.281928   | 1.178   | 1.241   | 1.426   | 56.9      |
| 105N04995 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 844        | 0.513656   | 1.158   | 1.214   | 1.417   | 58.7      |
| 105-04993 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 847        | 0.299283   | 1.157   | 1.193   | 1.545   | 58.8      |
| 105-04992 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 849        | 1.134139   | 1.150   | 1.218   | 1.396   | 58.3      |
| 105N04992 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 850        | 0.594646   | 1.145   | 1.236   | 1.360   | 59.4      |
| 105N04991 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 852        | 0.668887   | 1.137   | 1.150   | 1.255   | 60.7      |
| 105-04994 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 845        | 0.089714   | 1.125   | 1.172   | 1.308   | 60.4      |
| 105N04994 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 846        | 0.613343   | 1.125   | 1.172   | 1.360   | 60.5      |
| 105-04991 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 851        | 0.754487   | 1.124   | 1.193   | 1.333   | 60.5      |
| 105N04993 | PM PEAK | I-80 WB Robb Drive to I-590 | WESTBOUND  | 848        | 0.623111   | 1.091   | 1.153   | 1.236   | 62.3      |
| 105P21024 | PM PEAK | NV-445                      | NORTHBOUND |            | 0.153056   | 1.949   | 2.222   | 5.455   | 30.8      |
| 105P21025 | PM PEAK | NV-445                      | NORTHBOUND |            | 0.033187   | 1.945   | 2.200   | 4.583   | 28.3      |
| 105+21024 | PM PEAK | NV-445                      | NORTHBOUND |            | 1.684972   | 1.668   | 1.758   | 3.053   | 34.8      |
| 105+21025 | PM PEAK | NV-445                      | NORTHBOUND |            | 2.275038   | 1.332   | 1.425   | 1.900   | 42.8      |
| 105N21024 | PM PEAK | NV-445                      | SOUTHBOUND |            | 0.060006   | 2.497   | 2.857   | 8.571   | 24.0      |

| TMC       | PERIOD  | SEGMENT                           | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105N21025 | PM PEAK | NV-445                            | SOUTHBOUND |            | 0.063324   | 2.438   | 2.895   | 6.875   | 22.6      |
| 105-21022 | PM PEAK | NV-445                            | SOUTHBOUND |            | 1.935335   | 1.650   | 1.750   | 3.500   | 29.7      |
| 105N21023 | PM PEAK | NV-445                            | SOUTHBOUND |            | 0.05373    | 1.602   | 1.571   | 3.929   | 34.3      |
| 105-21024 | PM PEAK | NV-445                            | SOUTHBOUND |            | 2.287608   | 1.513   | 1.595   | 2.565   | 39.0      |
| 105-21023 | PM PEAK | NV-445                            | SOUTHBOUND |            | 1.762152   | 1.416   | 1.487   | 2.320   | 40.9      |
| 105+04964 | PM PEAK | US-395                            | NORTHBOUND | 128        | 0.178228   | 1.289   | 1.321   | 1.892   | 54.3      |
| 105P04964 | PM PEAK | US-395                            | NORTHBOUND | 129        | 0.696004   | 1.282   | 1.296   | 2.000   | 54.6      |
| 105P04963 | PM PEAK | US-395                            | NORTHBOUND | 127        | 0.293492   | 1.237   | 1.273   | 1.667   | 56.6      |
| 105+04965 | PM PEAK | US-395                            | NORTHBOUND | 130        | 0.420842   | 1.218   | 1.268   | 1.732   | 58.3      |
| 105+04963 | PM PEAK | US-395                            | NORTHBOUND | 126        | 1.19238    | 1.196   | 1.228   | 1.522   | 58.5      |
| 105+04962 | PM PEAK | US-395                            | NORTHBOUND | 124        | 1.086026   | 1.192   | 1.259   | 1.511   | 57.0      |
| 105P04962 | PM PEAK | US-395                            | NORTHBOUND | 125        | 0.719411   | 1.184   | 1.228   | 1.522   | 59.1      |
| 105P04965 | PM PEAK | US-395                            | NORTHBOUND | 131        | 0.666812   | 1.132   | 1.183   | 1.365   | 62.7      |
| 105+04967 | PM PEAK | US-395                            | NORTHBOUND | 134        | 1.269772   | 1.111   | 1.167   | 1.273   | 63.0      |
| 105+04966 | PM PEAK | US-395                            | NORTHBOUND | 132        | 1.06621    | 1.109   | 1.148   | 1.273   | 63.1      |
| 105P04966 | PM PEAK | US-395                            | NORTHBOUND | 133        | 0.638291   | 1.087   | 1.150   | 1.255   | 63.5      |
| 105-04963 | PM PEAK | US-395                            | SOUTHBOUND | 169        | 0.416232   | 1.228   | 1.224   | 1.511   | 57.8      |
| 105N04963 | PM PEAK | US-395                            | SOUTHBOUND | 170        | 0.37035    | 1.188   | 1.200   | 1.358   | 60.6      |
| 105-04962 | PM PEAK | US-395                            | SOUTHBOUND | 171        | 0.968015   | 1.180   | 1.164   | 1.291   | 60.1      |
| 105N04962 | PM PEAK | US-395                            | SOUTHBOUND | 172        | 0.781212   | 1.170   | 1.167   | 1.296   | 59.8      |
| 105N04964 | PM PEAK | US-395                            | SOUTHBOUND | 168        | 0.586885   | 1.166   | 1.207   | 1.346   | 60.0      |
| 105-04964 | PM PEAK | US-395                            | SOUTHBOUND | 167        | 0.573525   | 1.125   | 1.169   | 1.302   | 61.3      |
| 105-04966 | PM PEAK | US-395                            | SOUTHBOUND | 163        | 1.455568   | 1.125   | 1.186   | 1.321   | 62.2      |
| 105-04965 | PM PEAK | US-395                            | SOUTHBOUND | 165        | 1.265055   | 1.113   | 1.167   | 1.250   | 62.9      |
| 105N04965 | PM PEAK | US-395                            | SOUTHBOUND | 166        | 0.484825   | 1.110   | 1.167   | 1.250   | 63.0      |
| 105N04966 | PM PEAK | US-395                            | SOUTHBOUND | 164        | 0.405637   | 1.109   | 1.148   | 1.250   | 63.1      |
| 105N04967 | PM PEAK | US-395                            | SOUTHBOUND | 162        | 0.51969    | 1.107   | 1.164   | 1.246   | 64.1      |
| 105+04960 | PM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 120        | 0.08642    | 1.703   | 2.129   | 3.143   | 38.7      |
| 105P04960 | PM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 121        | 0.502584   | 1.559   | 1.914   | 2.680   | 43.0      |
| 105+04961 | PM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 122        | 0.184976   | 1.397   | 1.634   | 2.161   | 48.0      |
| 105P04961 | PM PEAK | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 123        | 0.463624   | 1.259   | 1.396   | 1.718   | 53.2      |
| 105+04959 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 118        | 0.212142   | 1.978   | 2.615   | 5.231   | 34.4      |
| 105P04959 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 119        | 0.744632   | 1.903   | 2.519   | 4.000   | 35.7      |
| 105P04958 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 117        | 0.339405   | 1.847   | 2.414   | 4.375   | 37.9      |
| 105+04958 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 116        | 0.3243     | 1.690   | 2.088   | 3.944   | 42.0      |
| 105P04957 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 115        | 0.275323   | 1.577   | 1.651   | 3.550   | 45.0      |
| 105+04957 | PM PEAK | US-395 NB<br>Moana to I-80        | NORTHBOUND | 114        | 0.119987   | 1.520   | 1.614   | 3.087   | 46.7      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105P04956 | PM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 113        | 0.260914   | 1.455   | 1.479   | 2.840   | 48.8      |
| 105+04956 | PM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 112        | 0.170715   | 1.430   | 1.440   | 2.769   | 50.4      |
| 105+04955 | PM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 110        | 0.336354   | 1.418   | 1.500   | 2.400   | 50.8      |
| 105P04955 | PM PEAK | US-395 NB Moana to I-80     | NORTHBOUND | 111        | 0.39239    | 1.406   | 1.412   | 2.483   | 51.2      |
| 105N04960 | PM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 176        | 0.231666   | 1.361   | 1.360   | 1.700   | 49.9      |
| 105-04960 | PM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 175        | 0.225185   | 1.313   | 1.308   | 1.659   | 51.8      |
| 105N04961 | PM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 174        | 0.346539   | 1.261   | 1.236   | 1.417   | 53.9      |
| 105-04961 | PM PEAK | US-395 SB McCarran to Oddie | SOUTHBOUND | 173        | 1.146802   | 1.234   | 1.190   | 1.380   | 55.9      |
| 105-04959 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 177        | 0.332732   | 1.415   | 1.478   | 1.889   | 48.1      |
| 105N04959 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 178        | 0.629412   | 1.343   | 1.314   | 1.718   | 49.9      |
| 105-04958 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 179        | 0.125871   | 1.312   | 1.340   | 1.861   | 51.1      |
| 105-04957 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 181        | 0.038985   | 1.292   | 1.321   | 1.842   | 54.2      |
| 105N04955 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 186        | 0.398734   | 1.287   | 1.246   | 2.152   | 55.2      |
| 105N04958 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 180        | 0.413255   | 1.285   | 1.283   | 1.789   | 52.9      |
| 105N04957 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 182        | 0.578341   | 1.280   | 1.250   | 1.707   | 54.7      |
| 105-04956 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 183        | 0.208402   | 1.243   | 1.250   | 1.795   | 56.3      |
| 105-04955 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 185        | 0.170324   | 1.216   | 1.224   | 1.732   | 58.4      |
| 105N04956 | PM PEAK | US-395 SB Moana to I-80     | SOUTHBOUND | 184        | 0.246436   | 1.199   | 1.203   | 1.614   | 59.2      |
| 105P04954 | WEEKEND | I-580                       | NORTHBOUND | 109        | 0.595534   | 1.175   | 1.177   | 1.377   | 62.1      |
| 105+04953 | WEEKEND | I-580                       | NORTHBOUND | 106        | 0.127841   | 1.173   | 1.197   | 1.460   | 62.3      |
| 105+04954 | WEEKEND | I-580                       | NORTHBOUND | 108        | 0.434419   | 1.171   | 1.217   | 1.460   | 62.3      |
| 105P04953 | WEEKEND | I-580                       | NORTHBOUND | 107        | 0.300153   | 1.159   | 1.177   | 1.377   | 63.0      |
| 105-04954 | WEEKEND | I-580                       | SOUTHBOUND | 187        | 0.346632   | 1.208   | 1.224   | 1.732   | 58.8      |
| 105N04954 | WEEKEND | I-580                       | SOUTHBOUND | 188        | 0.568946   | 1.185   | 1.203   | 1.511   | 59.9      |
| 105-04953 | WEEKEND | I-580                       | SOUTHBOUND | 189        | 0.274273   | 1.163   | 1.224   | 1.543   | 61.0      |
| 105N04953 | WEEKEND | I-580                       | SOUTHBOUND | 190        | 0.455024   | 1.135   | 1.183   | 1.392   | 62.5      |
| 105+04996 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND  | 348        | 0.162619   | 1.241   | 1.218   | 1.861   | 54.0      |
| 105P04995 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND  | 347        | 0.498886   | 1.207   | 1.218   | 1.718   | 55.5      |
| 105+04995 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND  | 346        | 0.119974   | 1.110   | 1.153   | 1.308   | 61.3      |
| 105+04994 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND  | 344        | 0.227521   | 1.108   | 1.148   | 1.296   | 63.2      |
| 105P04994 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND  | 345        | 0.595199   | 1.106   | 1.150   | 1.278   | 62.4      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|-----------|------------|------------|---------|---------|---------|-----------|
| 105P04993 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 343        | 0.655049   | 1.102   | 1.148   | 1.273   | 63.5      |
| 105+04991 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 338        | 1.155197   | 1.098   | 1.153   | 1.236   | 61.9      |
| 105+04993 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 342        | 1.145367   | 1.095   | 1.129   | 1.228   | 63.9      |
| 105+04992 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 340        | 0.931535   | 1.095   | 1.131   | 1.232   | 63.0      |
| 105P04991 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 339        | 0.302546   | 1.093   | 1.153   | 1.236   | 62.2      |
| 105P04992 | WEEKEND | I-80 EB Robb Drive to I-590 | EASTBOUND | 341        | 0.881881   | 1.093   | 1.129   | 1.207   | 64.0      |
| 105P05182 | WEEKEND | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 367        | 0.205581   | 1.110   | 1.159   | 1.217   | 65.7      |
| 105+05183 | WEEKEND | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 368        | 4.039421   | 1.100   | 1.141   | 1.217   | 66.3      |
| 105+05182 | WEEKEND | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 366        | 4.236706   | 1.093   | 1.143   | 1.200   | 65.9      |
| 105P05183 | WEEKEND | I-80 EXIT 23 to EXIT 32     | EASTBOUND | 369        | 0.513128   | 1.077   | 1.127   | 1.183   | 65.9      |
| 105N05001 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 832        | 0.628548   | 1.128   | 1.155   | 1.426   | 59.4      |
| 105-05000 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 833        | 0.693593   | 1.126   | 1.175   | 1.396   | 59.5      |
| 105N05000 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 834        | 0.673927   | 1.117   | 1.158   | 1.347   | 59.1      |
| 105-05003 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 827        | 1.260768   | 1.089   | 1.113   | 1.190   | 63.3      |
| 105-05002 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 829        | 2.34529    | 1.087   | 1.113   | 1.190   | 63.5      |
| 105-05001 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 831        | 0.264219   | 1.085   | 1.115   | 1.214   | 62.7      |
| 105N05003 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 828        | 0.217492   | 1.084   | 1.131   | 1.190   | 63.7      |
| 105N05002 | WEEKEND | I-80 EXIT 23 to EXIT 32     | WESTBOUND | 830        | 0.455011   | 1.076   | 1.115   | 1.193   | 63.2      |
| 105P05001 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 359        | 0.671839   | 1.165   | 1.131   | 1.302   | 59.2      |
| 105+05001 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 358        | 0.664687   | 1.117   | 1.150   | 1.327   | 61.8      |
| 105+05000 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 356        | 0.282767   | 1.108   | 1.153   | 1.308   | 61.3      |
| 105+05002 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 360        | 0.22621    | 1.104   | 1.150   | 1.302   | 62.5      |
| 105P05000 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 357        | 0.537362   | 1.099   | 1.133   | 1.259   | 61.9      |
| 105P05002 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 361        | 0.474367   | 1.094   | 1.131   | 1.232   | 63.1      |
| 105P05003 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 363        | 0.374494   | 1.093   | 1.129   | 1.207   | 64.1      |
| 105+05004 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 364        | 1.001389   | 1.093   | 1.129   | 1.207   | 64.1      |
| 105+05003 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 362        | 2.435694   | 1.089   | 1.129   | 1.207   | 64.3      |
| 105P05004 | WEEKEND | I-80 McCarran to EXIT 23    | EASTBOUND | 365        | 0.241508   | 1.084   | 1.129   | 1.186   | 64.6      |
| 105N05004 | WEEKEND | I-80 McCarran to EXIT 23    | WESTBOUND | 826        | 0.199647   | 1.098   | 1.129   | 1.207   | 63.8      |
| 105-05004 | WEEKEND | I-80 McCarran to EXIT 23    | WESTBOUND | 825        | 4.237694   | 1.095   | 1.127   | 1.183   | 64.9      |
| 105-05182 | WEEKEND | I-80 McCarran to EXIT 23    | WESTBOUND | 823        | 4.056869   | 1.091   | 1.127   | 1.183   | 65.1      |

| TMC       | PERIOD  | SEGMENT                     | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105N05182 | WEEKEND | I-80 McCarran to EXIT 23    | WESTBOUND  | 824        | 0.208917   | 1.086   | 1.129   | 1.186   | 64.4      |
| 105N05183 | WEEKEND | I-80 McCarran to EXIT 23    | WESTBOUND  | 822        | 0.513762   | 1.086   | 1.127   | 1.183   | 65.4      |
| 105N04992 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 850        | 0.594646   | 1.156   | 1.259   | 1.388   | 58.8      |
| 105-04992 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 849        | 1.134139   | 1.142   | 1.218   | 1.367   | 58.7      |
| 105N04996 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 842        | 0.490113   | 1.111   | 1.158   | 1.320   | 59.4      |
| 105N04995 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 844        | 0.513656   | 1.110   | 1.153   | 1.283   | 61.3      |
| 105-04991 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 851        | 0.754487   | 1.108   | 1.172   | 1.283   | 61.4      |
| 105-04993 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 847        | 0.299283   | 1.107   | 1.153   | 1.283   | 61.4      |
| 105N04991 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 852        | 0.668887   | 1.107   | 1.150   | 1.232   | 62.3      |
| 105-04995 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 843        | 0.281928   | 1.102   | 1.155   | 1.264   | 60.8      |
| 105N04994 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 846        | 0.613343   | 1.097   | 1.133   | 1.236   | 62.0      |
| 105N04993 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 848        | 0.623111   | 1.092   | 1.153   | 1.236   | 62.3      |
| 105-04994 | WEEKEND | I-80 WB Robb Drive to I-590 | WESTBOUND  | 845        | 0.089714   | 1.092   | 1.133   | 1.236   | 62.3      |
| 105P21025 | WEEKEND | NV-445                      | NORTHBOUND |            | 0.033187   | 2.393   | 2.619   | 9.167   | 23.0      |
| 105P21024 | WEEKEND | NV-445                      | NORTHBOUND |            | 0.153056   | 1.546   | 1.714   | 3.529   | 38.8      |
| 105+21024 | WEEKEND | NV-445                      | NORTHBOUND |            | 1.684972   | 1.392   | 1.450   | 2.320   | 41.7      |
| 105+21025 | WEEKEND | NV-445                      | NORTHBOUND |            | 2.275038   | 1.248   | 1.295   | 1.781   | 45.7      |
| 105N21025 | WEEKEND | NV-445                      | SOUTHBOUND |            | 0.063324   | 2.290   | 2.500   | 7.857   | 24.0      |
| 105N21024 | WEEKEND | NV-445                      | SOUTHBOUND |            | 0.060006   | 2.216   | 2.400   | 7.500   | 27.1      |
| 105N21023 | WEEKEND | NV-445                      | SOUTHBOUND |            | 0.053373   | 1.834   | 1.833   | 5.000   | 30.0      |
| 105-21022 | WEEKEND | NV-445                      | SOUTHBOUND |            | 1.935335   | 1.497   | 1.581   | 2.579   | 32.7      |
| 105-21023 | WEEKEND | NV-445                      | SOUTHBOUND |            | 1.762152   | 1.482   | 1.487   | 2.762   | 39.1      |
| 105-21024 | WEEKEND | NV-445                      | SOUTHBOUND |            | 2.287608   | 1.352   | 1.372   | 2.107   | 43.6      |
| 105P04962 | WEEKEND | US-395                      | NORTHBOUND | 125        | 0.719411   | 1.211   | 1.346   | 1.628   | 57.8      |
| 105+04964 | WEEKEND | US-395                      | NORTHBOUND | 128        | 0.178228   | 1.203   | 1.273   | 1.522   | 58.2      |
| 105+04962 | WEEKEND | US-395                      | NORTHBOUND | 124        | 1.086026   | 1.203   | 1.333   | 1.619   | 56.5      |
| 105+04963 | WEEKEND | US-395                      | NORTHBOUND | 126        | 1.19238    | 1.185   | 1.296   | 1.522   | 59.0      |
| 105P04963 | WEEKEND | US-395                      | NORTHBOUND | 127        | 0.293492   | 1.176   | 1.296   | 1.489   | 59.5      |
| 105P04964 | WEEKEND | US-395                      | NORTHBOUND | 129        | 0.696004   | 1.146   | 1.207   | 1.346   | 61.1      |
| 105+04965 | WEEKEND | US-395                      | NORTHBOUND | 130        | 0.420842   | 1.144   | 1.183   | 1.291   | 62.1      |
| 105+04967 | WEEKEND | US-395                      | NORTHBOUND | 134        | 1.269772   | 1.137   | 1.167   | 1.321   | 61.5      |
| 105+04966 | WEEKEND | US-395                      | NORTHBOUND | 132        | 1.06621    | 1.121   | 1.148   | 1.250   | 62.5      |
| 105P04966 | WEEKEND | US-395                      | NORTHBOUND | 133        | 0.638291   | 1.118   | 1.169   | 1.255   | 61.7      |
| 105P04965 | WEEKEND | US-395                      | NORTHBOUND | 131        | 0.666812   | 1.112   | 1.145   | 1.246   | 63.8      |
| 105-04963 | WEEKEND | US-395                      | SOUTHBOUND | 169        | 0.416232   | 1.238   | 1.183   | 1.420   | 57.3      |
| 105N04964 | WEEKEND | US-395                      | SOUTHBOUND | 168        | 0.586885   | 1.182   | 1.186   | 1.321   | 59.2      |
| 105N04963 | WEEKEND | US-395                      | SOUTHBOUND | 170        | 0.37035    | 1.167   | 1.161   | 1.286   | 61.7      |
| 105-04962 | WEEKEND | US-395                      | SOUTHBOUND | 171        | 0.968015   | 1.122   | 1.145   | 1.246   | 63.3      |
| 105N04967 | WEEKEND | US-395                      | SOUTHBOUND | 162        | 0.51969    | 1.117   | 1.145   | 1.246   | 63.5      |



| TMC       | PERIOD  | SEGMENT                           | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|-----------------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105-04964 | WEEKEND | US-395                            | SOUTHBOUND | 167        | 0.573525   | 1.115   | 1.150   | 1.255   | 61.9      |
| 105-04966 | WEEKEND | US-395                            | SOUTHBOUND | 163        | 1.455568   | 1.114   | 1.167   | 1.296   | 62.9      |
| 105N04962 | WEEKEND | US-395                            | SOUTHBOUND | 172        | 0.781212   | 1.106   | 1.129   | 1.228   | 63.3      |
| 105-04965 | WEEKEND | US-395                            | SOUTHBOUND | 165        | 1.265055   | 1.105   | 1.148   | 1.228   | 63.3      |
| 105N04966 | WEEKEND | US-395                            | SOUTHBOUND | 164        | 0.405637   | 1.103   | 1.129   | 1.228   | 63.5      |
| 105N04965 | WEEKEND | US-395                            | SOUTHBOUND | 166        | 0.484825   | 1.102   | 1.148   | 1.228   | 63.5      |
| 105+04960 | WEEKEND | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 120        | 0.08642    | 1.191   | 1.320   | 1.535   | 55.4      |
| 105+04961 | WEEKEND | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 122        | 0.184976   | 1.182   | 1.264   | 1.489   | 56.7      |
| 105P04960 | WEEKEND | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 121        | 0.502584   | 1.177   | 1.264   | 1.457   | 56.9      |
| 105P04961 | WEEKEND | US-395 NB<br>McCarran to<br>Oddie | NORTHBOUND | 123        | 0.463624   | 1.176   | 1.264   | 1.457   | 57.0      |
| 105+04955 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 110        | 0.336354   | 1.177   | 1.220   | 1.532   | 61.2      |
| 105P04959 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 119        | 0.744632   | 1.169   | 1.236   | 1.447   | 58.2      |
| 105+04957 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 114        | 0.119987   | 1.162   | 1.224   | 1.511   | 61.1      |
| 105P04955 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 111        | 0.39239    | 1.153   | 1.180   | 1.385   | 62.4      |
| 105+04959 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 118        | 0.212142   | 1.145   | 1.214   | 1.417   | 59.4      |
| 105+04958 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 116        | 0.3243     | 1.145   | 1.203   | 1.420   | 62.0      |
| 105+04956 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 112        | 0.170715   | 1.140   | 1.180   | 1.309   | 63.1      |
| 105P04956 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 113        | 0.260914   | 1.128   | 1.164   | 1.315   | 63.0      |
| 105P04958 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 117        | 0.339405   | 1.125   | 1.207   | 1.346   | 62.2      |
| 105P04957 | WEEKEND | US-395 NB<br>Moana to I-80        | NORTHBOUND | 115        | 0.275323   | 1.121   | 1.183   | 1.340   | 63.4      |
| 105N04960 | WEEKEND | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 176        | 0.231666   | 1.191   | 1.283   | 1.447   | 57.1      |
| 105-04960 | WEEKEND | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 175        | 0.225185   | 1.157   | 1.236   | 1.388   | 58.8      |
| 105N04961 | WEEKEND | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 174        | 0.346539   | 1.129   | 1.193   | 1.308   | 60.2      |
| 105-04961 | WEEKEND | US-395 SB<br>McCarran to<br>Oddie | SOUTHBOUND | 173        | 1.146802   | 1.126   | 1.150   | 1.278   | 61.3      |
| 105-04959 | WEEKEND | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 177        | 0.332732   | 1.238   | 1.388   | 1.659   | 54.9      |
| 105N04959 | WEEKEND | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 178        | 0.629412   | 1.212   | 1.314   | 1.595   | 55.3      |
| 105-04958 | WEEKEND | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 179        | 0.125871   | 1.202   | 1.264   | 1.558   | 55.7      |
| 105-04957 | WEEKEND | US-395 SB<br>Moana to I-80        | SOUTHBOUND | 181        | 0.038985   | 1.178   | 1.250   | 1.556   | 59.4      |

| TMC       | PERIOD  | SEGMENT                    | DIRECTION  | ROAD ORDER | TMC LENGTH | AVG TTI | TTI P80 | TTI P95 | AVG SPEED |
|-----------|---------|----------------------------|------------|------------|------------|---------|---------|---------|-----------|
| 105N04958 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 180        | 0.413255   | 1.159   | 1.214   | 1.511   | 58.7      |
| 105N04955 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 186        | 0.398734   | 1.145   | 1.164   | 1.340   | 62.0      |
| 105-04956 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 183        | 0.208402   | 1.135   | 1.186   | 1.400   | 61.7      |
| 105N04957 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 182        | 0.578341   | 1.131   | 1.186   | 1.373   | 61.9      |
| 105-04955 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 185        | 0.170324   | 1.114   | 1.145   | 1.291   | 63.8      |
| 105N04956 | WEEKEND | US-395 SB<br>Moana to I-80 | SOUTHBOUND | 184        | 0.246436   | 1.113   | 1.145   | 1.291   | 63.8      |

## Vehicle Classification Reports

\*The classification count covers an area that has four volume stations within the “From and To”

- Formula: Trucks/AADT = Truck Percentage
- The total number of trucks (Light Trucks + Heavy Trucks) is 6,939

Data Collection Methods:

- Permanent Continuous Weigh In Motion (WIM) – (up to 365 days per year 24 hours per day)
- Permanent Continuous Automatic Vehicle Classification (AVC) – (up to 365 days per year 24 hours per day)
- Short Term AVC – (up to seven continuous days 24 hours per day).
- Manual Classification – (24 to 48 continuous hours, [by manual observation])

\*Vehicle Classification distributions are based on number of axels as defined by the Federal Highway Administration (FHWA).

| Route | Segment Description                 |                                      | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|-------|-------------------------------------|--------------------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|       |                                     |                                      | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|       | From                                | To                                   | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| IR15  | CA/NV Stateline                     | St. Rose Pkwy. Interchange           | 351          | 689  | 129   | 235          | 4995 | 29   | 321           | 134  | 56   | 2016      |
| IR15  | St. Rose Pkwy. Interchange          | Flamingo Rd. Interchange             | 584          | 1929 | 424   | 335          | 5186 | 86   | 314           | 131  | 164  | E         |
| IR15  | Flamingo Rd. Interchange            | Spring Mtn. Rd. Interchange          | 1388         | 4584 | 1007  | 796          | 8323 | 204  | 746           | 311  | 390  | E         |
| IR15  | Spring Mtn. Rd. Interchange         | Sahara Ave.                          | 1414         | 4584 | 1027  | 811          | 8483 | 208  | 761           | 317  | 397  | E         |
| IR15  | Sahara Ave.                         | L.V. Expwy Interchange               | 1398         | 4672 | 1015  | 802          | 8387 | 206  | 752           | 314  | 393  | E         |
| IR15  | L.V. Expwy Interchange              | Lake Mead Interchange                | 1047         | 4619 | 1791  | 1360         | 7225 | 300  | 328           | 203  | 480  | 2016      |
| IR15  | Lake Mead Interchange               | Speedway-Hollywood Blvd. Interchange | 839          | 6319 | 1435  | 1090         | 5789 | 240  | 263           | 163  | 385  | 2016      |
| IR15  | Speedway-Hollywood Blvd Interchange | US93                                 | 199          | 5063 | 102   | 279          | 3572 | 32   | 161           | 100  | 472  | 2016      |
| IR15  | US93                                | West Mesquite                        | 154          | 570  | 71    | 199          | 3718 | 43   | 113           | 106  | 218  | 2015      |
| IR15  | West Mesquite                       | CA/NV State Line                     | 182          | 693  | 48    | 554          | 2224 | 9    | 97            | 75   | 216  | 2015      |
| IR80  | CA/NV Stateline                     | Garson Rd.                           | 167          | 852  | 106   | 191          | 3859 | 27   | 170           | 151  | 9    | 2016      |
| IR80  | Garson Rd.                          | Robb Dr.                             | 748          | 1076 | 93    | 681          | 1654 | 14   | 327           | 65   | 15   | 2014      |
| IR80  | Robb Dr.                            | McCarran Ave.                        | 182          | 1476 | 196   | 162          | 4728 | 25   | 222           | 187  | 15   | 2014      |
| IR80  | McCarran Ave.                       | Keystone Ave.                        | 182          | 657  | 196   | 162          | 4728 | 25   | 222           | 187  | 15   | 2015      |
| IR80  | Keystone Ave.                       | Wells Ave.                           | 540          | 657  | 186   | 205          | 3724 | 22   | 248           | 183  | 20   | 2013      |
| IR80  | Wells Ave.                          | US 395                               | 580          | 745  | 225   | 235          | 3485 | 35   | 270           | 120  | 15   | 2014      |
| IR80  | US 395                              | Vista Blvd.                          | 476          | 1975 | 382   | 302          | 1617 | 50   | 98            | 44   | 69   | 2015      |
| IR80  | Vista Blvd.                         | Mustang                              | 39           | 1303 | 650   | 346          | 4501 | 79   | 244           | 159  | 316  | 2016      |
| IR80  | Mustang                             | USA Pkwy.                            | 183          | 657  | 284   | 147          | 3150 | 37   | 98            | 90   | 206  | 2016      |
| IR80  | USA Pkwy.                           | E. Fernley                           | 157          | 36   | 115   | 217          | 2667 | 22   | 99            | 61   | 284  | 2016      |
| IR80  | E. Fernley                          | US 95 (Trinity)                      | 100          | 457  | 75    | 279          | 1866 | 16   | 314           | 64   | 292  | 2015      |
| IR80  | US 95 (Trinity)                     | Winnemucca Blvd. West                | 90           | 367  | 58    | 198          | 1960 | 15   | 69            | 62   | 260  | 2016      |

| Route         | Segment Description          |                                 | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|---------------|------------------------------|---------------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|               |                              |                                 | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|               | From                         | To                              | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| IR80          | Winnemucca Blvd. West        | East Winnemucca                 | 80           | 272  | 41    | 117          | 2053 | 13   | 55            | 60   | 192  | 2016      |
| IR80          | East Winnemucca              | SR304                           | 100          | 177  | 45    | 48           | 2120 | 44   | 31            | 59   | 277  | 2015      |
| IR80          | SR304                        | SR304                           | 122          | 314  | 41    | 158          | 2177 | 30   | 55            | 56   | 304  | 2013      |
| IR80          | SR304                        | SR766 Central Carlin            | 100          | 276  | 45    | 48           | 2120 | 44   | 31            | 59   | 277  | 2016      |
| IR80          | SR766 Central Carlin         | SR225 Mt. City Hwy.             | 281          | 314  | 46    | 208          | 2690 | 37   | 73            | 68   | 285  | 2016      |
| IR80          | SR225 Mt. City Hwy.          | Osino                           | 219          | 524  | 50    | 168          | 2724 | 36   | 58            | 67   | 299  | 2016      |
| IR80          | Osino                        | E. Wells Ave.                   | 66           | 375  | 48    | 65           | 2236 | 31   | 30            | 61   | 277  | 2016      |
| IR80          | E. Wells Ave.                | US95                            | 77           | 429  | 26    | 118          | 1907 | 15   | 46            | 61   | 242  | 2015      |
| IR215         | US95                         | IR15                            | 394          | 260  | 343   | 193          | 1033 | 39   | 36            | 22   | 99   | 2015      |
| IR215         | IR15                         | Valley View                     | 245          | 1599 | 303   | 123          | 641  | 40   | 34            | 12   | 169  | E         |
| CL215         | Valley View                  | Rainbow Super Arterial          | 349          | 2277 | 431   | 174          | 912  | 57   | 48            | 17   | 240  | E         |
| CL215         | Rainbow Super Arterial       | SR159 Charleston Blvd.          | 133          | 957  | 208   | 68           | 347  | 29   | 24            | 6    | 143  | E         |
| CL215         | SR159 Charleston Blvd.       | Summerlin Pkwy.                 | 96           | 920  | 263   | 52           | 248  | 41   | 32            | 2    | 238  | 2015      |
| CL215         | Summerlin Pkwy.              | US 95 (Trinity)                 | 132          | 998  | 185   | 122          | 2054 | 34   | 101           | 77   | 124  | E         |
| CL215         | US 95 (Trinity)              | CA/NV Stateline                 | 149          | 1037 | 145   | 156          | 2956 | 31   | 136           | 114  | 66   | E         |
| US6           | CA/NV Stateline              | US6/95 (Coaldale Jct.)          | 3            | 9    | 1     | 3            | 38   | 0    | 10            | 0    | 0    | 2015      |
| US6           | US6/95 (Coaldale Jct.)       | Jct. US95 (In Tonopah)          | 18           | 184  | 15    | 56           | 355  | 7    | 11            | 8    | 49   | 2016      |
| US6           | Jct. US95 (In Tonopah)       | SR375                           | 11           | 40   | 8     | 18           | 28   | 1    | 1             | 0    | 11   | 2016      |
| US 6          | SR375                        | SR318                           | 1            | 13   | 1     | 7            | 18   | 1    | 2             | 1    | 5    | 2016      |
| US6           | SR318                        | US6 / 50 / 93                   | 2            | 24   | 10    | 94           | 314  | 7    | 5             | 3    | 34   | 2016      |
| US6 / 50 / 93 | US6 / 50 / 93                | Cave Lake Rd.                   | 1            | 6    | 14    | 1            | 137  | 7    | 1             | 0    | 19   | 2016      |
| US6 / 50      | Cave Lake Rd.                | Jct. US6 / 50 / 93 (Maj. Woods) | 1            | 5    | 12    | 4            | 93   | 4    | 0             | 0    | 9    | 2016      |
| US50          | CA/NV Stateline              | Nevada Beach                    | 1            | 3    | 2     | 3            | 25   | 2    | 0             | 0    | 6    | 2016      |
| US50          | Nevada Beach                 | SR28                            | 116          | 224  | 40    | 43           | 158  | 0    | 10            | 1    | 12   | 2015      |
| US50          | SR28                         | US395                           | 118          | 183  | 44    | 43           | 165  | 2    | 8             | 4    | 12   | 2015      |
| US50          | US395                        | Fairview Ave.                   | 267          | 500  | 116   | 80           | 582  | 3    | 73            | 19   | 63   | 2015      |
| US50          | Fairview Ave.                | IR580 / US 50                   | 99           | 1838 | 106   | 234          | 654  | 24   | 49            | 25   | 107  | 2016      |
| US50          | IR580/ US50                  | Fairview Ln./Graves Ln.         | 94           | 718  | 76    | 69           | 80   | 4    | 14            | 4    | 21   | 2016      |
| US50          | Fairview Ln. / Graves Ln.    | Deer Run Rd. / Arrowhead Dr.    | 162          | 540  | 104   | 90           | 124  | 4    | 24            | 6    | 41   | 2016      |
| US50          | Deer Run Rd. / Arrowhead Dr. | SR341                           | 113          | 348  | 54    | 79           | 2018 | 8    | 22            | 4    | 122  | 2016      |
| US50          | Dayton Valley Rd.            | SR341                           | 78           | 163  | 37    | 55           | 152  | 5    | 15            | 2    | 105  | 2016      |

| Route  | Segment Description   |                          | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|--|-----------------------|--------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|  |                       |                          | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|  | From                  | To                       | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| US50   | US95 Alt.             | Lahonton Boat Landing    | 10           | 33   | 11    | 17           | 37   | 1    | 3             | 0    | 9    | 2016      |
| US50   | Lahonton Boat Landing | US50 Alt.                | 14           | 39   | 9     | 17           | 40   | 2    | 1             | 2    | 10   | 2016      |
| US50   | US50 Alt.             | US95                     | 74           | 271  | 38    | 138          | 447  | 4    | 29            | 10   | 56   | 2016      |
| US50   | US95                  | SR121 / Dixie Valley Rd. | 8            | 44   | 8     | 24           | 50   | 2    | 9             | 1    | 12   | 2016      |
| US50   | Dixie Valley Rd.      | SR305                    | 4            | 29   | 6     | 17           | 58   | 1    | 6             | 1    | 9    | 2016      |
| US50   | SR305                 | SR376                    | 1            | 3    | 4     | 1            | 51   | 8    | 2             | 0    | 20   | 2016      |
| US50   | SR376                 | SR278                    | 3            | 9    | 2     | 34           | 39   | 2    | 7             | 0    | 9    | 2016      |
| US50   | SR278                 | Fayette Ave.             | 1            | 2    | 11    | 3            | 42   | 6    | 1             | 0    | 13   | 2016      |
| US50A/<br>US95A  | US50                  | SR427                    | 18           | 184  | 15    | 56           | 355  | 7    | 11            | 8    | 49   | 2016      |
| US50A/<br>US95A  | SR427                 | Roundabout               | 20           | 99   | 21    | 13           | 150  | 2    | 9             | 1    | 10   | 2016      |
| US50A  | Roundabout            | US50                     | 32           | 698  | 38    | 97           | 559  | 13   | 30            | 18   | 73   | 2016      |
| US93   | AZ/NV Stateline       | Nevada Hwy.              | 152          | 986  | 136   | 187          | 1590 | 28   | 82            | 57   | 64   | 2016      |
| US93   | Nevada Hwy.           | Buchanan Blvd.           | 214          | 239  | 56    | 128          | 1742 | 19   | 157           | 38   | 13   | 2016      |
| US93   | Buchanan Blvd.        | US95                     | 395          | 466  | 65    | 160          | 1479 | 21   | 127           | 35   | 15   | 2015      |
| US93/95  | RR Pass               | Wagonwheel Dr.           | 446          | 622  | 91    | 282          | 1829 | 21   | 171           | 43   | 90   | 2015      |
| US93/95 run concurrent with and are mileposted IR515, Wagonwheel Dr. to IR15. Then US93 runs concurrent with and is mileposted IR15, Spaghetti Bowl to Jct. US93 N. of Apex. |                       |                          |              |      |       |              |      |      |               |      |      |           |
| US93   | IR15                  | SR318                    | 27           | 118  | 9     | 50           | 271  | 5    | 14            | 4    | 19   | 2016      |
| US93   | SR318                 | SR319                    | 1            | 13   | 1     | 7            | 18   | 1    | 2             | 1    | 5    | 2016      |
| US93   | SR319                 | US6/50                   | 3            | 7    | 7     | 4            | 65   | 2    | 2             | 0    | 5    | 2016      |
| US93   | SR319                 | US6/50                   | 3            | 7    | 7     | 4            | 65   | 2    | 2             | 0    | 5    | 2016      |
| US93   | US50                  | US93 Alt.                | 21           | 56   | 8     | 26           | 412  | 6    | 7             | 3    | 100  | 2015      |
| US93   | US93 Alt. (MP303.892) | IR80 (MP 381.753)        | 2            | 12   | 6     | 6            | 373  | 6    | 1             | 2    | 15   | 2016      |
| US93   | IR80 (MP 381.753)     | Idaho (MP 449.668)       | 13           | 179  | 8     | 51           | 669  | 13   | 3             | 2    | 28   | 2016      |
| US93A  | US93 Alt (MP 0.00)    | IR80 (MP 59.2)           | 0            | 1    | 3     | 0            | 24   | 1    | 0             | 0    | 72   | 2016      |
| US95   | California Ave.       | SR163 (Laughlin Hwy.)    | 19           | 71   | 10    | 63           | 367  | 1    | 49            | 7    | 1    | 2016      |
| US95   | SR163 (Laughlin Hwy.) | SR164 (Nipton Rd.)       | 66           | 238  | 13    | 162          | 146  | 0    | 43            | 4    | 1    | 2016      |
| US95   | SR164 (Nipton Rd.)    | US93/95 RR Pass          | 33           | 27   | 44    | 40           | 496  | 15   | 39            | 7    | 21   | 2016      |
| US95 Runs concurrent with and is mileposted US93 from Jct. US93 to Wagonwheel Dr., then US93/95 runs concurrent with and are mileposted IR515 to IR15 at the Spaghetti Bowl. |                       |                          |              |      |       |              |      |      |               |      |      |           |
| US515  | Wagonwheel Dr.        | IR215                    | 446          | 622  | 91    | 282          | 1829 | 21   | 171           | 43   | 90   | 2015      |
| US515  | Russel Rd.            | SR582 Boulder Hwy.       | 719          | 2066 | 598   | 246          | 2805 | 234  | 97            | 44   | 268  | 2016      |
| US515  | Boulder Hwy.          | IR15                     | 460          | 1286 | 442   | 233          | 1763 | 147  | 124           | 52   | 262  | E         |
| US95   | IR15                  | Rainbow Rd.              | 330          | 895  | 363   | 227          | 1241 | 104  | 137           | 56   | 258  | 2016      |
| US95   | Rainbow Rd.           | Rancho Interchange       | 200          | 505  | 285   | 220          | 720  | 60   | 150           | 60   | 255  | E         |
| US95   | Rancho Interchange    | SR157 Mt. Charleston     | 226          | 969  | 132   | 72           | 388  | 12   | 9             | 5    | 121  | 2013      |
| US95   | SR157 Mt. Charleston  | Indian Springs AFB       | 76           | 125  | 25    | 87           | 380  | 9    | 12            | 5    | 62   | 2016      |

| Route   | Segment                      |                              | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|---|------------------------------|------------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|   |                              |                              | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|   | From                         | To                           | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| US95  | Indian Springs AFB           | SR160                        | 43           | 92   | 9     | 71           | 361  | 9    | 13            | 7    | 67   | 2016      |
| US95  | SR160                        | 1 <sup>st</sup> St. (Beatty) | 35           | 61   | 10    | 52           | 399  | 8    | 16            | 5    | 21   | 2016      |
| US95  | 1 <sup>st</sup> St. (Beatty) | SR226                        | 28           | 51   | 8     | 36           | 384  | 4    | 12            | 7    | 66   | 2015      |
| US95  | SR266                        | Jct. US6 (in Tonopah)        | 29           | 57   | 7     | 46           | 323  | 5    | 15            | 5    | 60   | 2016      |
| US6/95 run concurrent from Junction US6 in Tonopah to Coaldale Jct. and are mileposted at US6.      |                              |                              |              |      |       |              |      |      |               |      |      |           |
| US95  | Jct. US6 (Coaldale Jct.)     | SR360                        | 28           | 54   | 6     | 62           | 311  | 4    | 15            | 5    | 32   | 2015      |
| US95  | SR360                        | SR362                        | 34           | 57   | 8     | 30           | 547  | 7    | 45            | 8    | 29   | 2016      |
| US95  | SR362                        | Army Ammo Depot (N)          | 33           | 86   | 15    | 45           | 519  | 4    | 37            | 8    | 37   | E         |
| US95  | Army Ammo Depot (N)          | US95 Alt.                    | 35           | 74   | 11    | 33           | 539  | 6    | 46            | 8    | 34   | 2016      |
| US95  | US95 Alt.                    | Williams St. (US50)          | 21           | 129  | 18    | 41           | 571  | 5    | 23            | 13   | 48   | 2016      |
| US95  | Williams St. (US 50)         | IR80                         | 7            | 24   | 7     | 20           | 190  | 2    | 5             | 0    | 12   | 2016      |
| US95 runs concurrent with and is milepost as I80 from Trinity Rest Stop to Winnemucca.              |                              |                              |              |      |       |              |      |      |               |      |      |           |
| US95  | Winnemucca Downtown W.       | Winnemucca Blvd. E.          | 125          | 60   | 25    | 135          | 210  | 30   | 10            | 5    | 25   | E         |
| US95  | Melarkey St.                 | Reinhart Rd.                 | 110          | 78   | 38    | 19           | 291  | 24   | 11            | 6    | 44   | 2016      |
| US95  | Reinhart Rd.                 | SR290                        | 19           | 73   | 8     | 79           | 297  | 6    | 14            | 3    | 28   | 2016      |
| US95  | SR290                        | SR140                        | 15           | 53   | 6     | 62           | 313  | 6    | 13            | 2    | 26   | 2016      |
| US95  | SR140                        | Idaho                        | 18           | 89   | 4     | 47           | 294  | 5    | 12            | 4    | 25   | 2016      |
| US95A   | US95                         | SR339                        | 17           | 35   | 2     | 18           | 50   | 1    | 3             | 1    | 1    | 2016      |
| US95A   | SR339                        | Weeks Cutoff                 | 198          | 65   | 131   | 28           | 255  | 6    | 15            | 4    | 21   | 2016      |
| US95A   | Weeks Cutoff                 | US50                         | 28           | 46   | 13    | 14           | 263  | 6    | 15            | 3    | 19   | 2016      |
| US50A/95A runs concurrent from Jct. US50 to the Roundabout in Fernley, and are mileposted as US50A. |                              |                              |              |      |       |              |      |      |               |      |      |           |
| US395   | CA/NV Stateline              | Riverview                    | 27           | 9    | 11    | 10           | 181  | 1    | 30            | 13   | 0    | 2016      |
| US395   | Riverview                    | SR88                         | 87           | 169  | 72    | 43           | 424  | 7    | 87            | 18   | 90   | 2015      |
| US395   | SR88                         | US50                         | 132          | 299  | 53    | 95           | 163  | 1    | 34            | 6    | 6    | 2016      |
| US50 / IR580  | US395 / S. Carson St.        | US 50 (William St.)          | 99           | 1838 | 106   | 234          | 654  | 24   | 49            | 25   | 107  | 2016      |
| IR580   | US50 (William St.)           | Lakeview Interchange         | 272          | 685  | 91    | 203          | 329  | 2    | 65            | 11   | 28   | 2014      |
| IR580   | Lakeview Interchange         | Bowers Mansion Rd.           | 213          | 426  | 64    | 102          | 329  | 2    | 65            | 11   | 28   | 2014      |
| IR580   | Bowers Mansion Rd.           | Mt. Rose Hwy. (SR431)        | 143          | 2228 | 142   | 228          | 711  | 63   | 63            | 30   | 42   | 2015      |
| IR580   | Mt. Rose Hwy.                | Neil Rd.                     | 142          | 2915 | 137   | 213          | 720  | 48   | 56            | 28   | 63   | 2016      |
| IR580   | Neil Rd.                     | Plumb Ln.                    | 476          | 1303 | 382   | 302          | 1617 | 50   | 98            | 44   | 69   | 2014      |
| US395   | Plumb Ln.                    | I-80                         | 518          | 1506 | 454   | 610          | 2200 | 21   | 75            | 65   | 44   | 2010      |
| US395   | IR80                         | Lemmon Valley                | 339          | 1335 | 272   | 384          | 1084 | 7    | 89            | 31   | 215  | 2015      |
| US395   | Lemmon Valley                | Red Rock                     | 360          | 808  | 195   | 329          | 1147 | 9    | 103           | 27   | 25   | 2016      |
| US 395  | Red Rock                     | California                   | 119          | 326  | 36    | 107          | 503  | 4    | 75            | 16   | 3    | 2016      |
| SR28  | US50                         | Village Blvd.                | 28           | 59   | 17    | 6            | 52   | 1    | 3             | 1    | 0    | 2015      |
| SR28  | Village Blvd.                | SR431                        | 82           | 100  | 75    | 11           | 68   | 3    | 3             | 0    | 2    | 2014      |
| SR28  | SR431                        | California                   | 75           | 154  | 91    | 12           | 45   | 1    | 5             | 1    | 0    | 2015      |
| SR88  | California                   | Centerville Ln.              | 23           | 618  | 56    | 50           | 108  | 3    | 18            | 30   | 40   | 2015      |

| Route | Segment                     |                             | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|-------|-----------------------------|-----------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|       | From                        | To                          | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|       |                             |                             | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| SR88  | Centerville Ln.             | US395                       | 38           | 112  | 64    | 20           | 226  | 7    | 16            | 2    | 6    | 2016      |
| SR117 | US50                        | US95                        | 35           | 76   | 19    | 29           | 132  | 1    | 12            | 7    | 30   | 2016      |
| IR146 | IR15                        | IR215 (Pecos Interchange)   | 204          | 394  | 118   | 59           | 254  | 8    | 17            | 28   | 51   | 2016      |
| SR157 | Kyle Canyon Recreation Area | US95                        | 5            | 33   | 9     | 8            | 4    | 0    | 0             | 0    | 0    | 2016      |
| SR159 | SR160 (Pahrump Valley Rd.)  | IR215                       | 15           | 28   | 17    | 8            | 230  | 0    | 23            | 4    | 16   | 2015      |
| SR160 | SR604 (Las Vegas Blvd.)     | Rainbow Blvd.               | 222          | 380  | 136   | 68           | 439  | 11   | 27            | 6    | 56   | 2016      |
| SR160 | Rainbow Blvd.               | SR159 (Blue Diamond)        | 66           | 120  | 23    | 40           | 271  | 2    | 24            | 4    | 22   | 2015      |
| SR160 | SR159 (Blue Diamond)        | SR371 (Charles Brown Hwy.)  | 53           | 80   | 6     | 32           | 73   | 1    | 4             | 3    | 7    | 2015      |
| SR160 | SR372 (Charles Brown Hwy.)  | US95                        | 11           | 14   | 9     | 13           | 28   | 1    | 3             | 0    | 5    | 2016      |
| SR163 | US95                        | Needles Hwy.                | 40           | 75   | 22    | 46           | 64   | 1    | 8             | 3    | 2    | 2016      |
| SR163 | Needles Hwy.                | NV/AZ State Line            | 41           | 67   | 44    | 29           | 80   | 1    | 19            | 3    | 1    | 2016      |
| SR170 | IR15                        | Mesquite Blvd.              | 21           | 67   | 6     | 4            | 18   | 4    | 1             | 1    | 49   | 2016      |
| SR206 | SR88 Woodfords Rd.          | SR207                       | 9            | 25   | 3     | 5            | 15   | 0    | 1             | 1    | 0    | 2016      |
| SR206 | SR207                       | Genoa Ln.                   | 10           | 14   | 5     | 2            | 3    | 0    | 0             | 0    | 0    | 2016      |
| SR207 | US50                        | SR206                       | 24           | 30   | 11    | 4            | 43   | 1    | 0             | 1    | 1    | 2016      |
| SR207 | SR206                       | SR88                        | 18           | 48   | 1     | 4            | 28   | 0    | 1             | 0    | 0    | 2016      |
| SR208 | US395                       | SR339                       | 4            | 4    | 1     | 2            | 6    | 0    | 2             | 0    | 0    | 2016      |
| SR208 | SR339                       | US95 Alt.                   | 5            | 5    | 10    | 5            | 10   | 5    | 5             | 0    | 0    | E         |
| SR225 | Idaho St.                   | Copper St.                  | 15           | 90   | 5     | 45           | 10   | 0    | 0             | 0    | 5    | 2008      |
| SR225 | Copper St.                  | Idaho                       | 14           | 37   | 14    | 17           | 23   | 2    | 1             | 0    | 12   | 2016      |
| SR227 | Idaho St.                   | Licht Way                   | 195          | 364  | 114   | 55           | 65   | 4    | 16            | 3    | 29   | 2013      |
| SR266 | CA/NV Stateline             | US95                        | 1            | 6    | 1     | 4            | 2    | 0    | 1             | 0    | 0    | 2016      |
| SR278 | US50                        | IR80 (Carlin)               | 4            | 23   | 4     | 4            | 14   | 2    | 3             | 1    | 7    | 2015      |
| SR294 | PE / HU Line                | SR794 (3 <sup>rd</sup> St.) | 10           | 31   | 20    | 2            | 7    | 1    | 2             | 0    | 28   | 2016      |
| SR305 | US50                        | Copper Canyon Rd.           | 7            | 6    | 21    | 4            | 19   | 5    | 5             | 1    | 20   | 2016      |
| SR305 | Copper Canyon Rd.           | 7                           | 3            | 27   | 2     | 6            | 24   | 12   | 4             | 0    | 18   | 2015      |
| SR318 | US93/SR375                  | US6                         | 13           | 39   | 3     | 22           | 290  | 4    | 9             | 2    | 21   | 2016      |
| SR319 | US93                        | NV/UT State Line            | 5            | 2    | 9     | 1            | 28   | 3    | 0             | 0    | 4    | 2016      |
| SR339 | SR208 (Yerington Rd.)       | US95 Alt.                   | 13           | 53   | 5     | 15           | 51   | 0    | 20            | 1    | 4    | 2016      |
| SR341 | US50                        | SR342 (in V.C.)             | 31           | 56   | 15    | 8            | 57   | 0    | 8             | 0    | 7    | 2016      |
| SR341 | SR342 (in V.C.)             | US395                       | 17           | 42   | 17    | 5            | 17   | 1    | 0             | 2    | 1    | 2014      |
| SR360 | US6                         | US95                        | 3            | 7    | 1     | 5            | 276  | 2    | 60            | 4    | 3    | 2016      |
| SR362 | US95                        | US95                        | 25           | 27   | 8     | 16           | 539  | 6    | 42            | 8    | 33   | 2016      |
| SR373 | California Ave.             | US95                        | 11           | 23   | 2     | 5            | 85   | 2    | 6             | 0    | 9    | 2016      |
| SR375 | US6                         | SR318                       | 1            | 6    | 0     | 6            | 9    | 0    | 1             | 0    | 5    | 2016      |
| SR376 | US6                         | US50 (Austin)               | 1            | 1    | 4     | 1            | 28   | 10   | 4             | 1    | 4    | 2016      |

| Route               | Segment                    |                               | Light Trucks |      |       | Heavy Trucks |      |      |               |      |      | Data Year |
|---------------------|----------------------------|-------------------------------|--------------|------|-------|--------------|------|------|---------------|------|------|-----------|
|                     |                            |                               | Single Unit  |      |       | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|                     | From                       | To                            | Bus          | 2 Ax | 3+ Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| US395A              | Bowers Mansion Rd. (SR429) | Mt. Rose Hwy. (SR431)         | 73           | 123  | 15    | 18           | 46   | 0    | 3             | 2    | 2    | 2015      |
| US395A              | Mt. Rose Hwy. (SR431)      | Longley Ln.                   | 35           | 67   | 12    | 15           | 16   | 0    | 6             | 1    | 2    | 2015      |
| Virginia St.        | Longley Ln.                | S. McCarran Blvd.             | 35           | 67   | 12    | 15           | 16   | 0    | 6             | 1    | 2    | 2015      |
| Virginia St.        | S. McCarran Blvd.          | Plumb Ln.                     | 138          | 86   | 24    | 64           | 44   | 0    | 15            | 3    | 4    | 2014      |
| Virginia St.        | Plumb Ln.                  | N. McCarran Blvd.             | 109          | 69   | 14    | 21           | 25   | 0    | 5             | 1    | 1    | 2016      |
| Virginia St., SR430 | N. McCarran Blvd.          | US395                         | 99           | 63   | 10    | 7            | 19   | 0    | 1             | 0    | 0    | 2016      |
| SR431               | SR28 (N. Lake Blvd.)       | Mt. Rose Ski Area             | 19           | 66   | 54    | 5            | 12   | 1    | 1             | 0    | 0    | 2015      |
| SR431               | Mt. Rose Ski Area          | SR430 (S. Virginia St.)       | 13           | 486  | 19    | 12           | 25   | 34   | 9             | 1    | 31   | 2014      |
| SR445               | IR80                       | N. McCarran Blvd.             | 44           | 204  | 64    | 53           | 105  | 4    | 20            | 8    | 31   | 2015      |
| SR445               | N. McCarran Blvd.          | 44                            | 44           | 204  | 64    | 53           | 105  | 4    | 20            | 8    | 31   | 2015      |
| SR513               | S. Division St.            | Fairview Ave.                 | 23           | 22   | 11    | 3            | 5    | 0    | 0             | 0    | 2    | 2015      |
| SR520               | SR529 (S. Carson St.)      | SR530 (William St.)           | 20           | 70   | 14    | 8            | 15   | 0    | 7             | 3    | 2    | 2015      |
| SR525               | Graves Ln.                 | US50                          | 22           | 74   | 11    | 11           | 9    | 0    | 0             | 1    | 2    | 2016      |
| SR529               | US50 (Spooner Jct.)        | Fairview Dr.                  | 267          | 500  | 116   | 80           | 582  | 3    | 73            | 19   | 63   | 2015      |
| SR529               | Fairview Dr.               | SR520 (Stewart St.)           | 153          | 323  | 66    | 57           | 309  | 2    | 43            | 13   | 34   | E         |
| SR529               | SR530 (Williams St.)       | SR531 (College Pkwy.)         | 56           | 135  | 16    | 26           | 41   | 0    | 8             | 4    | 4    | E         |
| SR529               | SR531 (College Pkwy.)      | IR580 / US395 (Carson Bypass) | 73           | 123  | 15    | 18           | 46   | 0    | 3             | 2    | 2    | 2015      |
| SR530               | SR529 (Carson St.)         | US395 (Carson By-Pass)        | 25           | 895  | 47    | 48           | 36   | 3    | 3             | 1    | 1    | 2016      |
| SR531               | SR529 (North Carson St.)   | Graves Ln.                    | 55           | 80   | 8     | 7            | 7    | 0    | 0             | 0    | 0    | 2016      |
| SR535               | West Urban Limit           | End State Maintained          | 127          | 148  | 70    | 29           | 103  | 5    | 11            | 3    | 51   | 2015      |
| SR562               | Las Vegas Blvd (SR604)     | Mountain Vista                | 306          | 192  | 36    | 41           | 127  | 1    | 4             | 2    | 1    | 2014      |
| SR562               | Mountain Vista             | US95                          | 148          | 183  | 80    | 35           | 93   | 3    | 10            | 4    | 23   | 2016      |
| SR573               | SR599 (Rancho Rd.)         | IR15                          | 295          | 309  | 112   | 65           | 177  | 5    | 15            | 6    | 51   | 2016      |
| SR574               | US95 (OK Hwy.)             | MLK Blvd.                     | 168          | 144  | 333   | 10           | 79   | 8    | 0             | 0    | 15   | 2016      |
| SR574               | MLK Blvd.                  | SR612 (Nellis Blvd.)          | 439          | 444  | 327   | 99           | 349  | 10   | 70            | 8    | 38   | 2016      |
| SR579               | SR599 (Rancho Rd.)         | SR604 (Las Vegas Blvd.)       | 120          | 112  | 17    | 30           | 54   | 1    | 5             | 0    | 18   | 2016      |
| SR579               | Las Vegas Blvd. (SR604)    | SR612 (Nellis Blvd.)          | 147          | 143  | 13    | 10           | 26   | 0    | 1             | 00   | 1    | 2016      |
| SR582               | US95 (Wagonwheel Dr.)      | SR612 (Nellis Blvd.)          | 154          | 218  | 62    | 165          | 44   | 2    | 8             | 1    | 2    | 2016      |
| SR582               | SR612 (Nellis Blvd.)       | Maryland Pkwy.                | 88           | 146  | 37    | 110          | 22   | 1    | 7             | 2    | 2    | 2016      |
| SR589               | Rainbow Blvd.              | Las Vegas Blvd. (SR604)       | 100          | 219  | 30    | 153          | 62   | 1    | 10            | 1    | 2    | 2016      |
| SR589               | SR604 (Las Vegas Blvd.)    | Nellis Blvd. (SR612)          | 48           | 70   | 29    | 72           | 16   | 1    | 2             | 0    | 2    | 2014      |
| SR592               | Rainbow Blvd.              | SR604 (Las Vegas Blvd.)       | 190          | 252  | 68    | 55           | 63   | 1    | 6             | 1    | 4    | 2015      |
| SR592               | SR604 (Las Vegas Blvd.)    | SR582 (Boulder Hwy.)          | 189          | 243  | 91    | 49           | 47   | 1    | 10            | 2    | 10   | 2015      |



| Route      | Segment                    |                                   | Light Trucks |      |      | Heavy Trucks |      |      |               |      |      | Data Year |
|------------|----------------------------|-----------------------------------|--------------|------|------|--------------|------|------|---------------|------|------|-----------|
|            | From                       | To                                | Single Unit  |      |      | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|            |                            |                                   | Bus          | 2 Ax | 3 Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| SR593      | Rainbow Blvd.              | IR15                              | 275          | 225  | 85   | 100          | 90   | 5    | 5             | 5    | 5    | E         |
| SR593      | IR15                       | IR515                             | 145          | 204  | 38   | 168          | 76   | 1    | 8             | 2    | 2    | 2015      |
| SR593      | IR515                      | Boulder Hwy. (SR582)              | 128          | 225  | 43   | 202          | 61   | 2    | 6             | 0    | 3    | 2016      |
| SR594      | Paradise                   | Sandhill Rd.                      | 68           | 119  | 25   | 13           | 20   | 6    | 2             | 1    | 3    | 2016      |
| SR594      | Sandhill Rd.               | IR515                             | 86           | 120  | 34   | 12           | 40   | 6    | 3             | 1    | 4    | 2016      |
| SR595      | SR160 (Pahrump Valley Rd.) | SR593 (Tropicana Blvd.)           | 87           | 96   | 37   | 9            | 57   | 1    | 3             | 1    | 3    | 2014      |
| SR595      | SR593 (Tropicana Blvd.)    | Rainbow Blvd. Interchange (US95)  | 167          | 190  | 51   | 60           | 130  | 3    | 9             | 1    | 8    | 2014      |
| SR596      | SR593 (Tropicana Ave.)     | US95                              | 109          | 150  | 12   | 10           | 21   | 0    | 1             | 0    | 7    | 2016      |
| SR596      | US95                       | Rancho Rd.                        | 81           | 107  | 25   | 6            | 11   | 1    | 1             | 0    | 0    | 2016      |
| SR599      | US95                       | SR574 (Cheyenne Ave.)             | 243          | 199  | 22   | 24           | 47   | 1    | 6             | 1    | 4    | 2015      |
| SR599      | SR574 (Cheyenne Ave.)      | US95 (Ann/Rancho Rd. Interchange) | 246          | 193  | 61   | 15           | 25   | 1    | 3             | 0    | 9    | 2016      |
| SR604      | IR15                       | SR146 (Saint Rose Pkwy.)          | 7            | 24   | 9    | 10           | 18   | 4    | 1             | 1    | 57   | 2016      |
| SR604      | SR146 (Saint Rose Pkwy.)   | SR593 (Tropicana Ave.)            | 300          | 373  | 82   | 22           | 57   | 1    | 4             | 0    | 1    | 2016      |
| SR604      | SR593 (Tropicana Ave.)     | SR147 (Lake Mead Blvd.)           | 434          | 354  | 22   | 59           | 16   | 1    | 12            | 5    | 3    | 2016      |
| SR604      | SR147 (Lake Mead Blvd.)    | IR15                              | 63           | 84   | 24   | 126          | 48   | 0    | 12            | 2    | 5    | 2016      |
| SR606      | Russell Rd.                | Charleston Blvd.                  | 63           | 92   | 19   | 96           | 19   | 0    | 5             | 1    | 2    | 2016      |
| SR607      | SR562 (Sunset Rd.)         | SR159 (Charleston Blvd.)          | 219          | 150  | 67   | 30           | 32   | 0    | 5             | 1    | 2    | 2016      |
| SR607      | SR159 (Charleston Blvd.)   | SR604 (Las Vegas Blvd.)           | 145          | 192  | 67   | 35           | 34   | 0    | 9             | 1    | 1    | 2015      |
| SR610      | SR159 (Charleston Blvd.)   | SR604 (Las Vegas Blvd.)           | 145          | 192  | 67   | 35           | 34   | 0    | 9             | 1    | 1    | 2015      |
| SR610      | SR604 (Las Vegas Blvd.)    | IR15                              | 215          | 344  | 253  | 142          | 274  | 16   | 156           | 11   | 112  | 2016      |
| SR612      | SR593 (Tropicana Ave.)     | Washington Ave.                   | 163          | 218  | 75   | 23           | 55   | 1    | 6             | 0    | 2    | 2015      |
| SR612      | Washington Ave.            | SR604 Las Vegas Blvd.             | 286          | 328  | 230  | 41           | 66   | 5    | 9             | 1    | 54   | 2016      |
| SR648      | Kietzke Ln.                | E. McCarran Blvd.                 | 175          | 336  | 69   | 42           | 105  | 2    | 39            | 9    | 6    | 2014      |
| SR653      | McCarran Blvd.             | Virginia St.                      | 12           | 44   | 8    | 5            | 1    | 0    | 1             | 0    | 0    | 2016      |
| SR657      | California Ave.            | IR80                              | 64           | 99   | 13   | 25           | 7    | 0    | 11            | 2    | 5    | 2016      |
| SR657      | IR80                       | End of Route                      | 30           | 60   | 20   | 35           | 15   | 0    | 5             | 5    | 10   | 2015      |
| SR659      | IR580/US395                | IR80                              | 125          | 225  | 90   | 80           | 65   | 10   | 0             | 0    | 10   | E         |
| SR659      | IR80                       | Longley Ln.                       | 144          | 253  | 120  | 69           | 288  | 10   | 24            | 25   | 75   | 2014      |
| SR659      | Longley Ln.                | IR580                             | 125          | 765  | 150  | 120          | 160  | 5    | 5             | 5    | 5    | E         |
| SR756      | SR88                       | US395                             | 22           | 40   | 3    | 2            | 6    | 0    | 1             | 0    | 0    | 2016      |
| SR766      | IR80                       | End of Route                      | 127          | 130  | 13   | 21           | 52   | 18   | 4             | 2    | 381  | 2015      |
| Airway Dr. | Longley Ln.                | Neil Rd.                          | 65           | 97   | 31   | 14           | 33   | 1    | 8             | 1    | 3    | 2015      |
| Carat Ave. | Double Diamond Pkwy.       | Steamboat Pkwy.                   | 11           | 28   | 15   | 0            | 11   | 0    | 0             | 0    | 15   | 2016      |

| Route               | Segment               |                       | Light Trucks |      |      | Heavy Trucks |      |      |               |      |      | Data Year |
|---------------------|-----------------------|-----------------------|--------------|------|------|--------------|------|------|---------------|------|------|-----------|
|                     |                       |                       | Single Unit  |      |      | Semi-Trailer |      |      | Multi-Trailer |      |      |           |
|                     | From                  | To                    | Bus          | 2 Ax | 3 Ax | 4 Ax         | 5 Ax | 6 Ax | 5 Ax          | 6 Ax | 7 Ax |           |
| Double Diamond      | Double R Blvd.        | Double R Blvd.        | 45           | 151  | 9    | 7            | 16   | 1    | 1             | 1    | 7    | 2016      |
| Echo Blvd.          | Moya Blvd.            | Alpha Ave.            | 48           | 26   | 14   | 22           | 42   | 0    | 5             | 1    | 2    | 2016      |
| Fairview Ave.       | S. Carson St.         | Freeway Entrance      | 229          | 364  | 154  | 69           | 604  | 4    | 80            | 12   | 42   | 2014      |
| Fairview Ave.       | Freeway Entrance      | US50                  | 36           | 82   | 23   | 12           | 19   | 0    | 6             | 1    | 3    | 2015      |
| Jacks Valley Rd.    | SR206                 | US395                 | 12           | 21   | 4    | 2            | 1    | 0    | 4             | 0    | 0    | 2016      |
| Koval Ln.           | Reno Ave.             | Sands                 | 545          | 680  | 24   | 34           | 43   | 0    | 3             | 1    | 1    | 2016      |
| Lone Mtn. Rd.       | IR215                 | Rancho Rd.            | 26           | 73   | 10   | 6            | 3    | 0    | 1             | 0    | 0    | 2016      |
| Lone Mts. Rd.       | Rancho Rd.            | Camino Al Norte       | 10           | 67   | 2    | 3            | 5    | 1    | 1             | 0    | 0    | 2015      |
| Longley Ln.         | S. McCarran Blvd.     | Pembroke Dr.          | 80           | 131  | 30   | 83           | 67   | 0    | 6             | 4    | 0    | 2014      |
| Needles Hwy.        | CA/NV Stateline       | SR163 (Laughlin Hwy.) | 32           | 34   | 4    | 15           | 13   | 0    | 8             | 0    | 0    | 2016      |
| Nevada Hwy.         | Buchanan Blvd.        | US93                  | 14           | 31   | 6    | 4            | 1    | 0    | 1             | 0    | 0    | 2016      |
| Sandhill Rd.        | Sunset Rd.            | Tropicana Ave.        | 78           | 59   | 12   | 40           | 0    | 1    | 1             | 0    | 1    | 2016      |
| Sandhill Rd.        | Russel Rd.            | Boulder Hwy.          | 62           | 51   | 8    | 5            | 10   | 1    | 1             | 0    | 0    | 2016      |
| South Meadows Pkwy. | I-580 NB off/on ramps | E. of Veterans Pkwy.  | 57           | 63   | 7    | 2            | 5    | 0    | 1             | 0    | 0    | 2015      |
| Sparks Blvd.        | IR80                  | Pyramid Way           | 27           | 60   | 41   | 54           | 135  | 1    | 6             | 2    | 2    | 2016      |
| Terminal Way        | Plumb Ln.             | Gregg St.             | 152          | 149  | 46   | 31           | 29   | 0    | 5             | 1    | 3    | 2014      |
| Torrey Pines Rd.    | Tropicana Ave.        | Charleston Blvd.      | 5            | 25   | 2    | 1            | 1    | 0    | 0             | 0    | 0    | 2016      |
| USA Pkwy.           | IR80                  | EOP                   | 68           | 175  | 207  | 110          | 910  | 4    | 16            | 4    | 32   | 2016      |
| Valley View         | IR215                 | Spring Mtn.           | 113          | 123  | 24   | 12           | 21   | 1    | 3             | 0    | 1    | 2016      |
| Valley View         | Spring Mtn.           | US95                  | 143          | 196  | 24   | 16           | 19   | 1    | 2             | 1    | 1    | 2016      |
| Veterans Pkwy.      | SR341 (Geiger Grade)  | S. Meadows Pkwy.      | 44           | 111  | 8    | 7            | 11   | 2    | 1             | 0    | 7    | 2016      |
| Vista Blvd.         | IR80                  | Prater Way            | 142          | 319  | 222  | 176          | 419  | 3    | 35            | 15   | 34   | 2016      |
| Vista Blvd.         | Prater Way            | End of Maintained     | 82           | 124  | 57   | 15           | 38   | 3    | 4             | 2    | 7    | 2015      |
| W. Fourth St.       | IR80                  | W. McCarran Blvd.     | 30           | 37   | 31   | 2            | 41   | 0    | 0             | 0    | 2    | 2016      |
| W. Mesquite Blvd.   | IR15                  | Sandhill Blvd.        | 28           | 89   | 25   | 9            | 30   | 3    | 7             | 2    | 55   | 2016      |
| Wedge Pkwy.         | Mt. Rose Hwy.         | Arrow Creek Pkwy.     | 7            | 22   | 8    | 1            | 1    | 0    | 0             | 0    | 0    | 2016      |

### Reno Facility

| SEGMENT                     | DIRECTION  | PERIOD  | AVG_TTI | TTI_P80 | TTI_P95 | AVG_SPEED | Score |                     |
|-----------------------------|------------|---------|---------|---------|---------|-----------|-------|---------------------|
| I-580                       | NORTHBOUND | AM PEAK | 1.149   | 1.196   | 1.349   | 63.6      |       |                     |
| I-580                       | NORTHBOUND | MIDDAY  | 1.199   | 1.238   | 1.419   | 60.9      |       |                     |
| I-580                       | NORTHBOUND | PM PEAK | 1.672   | 2.086   | 3.115   | 43.7      | 25    | I-580 Aux lanes     |
| I-580                       | NORTHBOUND | WEEKEND | 1.159   | 1.196   | 1.349   | 63.1      |       |                     |
| I-580                       | SOUTHBOUND | AM PEAK | 1.220   | 1.259   | 1.427   | 58.2      |       |                     |
| I-580                       | SOUTHBOUND | MIDDAY  | 1.202   | 1.247   | 1.415   | 59.1      |       |                     |
| I-580                       | SOUTHBOUND | PM PEAK | 1.262   | 1.319   | 1.930   | 56.3      |       |                     |
| I-580                       | SOUTHBOUND | WEEKEND | 1.160   | 1.199   | 1.382   | 61.3      |       |                     |
| I-80 EB Robb Drive to I-590 | EASTBOUND  | AM PEAK | 1.214   | 1.220   | 1.548   | 56.8      | 8.3   | I-80 Robb to I-580  |
| I-80 EB Robb Drive to I-590 | EASTBOUND  | MIDDAY  | 1.136   | 1.154   | 1.235   | 60.8      |       |                     |
| I-80 EB Robb Drive to I-590 | EASTBOUND  | PM PEAK | 1.156   | 1.177   | 1.289   | 59.7      |       |                     |
| I-80 EB Robb Drive to I-590 | EASTBOUND  | WEEKEND | 1.110   | 1.140   | 1.209   | 62.2      |       |                     |
| I-80 EXIT 23 to EXIT 32     | EASTBOUND  | AM PEAK | 1.129   | 1.125   | 1.176   | 64.2      |       |                     |
| I-80 EXIT 23 to EXIT 32     | EASTBOUND  | MIDDAY  | 1.103   | 1.123   | 1.154   | 65.6      |       |                     |
| I-80 EXIT 23 to EXIT 32     | EASTBOUND  | PM PEAK | 1.113   | 1.136   | 1.176   | 65.1      |       |                     |
| I-80 EXIT 23 to EXIT 32     | EASTBOUND  | WEEKEND | 1.117   | 1.145   | 1.194   | 64.9      |       |                     |
| I-80 EXIT 23 to EXIT 32     | WESTBOUND  | AM PEAK | 1.313   | 1.376   | 2.109   | 51.9      | 16.6  | Mustang to USA      |
| I-80 EXIT 23 to EXIT 32     | WESTBOUND  | MIDDAY  | 1.120   | 1.141   | 1.196   | 60.9      |       |                     |
| I-80 EXIT 23 to EXIT 32     | WESTBOUND  | PM PEAK | 1.285   | 1.364   | 1.947   | 53.1      |       |                     |
| I-80 EXIT 23 to EXIT 32     | WESTBOUND  | WEEKEND | 1.108   | 1.130   | 1.191   | 61.5      |       |                     |
| I-80 McCarran to EXIT 23    | EASTBOUND  | AM PEAK | 1.150   | 1.131   | 1.193   | 60.4      |       |                     |
| I-80 McCarran to EXIT 23    | EASTBOUND  | MIDDAY  | 1.104   | 1.123   | 1.156   | 63.0      |       |                     |
| I-80 McCarran to EXIT 23    | EASTBOUND  | PM PEAK | 1.201   | 1.151   | 1.232   | 57.9      | 8.3   | McCarran to Mustang |
| I-80 McCarran to EXIT 23    | EASTBOUND  | WEEKEND | 1.106   | 1.134   | 1.184   | 62.8      |       |                     |
| I-80 McCarran to EXIT 23    | WESTBOUND  | AM PEAK | 1.133   | 1.125   | 1.161   | 62.6      |       |                     |
| I-80 McCarran to EXIT 23    | WESTBOUND  | MIDDAY  | 1.105   | 1.121   | 1.155   | 64.2      |       |                     |
| I-80 McCarran to EXIT 23    | WESTBOUND  | PM PEAK | 1.247   | 1.123   | 1.238   | 56.9      | 8.3   | McCarran to Mustang |

| SEGMENT                     | DIRECTION  | PERIOD  | AVG_TTI | TTI_P80 | TTI_P95 | AVG_SPEED | Score |                        |
|-----------------------------|------------|---------|---------|---------|---------|-----------|-------|------------------------|
| I-80 McCarran to EXIT 23    | WESTBOUND  | WEEKEND | 1.114   | 1.129   | 1.172   | 63.7      |       |                        |
| I-80 WB Robb Drive to I-590 | WESTBOUND  | AM PEAK | 1.153   | 1.181   | 1.241   | 58.7      |       |                        |
| I-80 WB Robb Drive to I-590 | WESTBOUND  | MIDDAY  | 1.141   | 1.169   | 1.219   | 59.4      |       |                        |
| I-80 WB Robb Drive to I-590 | WESTBOUND  | PM PEAK | 1.150   | 1.188   | 1.278   | 58.9      | 8.3   | I-80 West              |
| I-80 WB Robb Drive to I-590 | WESTBOUND  | WEEKEND | 1.129   | 1.163   | 1.219   | 60.0      |       |                        |
| NV-445                      | NORTHBOUND | AM PEAK | 1.326   | 1.437   | 1.834   | 43.3      |       |                        |
| NV-445                      | NORTHBOUND | MIDDAY  | 1.298   | 1.396   | 1.803   | 44.3      |       |                        |
| NV-445                      | NORTHBOUND | PM PEAK | 1.459   | 1.573   | 2.163   | 39.4      |       |                        |
| NV-445                      | NORTHBOUND | WEEKEND | 1.306   | 1.361   | 1.913   | 44.2      |       |                        |
| NV-445                      | SOUTHBOUND | AM PEAK | 1.668   | 1.893   | 3.300   | 32.9      | 25    | Pyramid Highway        |
| NV-445                      | SOUTHBOUND | MIDDAY  | 1.510   | 1.609   | 2.638   | 36.4      |       |                        |
| NV-445                      | SOUTHBOUND | PM PEAK | 1.554   | 1.664   | 2.679   | 35.3      |       |                        |
| NV-445                      | SOUTHBOUND | WEEKEND | 1.474   | 1.568   | 2.494   | 37.3      |       |                        |
| US-395                      | NORTHBOUND | AM PEAK | 1.182   | 1.217   | 1.339   | 59.0      |       |                        |
| US-395                      | NORTHBOUND | MIDDAY  | 1.163   | 1.199   | 1.298   | 60.0      |       |                        |
| US-395                      | NORTHBOUND | PM PEAK | 1.177   | 1.217   | 1.411   | 59.3      |       |                        |
| US-395                      | NORTHBOUND | WEEKEND | 1.144   | 1.211   | 1.328   | 61.1      |       |                        |
| US-395                      | SOUTHBOUND | AM PEAK | 1.629   | 1.869   | 3.571   | 43.1      | 25    | Clear Acre to Red Rock |
| US-395                      | SOUTHBOUND | MIDDAY  | 1.138   | 1.156   | 1.250   | 61.7      |       |                        |
| US-395                      | SOUTHBOUND | PM PEAK | 1.140   | 1.161   | 1.261   | 61.6      |       |                        |
| US-395                      | SOUTHBOUND | WEEKEND | 1.110   | 1.143   | 1.222   | 63.4      |       |                        |
| US-395 NB McCarran to Oddie | NORTHBOUND | AM PEAK | 1.242   | 1.298   | 1.450   | 54.3      |       |                        |
| US-395 NB McCarran to Oddie | NORTHBOUND | MIDDAY  | 1.199   | 1.258   | 1.379   | 56.3      |       |                        |
| US-395 NB McCarran to Oddie | NORTHBOUND | PM PEAK | 1.335   | 1.483   | 1.782   | 50.6      |       |                        |
| US-395 NB McCarran to Oddie | NORTHBOUND | WEEKEND | 1.185   | 1.290   | 1.449   | 57.1      |       |                        |
| US-395 NB Moana to I-80     | NORTHBOUND | AM PEAK | 1.175   | 1.223   | 1.337   | 60.1      |       |                        |
| US-395 NB Moana to I-80     | NORTHBOUND | MIDDAY  | 1.187   | 1.228   | 1.321   | 59.5      |       |                        |
| US-395 NB Moana to I-80     | NORTHBOUND | PM PEAK | 1.662   | 2.102   | 3.179   | 42.5      | 25    | I-580 Aux lanes        |
| US-395 NB Moana to I-80     | NORTHBOUND | WEEKEND | 1.146   | 1.197   | 1.301   | 61.7      |       |                        |

| SEGMENT                                    | DIRECTION  | PERIOD  | AVG_TTI | TTI_P80 | TTI_P95 | AVG_SPEED | Score |                   |
|--|------------|---------|---------|---------|---------|-----------|-------|-------------------|
| <b>US-395 SB<br/>McCarran to<br/>Oddie</b> | SOUTHBOUND | AM PEAK | 2.433   | 3.136   | 6.331   | 28.2      | 25    | Spaghetti<br>bowl |
| <b>US-395 SB<br/>McCarran to<br/>Oddie</b> | SOUTHBOUND | MIDDAY  | 1.174   | 1.202   | 1.309   | 58.5      |       |                   |
| <b>US-395 SB<br/>McCarran to<br/>Oddie</b> | SOUTHBOUND | PM PEAK | 1.257   | 1.224   | 1.378   | 54.6      |       |                   |
| <b>US-395 SB<br/>McCarran to<br/>Oddie</b> | SOUTHBOUND | WEEKEND | 1.131   | 1.182   | 1.270   | 60.8      |       |                   |
| <b>US-395 SB Moana<br/>to I-80</b>         | SOUTHBOUND | AM PEAK | 1.377   | 1.427   | 1.946   | 50.5      |       |                   |
| <b>US-395 SB Moana<br/>to I-80</b>         | SOUTHBOUND | MIDDAY  | 1.214   | 1.251   | 1.370   | 57.3      |       |                   |
| <b>US-395 SB Moana<br/>to I-80</b>         | SOUTHBOUND | PM PEAK | 1.303   | 1.303   | 1.951   | 53.3      |       |                   |
| <b>US-395 SB Moana<br/>to I-80</b>         | SOUTHBOUND | WEEKEND | 1.167   | 1.213   | 1.337   | 59.6      |       |                   |

**TTTR Metric**

| SEGMENT                           | DIRECTION  | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|-----------------------------------|------------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                                   |            |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| I-580                             | NORTHBOUND | 105+04953 | 106        | 1.286           | 1.714          | 3.875         | 1.286         | 1.286         |
| I-580                             | NORTHBOUND | 105P04953 | 107        | 1.235           | 1.765          | 3.778         | 1.235         | 1.313         |
| I-580                             | NORTHBOUND | 105+04954 | 108        | 1.375           | 1.500          | 2.333         | 1.320         | 1.333         |
| I-580                             | SOUTHBOUND | 105-04953 | 189        | 1.313           | 1.438          | 1.563         | 1.250         | 1.313         |
| I-580                             | SOUTHBOUND | 105N04953 | 190        | 1.231           | 1.269          | 1.333         | 1.269         | 1.231         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04991 | 338        | 1.130           | 1.116          | 1.159         | 1.243         | 1.130         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105P04991 | 339        | 1.167           | 1.111          | 1.167         | 1.222         | 1.111         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04992 | 340        | 1.127           | 1.111          | 1.130         | 1.218         | 1.111         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105P04992 | 341        | 1.275           | 1.120          | 1.180         | 1.196         | 1.120         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04993 | 342        | 1.373           | 1.154          | 1.200         | 1.200         | 1.108         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105P04993 | 343        | 1.184           | 1.132          | 1.158         | 1.184         | 1.162         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04994 | 344        | 1.308           | 1.154          | 1.231         | 1.231         | 1.154         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105P04994 | 345        | 1.229           | 1.171          | 1.200         | 1.143         | 1.143         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04995 | 346        | 1.286           | 1.286          | 1.286         | 1.143         | 1.143         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105P04995 | 347        | 1.467           | 1.467          | 1.467         | 1.241         | 1.276         |
| I-80 EB<br>Robb Drive<br>to I-590 | EASTBOUND  | 105+04996 | 348        | 1.800           | 1.600          | 1.500         | 1.333         | 1.333         |
| I-80 EXIT<br>23 to EXIT<br>32     | EASTBOUND  | 105+05182 | 366        | 1.105           | 1.050          | 1.088         | 1.107         | 1.088         |
| I-80 EXIT<br>23 to EXIT<br>32     | EASTBOUND  | 105P05182 | 367        | 1.182           | 1.091          | 1.182         | 1.083         | 1.182         |
| I-80 EXIT<br>23 to EXIT<br>32     | EASTBOUND  | 105+05183 | 368        | 1.121           | 1.063          | 1.080         | 1.145         | 1.098         |

| SEGMENT                  | DIRECTION | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|--------------------------|-----------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                          |           |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105-05003 | 827        | 1.096           | 1.096          | 1.178         | 1.167         | 1.125         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105N05003 | 828        | 1.167           | 1.167          | 1.167         | 1.167         | 1.167         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105-05002 | 829        | 1.110           | 1.088          | 1.221         | 1.149         | 1.104         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105N05002 | 830        | 1.231           | 1.154          | 1.423         | 1.154         | 1.115         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105-05001 | 831        | 1.333           | 1.200          | 1.688         | 1.200         | 1.133         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105N05001 | 832        | 1.718           | 1.342          | 2.711         | 1.378         | 1.270         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105-05000 | 833        | 2.591           | 1.767          | 3.089         | 1.268         | 1.214         |
| I-80 EXIT 23 to EXIT 32  | WESTBOUND | 105N05000 | 834        | 2.814           | 2.214          | 2.750         | 1.250         | 1.200         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105+05000 | 356        | 1.294           | 1.176          | 1.353         | 1.375         | 1.250         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105P05000 | 357        | 1.219           | 1.125          | 1.219         | 1.226         | 1.161         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105+05001 | 358        | 1.256           | 1.154          | 1.231         | 1.205         | 1.179         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105P05001 | 359        | 1.158           | 1.105          | 1.158         | 1.158         | 1.105         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105+05002 | 360        | 1.308           | 1.231          | 1.308         | 1.231         | 1.231         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105P05002 | 361        | 1.143           | 1.111          | 1.185         | 1.148         | 1.148         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105+05003 | 362        | 1.108           | 1.072          | 1.102         | 1.129         | 1.086         |
| I-80 McCarran to EXIT 23 | EASTBOUND | 105P05003 | 363        | 1.143           | 1.095          | 1.143         | 1.143         | 1.095         |

| SEGMENT                     | DIRECTION | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|-----------------------------|-----------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                             |           |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| I-80 McCarran to EXIT 23    | EASTBOUND | 105P05004 | 365        | 1.071           | 1.071          | 1.071         | 1.071         | 1.071         |
| I-80 McCarran to EXIT 23    | WESTBOUND | 105N05183 | 822        | 1.107           | 1.107          | 1.143         | 1.143         | 1.107         |
| I-80 McCarran to EXIT 23    | WESTBOUND | 105-05182 | 823        | 1.088           | 1.066          | 1.123         | 1.123         | 1.088         |
| I-80 McCarran to EXIT 23    | WESTBOUND | 105N05182 | 824        | 1.083           | 1.083          | 1.167         | 1.083         | 1.083         |
| I-80 McCarran to EXIT 23    | WESTBOUND | 105-05004 | 825        | 1.070           | 1.070          | 1.190         | 1.126         | 1.088         |
| I-80 McCarran to EXIT 23    | WESTBOUND | 105N05004 | 826        | 1.182           | 1.182          | 1.273         | 1.182         | 1.182         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105N04996 | 842        | 1.200           | 1.207          | 1.267         | 1.241         | 1.172         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105-04995 | 843        | 1.176           | 1.176          | 1.235         | 1.235         | 1.118         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105N04995 | 844        | 1.167           | 1.133          | 1.161         | 1.267         | 1.133         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105-04994 | 845        | 1.200           | 1.200          | 1.200         | 1.400         | 1.200         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105N04994 | 846        | 1.139           | 1.111          | 1.167         | 1.333         | 1.111         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105-04993 | 847        | 1.111           | 1.111          | 1.167         | 1.333         | 1.111         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105N04993 | 848        | 1.135           | 1.108          | 1.135         | 1.405         | 1.135         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105-04992 | 849        | 1.139           | 1.139          | 1.181         | 1.370         | 1.137         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105N04992 | 850        | 1.184           | 1.184          | 1.211         | 1.282         | 1.184         |
| I-80 WB Robb Drive to I-590 | WESTBOUND | 105-04991 | 851        | 1.133           | 1.133          | 1.178         | 1.283         | 1.133         |

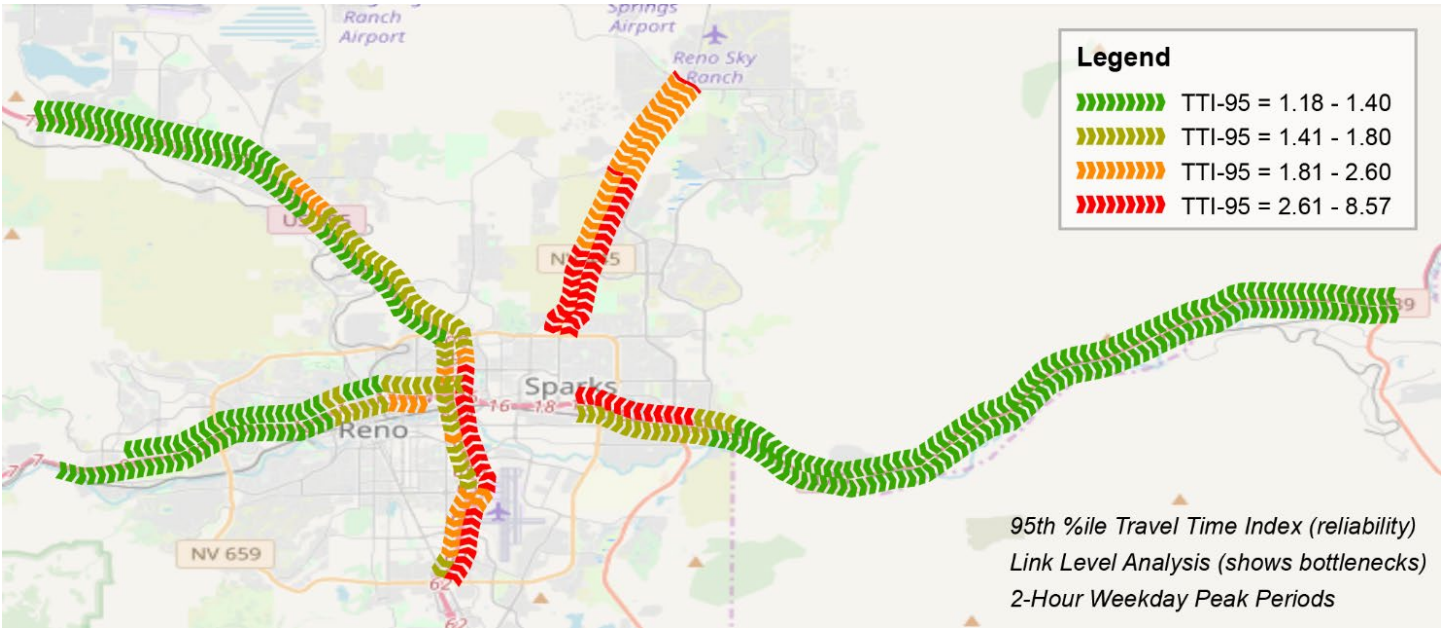
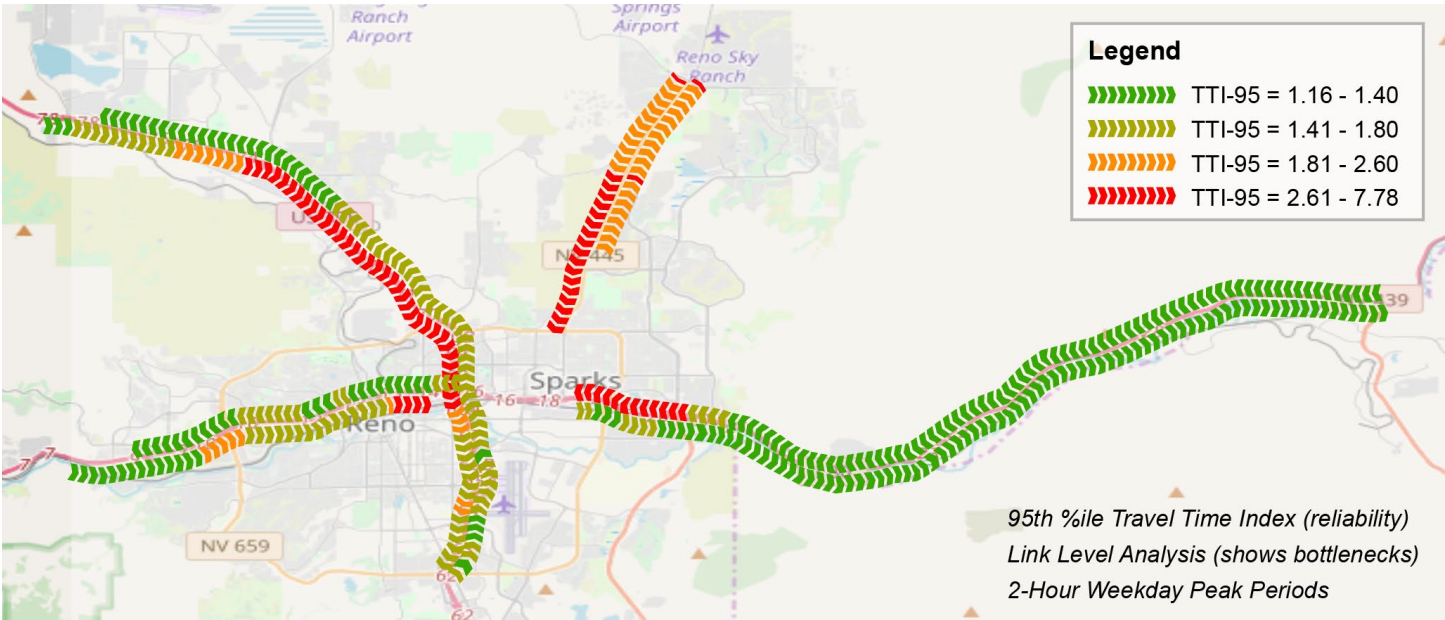


| SEGMENT                     | DIRECTION  | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|-----------------------------|------------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                             |            |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| NV-445                      | NORTHBOUND | 105+21024 |            | 1.722           | 1.815          | 2.141         | 2.281         | 2.008         |
| NV-445                      | NORTHBOUND | 105+21025 |            | 1.596           | 1.497          | 1.569         | 1.540         | 1.590         |
| NV-445                      | NORTHBOUND | 105P21024 |            | 3.083           | 3.091          | 3.833         | 2.364         | 3.091         |
| NV-445                      | NORTHBOUND | 105P21025 |            | 3.333           | 3.667          | 4.000         | 3.333         | 6.667         |
| NV-445                      | SOUTHBOUND | 105-21022 |            | 3.090           | 3.090          | 2.649         | 1.681         | 2.050         |
| NV-445                      | SOUTHBOUND | 105-21023 |            | 2.133           | 1.924          | 1.924         | 1.766         | 2.341         |
| NV-445                      | SOUTHBOUND | 105-21024 |            | 1.843           | 1.651          | 2.000         | 1.658         | 1.861         |
| NV-445                      | SOUTHBOUND | 105N21023 |            | 4.000           | 3.750          | 3.500         | 2.750         | 4.500         |
| NV-445                      | SOUTHBOUND | 105N21024 |            | 3.600           | 4.000          | 6.200         | 3.250         | 5.400         |
| NV-445                      | SOUTHBOUND | 105N21025 |            | 3.500           | 3.833          | 4.143         | 2.800         | 5.500         |
| US-395                      | NORTHBOUND | 105P04962 | 125        | 1.378           | 1.364          | 1.395         | 1.313         | 1.465         |
| US-395                      | NORTHBOUND | 105+04963 | 126        | 1.284           | 1.292          | 1.319         | 1.299         | 1.361         |
| US-395                      | NORTHBOUND | 105P04963 | 127        | 1.278           | 1.222          | 1.333         | 1.263         | 1.353         |
| US-395                      | NORTHBOUND | 105+04964 | 128        | 1.364           | 1.273          | 1.455         | 1.364         | 1.400         |
| US-395                      | NORTHBOUND | 105P04964 | 129        | 1.250           | 1.200          | 1.619         | 1.262         | 1.200         |
| US-395                      | NORTHBOUND | 105+04965 | 130        | 1.208           | 1.208          | 1.500         | 1.250         | 1.167         |
| US-395                      | NORTHBOUND | 105P04965 | 131        | 1.158           | 1.132          | 1.211         | 1.158         | 1.105         |
| US-395                      | NORTHBOUND | 105+04966 | 132        | 1.213           | 1.164          | 1.180         | 1.161         | 1.167         |
| US-395                      | NORTHBOUND | 105P04966 | 133        | 1.162           | 1.162          | 1.194         | 1.158         | 1.194         |
| US-395                      | NORTHBOUND | 105+04967 | 134        | 1.230           | 1.189          | 1.205         | 1.213         | 1.178         |
| US-395                      | SOUTHBOUND | 105N04967 | 162        | 1.172           | 1.138          | 1.138         | 1.167         | 1.138         |
| US-395                      | SOUTHBOUND | 105-04966 | 163        | 1.289           | 1.188          | 1.188         | 1.235         | 1.193         |
| US-395                      | SOUTHBOUND | 105N04966 | 164        | 1.217           | 1.130          | 1.130         | 1.217         | 1.182         |
| US-395                      | SOUTHBOUND | 105-04965 | 165        | 1.625           | 1.125          | 1.153         | 1.205         | 1.141         |
| US-395                      | SOUTHBOUND | 105N04965 | 166        | 2.607           | 1.107          | 1.143         | 1.179         | 1.148         |
| US-395                      | SOUTHBOUND | 105-04964 | 167        | 2.324           | 1.182          | 1.212         | 1.273         | 1.152         |
| US-395                      | SOUTHBOUND | 105N04964 | 168        | 2.143           | 1.176          | 1.171         | 1.294         | 1.206         |
| US-395                      | SOUTHBOUND | 105-04963 | 169        | 3.160           | 1.375          | 1.375         | 1.333         | 1.250         |
| US-395                      | SOUTHBOUND | 105N04963 | 170        | 4.318           | 1.143          | 1.190         | 1.190         | 1.143         |
| US-395                      | SOUTHBOUND | 105-04962 | 171        | 4.000           | 1.148          | 1.182         | 1.222         | 1.148         |
| US-395                      | SOUTHBOUND | 105N04962 | 172        | 5.333           | 1.111          | 1.156         | 1.200         | 1.163         |
| US-395 NB McCarran to Oddie | NORTHBOUND | 105+04960 | 120        | 1.333           | 1.333          | 2.500         | 1.500         | 1.167         |

| SEGMENT                           | DIRECTION  | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|-----------------------------------|------------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                                   |            |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| US-395 NB<br>McCarran<br>to Oddie | NORTHBOUND | 105+04961 | 122        | 1.250           | 1.250          | 1.615         | 1.417         | 1.364         |
| US-395 NB<br>McCarran<br>to Oddie | NORTHBOUND | 105P04961 | 123        | 1.233           | 1.276          | 1.433         | 1.367         | 1.276         |
| US-395 NB<br>McCarran<br>to Oddie | NORTHBOUND | 105+04962 | 124        | 1.329           | 1.319          | 1.348         | 1.324         | 1.418         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04954 | 109        | 1.176           | 1.229          | 1.750         | 1.265         | 1.212         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105+04955 | 110        | 1.400           | 1.400          | 1.714         | 1.400         | 1.368         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04955 | 111        | 1.318           | 1.217          | 1.792         | 1.261         | 1.227         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105+04956 | 112        | 1.300           | 1.200          | 2.000         | 1.200         | 1.333         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04956 | 113        | 1.267           | 1.267          | 2.000         | 1.333         | 1.200         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105+04957 | 114        | 1.429           | 1.429          | 2.286         | 1.429         | 1.429         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04957 | 115        | 1.313           | 1.250          | 2.529         | 1.313         | 1.333         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105+04958 | 116        | 1.316           | 1.316          | 2.900         | 1.474         | 1.263         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04958 | 117        | 1.190           | 1.238          | 3.273         | 1.333         | 1.250         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105+04959 | 118        | 1.385           | 1.286          | 4.214         | 1.615         | 1.385         |
| US-395 NB<br>Moana to<br>I-80     | NORTHBOUND | 105P04959 | 119        | 1.383           | 1.426          | 3.231         | 1.604         | 1.422         |
| US-395 SB<br>McCarran<br>to Oddie | SOUTHBOUND | 105-04961 | 173        | 5.000           | 1.162          | 1.191         | 1.343         | 1.152         |
| US-395 SB<br>McCarran<br>to Oddie | SOUTHBOUND | 105N04961 | 174        | 4.000           | 1.190          | 1.286         | 1.381         | 1.200         |

| SEGMENT                        | DIRECTION  | TMC       | ROAD ORDER | Weekday         |                |               | All Days      | Weekend       |
|--------------------------------|------------|-----------|------------|-----------------|----------------|---------------|---------------|---------------|
|                                |            |           |            | 6:00am-10:00 am | 10:00am-4:00pm | 4:00pm-8:00pm | 8:00pm-6:00am | 6:00am-8:00pm |
| US-395 SB<br>McCarran to Oddie | SOUTHBOUND | 105-04960 | 175        | 2.813           | 1.286          | 1.357         | 1.429         | 1.214         |
| US-395 SB<br>McCarran to Oddie | SOUTHBOUND | 105N04960 | 176        | 2.588           | 1.267          | 1.333         | 1.400         | 1.286         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04959 | 177        | 2.000           | 1.348          | 1.391         | 1.500         | 1.364         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04959 | 178        | 1.727           | 1.390          | 1.450         | 1.488         | 1.450         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04958 | 179        | 1.667           | 1.500          | 1.500         | 1.375         | 1.375         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04958 | 180        | 1.630           | 1.346          | 1.423         | 1.400         | 1.320         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04957 | 181        | 2.000           | 1.500          | 2.000         | 1.500         | 1.500         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04957 | 182        | 1.486           | 1.229          | 1.371         | 1.294         | 1.235         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04956 | 183        | 1.346           | 1.333          | 1.462         | 1.333         | 1.333         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04956 | 184        | 1.200           | 1.214          | 1.429         | 1.214         | 1.143         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04955 | 185        | 1.200           | 1.200          | 1.400         | 1.100         | 1.222         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04955 | 186        | 1.250           | 1.261          | 1.625         | 1.217         | 1.227         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105-04954 | 187        | 1.524           | 1.524          | 2.000         | 1.350         | 1.450         |
| US-395 SB<br>Moana to I-80     | SOUTHBOUND | 105N04954 | 188        | 1.235           | 1.294          | 1.765         | 1.242         | 1.303         |

*\*Refer to AADT Totals under Optimizing Mobility for truck percentages.*



## SUB-SECTION E - Sustainability

### Overall Community and Well-Being

| Total Score | Ranking | Score       |
|-------------|---------|-------------|
| 100         | HIGH    | 57.5        |
|             | MEDIUM  | 17.0 - 21.5 |
|             | LOW     | 45          |

This section is intended to provide points to those projects that promote livability within the surrounding community to improve the quality of life.

### E1 - Intermodal / Technology Accommodations

| Maximum Score | Intermodal Scoring System |         |
|---------------|---------------------------|---------|
|               | Criteria                  | Scoring |
| 40.0          | None                      | 0       |
|               | 1                         | 13.3    |
|               | 2                         | 26.7    |
|               | 3 Plus                    | 40      |

#### Description

Points are awarded for connecting modes of transportation (i.e., park and ride lots, transit facilities, bicycle facilities) as well as making accommodations for the implementation of technology, connected vehicles, variable speed signs, Active Management Systems.

### E2 - Financial / Resource Sustainability

| Maximum Score | Scoring System                              |         |
|---------------|---|---------|
|               | Criteria                                    | Scoring |
| 40.0          | No significant long term resources required | 40.0    |
|               | Moderate long term resources required       | 20.0    |
|               | Significant long term resources required    | 0       |

#### Description

Points are awarded for projects that will not have significant long term cost or resource demands. Less points are awarded for projects that have moderate additional maintenance, such as additional lanes, lighting, technology such as variable speed signs and active traffic management. No points are awarded for new facilities that will require additional maintenance crews.

### E3 - Environmental Effects

| Maximum Score | Environmental Scoring System |         |
|---------------|------------------------------|---------|
|               | Criteria                     | Scoring |

|  |         |      |
|--|---------|------|
| 20.0   | YES     | 20.0 |
|  | NEUTRAL | 10.0 |
|  | NO      | 0    |
| Description  |         |      |
| Points are awarded to projects that have the potential to improve air quality, water quality, as well as the potential to mitigate for light and noise pollution, or have minimal environmental impacts.   |         |      |
| For new alignments, the existing roadway must be compared to the proposed alignment when analyzing air and water quality. In addition, new alignments are assumed to mitigate environmental impacts, but are scored lower as any new alignment has effects on the environment. |         |      |

| Study          | Location                             | Description                                     | Sustainability   |  |                          |                                  |                                     |            |
|----------------|--------------------------------------|---|--|--|--------------------------|----------------------------------|-------------------------------------|------------|
|                |                                      |   | Intermodal/<br>Technology<br>Accommodation   | Financial/<br>Staffing<br>Sustainability | Environmental<br>Effects | Total<br>Sustainability<br>Score | Weighted<br>Sustainability<br>Score |            |
|                |                                      |   | 40.0%  | 40.0%                                    | 20.0%                    | 100.0%                           | 7.5%                                |            |
| <b>Roadway</b> |                                      |   |  |  |                          |                                  |                                     |            |
| 1              |                                      | US 395  | Widen US-395 from Clear Acre Lane to Red Rock Drive (MP 27.06 to 35.81)  | 13.3                                     | 40.0                     | 10.0                             | 63.3                                | <b>4.7</b> |
| 2              |                                      | I-80 East                                       | Widen I-80 from McCarran Boulevard to USA Parkway (MP 17.56 to 32.75)  | 13.3                                     | 40.0                     | 20.0                             | 73.3                                | <b>5.5</b> |
| 3              |                                      | I-580   | New Auxiliary Lanes between interchanges:<br>1. NB I-580 Moana Ln to Virginia St (MP 22.56 to 21.51)<br>2. NB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51)<br>3. SB I-580 Moana Ln to Virginia St/Kietzke Ln (MP 22.56 to 21.51)<br>4. SB I-580 Neil Rd/Meadowood Mall to S. Virginia St. (MP 20.72 to 21.51) | 0.0                                      | 40.0                     | 10.0                             | 50.0                                | <b>3.8</b> |
| 4              |                                      | I-80 West                                       | Widen EB I-80 Robb Drive to Keystone Avenue (MP 9.23 to 12.48)   | 0.0                                      | 40.0                     | 10.0                             | 50.0                                | <b>3.8</b> |
| 5              | <b>EDAWN La Posada Study</b>         | La Posada Alternatives                          | Potential roadway connection from La Posada to USA Parkway   | 13.3                                     | 0.0                      | 0.0                              | 13.3                                | <b>1.0</b> |
| 6              | <b>Sparks TMSA Study</b>             | La Posada                                       |  |  |                          |                                  |                                     |            |
| 7              | <b>NDOT South Meadows Evaluation</b> | South Meadows Connector                         | New alignment from South Meadows to USA Parkway  | 13.3                                     | 0.0                      | 0.0                              | 13.3                                | <b>1.0</b> |
| 8              | <b>Pyramid/US 395 Connector</b>      | Connection between Pyramid and US 395 (Overall) | New alignment currently under EIS study  | 13.3                                     | 0.0                      | 0.0                              | 13.3                                | <b>1.0</b> |
| 9              |                                      | Phase 1   | Widen Pyramid Hwy between Queen Way and Sparks Blvd. (MP 1.97 to 5.44)   | 0.0                                      | 40.0                     | 10.0                             | 50.0                                | <b>3.8</b> |
| 10             |                                      | Phase 2   | Widen Disc Dr. from Pyramid hwy. to Vista Blvd.  | 0.0                                      | 40.0                     | 10.0                             | 50.0                                | <b>3.8</b> |
| 11             |                                      | Phase 3   | Construct new US 395 Connector from Parr interchange to Pyramid Highway  | 13.3                                     | 0.0                      | 0.0                              | 13.3                                | <b>1.0</b> |

| Study          | Location                              | Description                          | Sustainability   |                                   |                       |                            |                               |     |
|----------------|---------------------------------------|--------------------------------------|--|-----------------------------------|-----------------------|----------------------------|-------------------------------|-----|
|                |                                       |                                      | Intermodal / Technology Accommodation  | Financial Staffing Sustainability | Environmental Effects | Total Sustainability Score | Weighted Sustainability Score |     |
|                |                                       |                                      | 40.0%  | 40.0%                             | 20.0%                 | 100.0%                     | 7.5%                          |     |
| <b>Roadway</b> |                                       |                                      |  |                                   |                       |                            |                               |     |
| 12             |                                       | Phase 4                              | Add new direct connect Ramps at US395 w/ widening of US395                     | 0.0                               | 20.0                  | 0.0                        | 20.0                          | 1.5 |
| 13             |                                       | Phase 5                              | Widen Pyramid highway from Sparks Blvd. to Calle De La Plata (MP 5.44 to 9.75) | 0.0                               | 40.0                  | 10.0                       | 50.0                          | 3.8 |
| 14             |                                       | Phase 6                              | New interchange near Sun Valley local improvements                             | 0.0                               | 0.0                   | 0.0                        | 0.0                           | 0.0 |
|                | SEC Alignment Studies                 |                                      |  |                                   |                       |                            |                               |     |
|                | <b>Storey County Land Use</b>         |                                      |  |                                   |                       |                            |                               |     |
| 15             |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange  | 0                                 | 40                    | 10                         | 50.0                          | 3.8 |
| 16             |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange  | 0                                 | 40                    | 10                         | 50.0                          | 3.8 |
| 17             |                                       | Vanpooling                           | See transit column below   |                                   |                       |                            |                               |     |
| 18             |                                       | TRIC internal transit/rail           | NDOT currently studying as part of inter-county regional transit study         |                                   |                       |                            |                               |     |
| 19             | <b>Reno Spaghetti Bowl</b>            | I-80/I-580/US 395 System Interchange | Reconstruct Interchange (MP 25.0)  | 13.3                              | 20.0                  | 10.0                       | 43.3                          | 3.2 |
| 20             | <b>NDOT Autonomous Vehicles Grant</b> | I-80                                 | Feasibility of a pilot AV corridor project                                     | 26.7                              | 20                    | 20                         | 66.7                          | 5.0 |
|                | <b>2009 I-80 Corridor Study</b>       |                                      |  |                                   |                       |                            |                               |     |
|                |                                       | Patrick/I-80 Interchange             | Reconstruct Interchange (MP 28.1)  |                                   |                       |                            |                               |     |
|                |                                       | Lockwood/I-80 Interchange            | Reconstruct Interchange (MP 22.5)  |                                   |                       |                            |                               |     |
|                |                                       | Patrick/I-80 Interchange             | Construct Roundabout ramp termini  |                                   |                       |                            |                               |     |
|                |                                       | Lockwood/I-80 Interchange            | Construct Roundabout ramp termini  |                                   |                       |                            |                               |     |
| 21             |                                       | Eastbound I-80 - McCarran to Sparks  | Add auxiliary lanes (MP 16.5 to 17.6)  | 0.0                               | 40.0                  | 10.0                       | 50.0                          | 3.8 |
| 22             |                                       | Eastbound I-80 McCarran to Vista     | Widen to 3 lanes (MP 17.6 to 19.7)   | 0.0                               | 40.0                  | 10.0                       | 50.0                          | 3.8 |
|                |                                       | Eastbound I-80 Vista to Lockwood     | Add auxiliary lane   |                                   |                       |                            |                               |     |
|                |                                       | Eastbound I-80 Vista to Patrick      | Widen to 3 lanes   |                                   |                       |                            |                               |     |



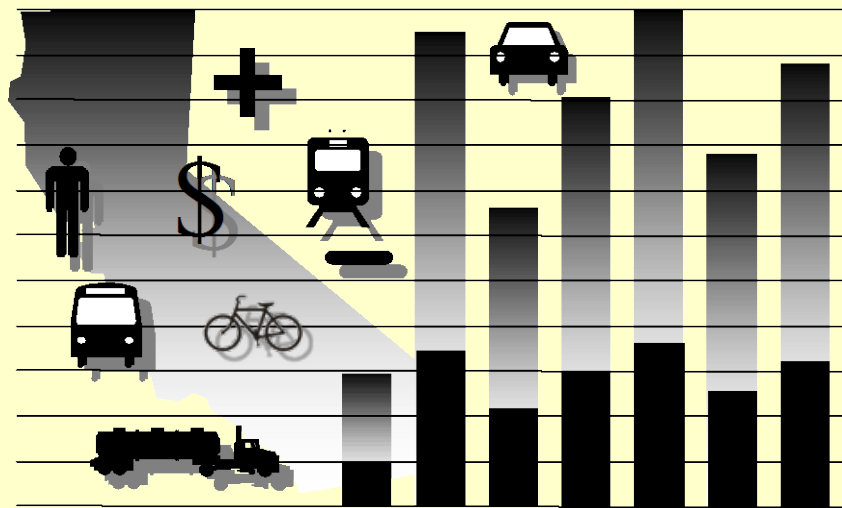
| Study                    | Location  | Description                       | Sustainability  |   |                          |                                  |                                     |     |
|--------------------------|---|-----------------------------------|---|---|--------------------------|----------------------------------|-------------------------------------|-----|
|                          |   |                                   | Intermodal/<br>Technology<br>Accommodation                    | Financial<br>Staffing<br>Sustainability | Environmental<br>Effects | Total<br>Sustainability<br>Score | Weighted<br>Sustainability<br>Score |     |
|                          |   |                                   | 40.0%   | 40.0%                                   | 20.0%                    | 100.0%                           | 7.5%                                |     |
| <b>Roadway</b>           |   |                                   |   |   |                          |                                  |                                     |     |
| 23                       |   | Westbound I-80 Sparks to McCarran | Add auxiliary lane (MP 16.5 to 17.6)                          | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
| 24                       |   | Westbound I-80 Vista to McCarran  | Widen to 3 lanes (MP 17.6 to 19.7)                            | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
|                          |   | Westbound Lockwood to Vista       | Add auxiliary lane  |   |                          |                                  |                                     |     |
|                          |   | Westbound Patrick to Vista        | Widen to 3 lanes  |   |                          |                                  |                                     |     |
| 25                       |   | Install ITS backbone              | E. McCarran to Wadsworth                                      | 13.3                                    | 40.0                     | 10.0                             | 63.3                                | 4.7 |
| <b>Freight</b>           |   |                                   |   |   |                          |                                  |                                     |     |
|                          | <b>Nevada State Freight Plan</b>                        |                                   |   |   |                          |                                  |                                     |     |
| 26                       |   | I-80 Safety Improvements          | Eastern Truckee Canyon (USA Parkway interchange improvements) | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
| 27                       |   | I-80 USA Parkway Interchange      | New interchange with possible direct connect system           | 0.0                                     | 20.0                     | 10.0                             | 30.0                                | 2.3 |
| 28                       |   | Lockwood Interchange              | New interchange including bridge over the Truckee             |   |                          |                                  |                                     |     |
|                          | <b>NDOT Statewide Truck Parking Implementation Plan</b> |                                   |   |   |                          |                                  |                                     |     |
| <b>Other</b>             |   |                                   |   |   |                          |                                  |                                     |     |
| 29                       | McCarran SMP  | McCarran Interchange              | Construct new interchange at McCarran Boulevard               | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
| 30                       | City of Sparks  | Sparks Interchange                | Construct new interchange at Sparks Blvd.                     | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
| 31                       | City of Sparks  | Vista Interchange                 | Construct new interchange at Vista Blvd.                      | 0.0                                     | 40.0                     | 10.0                             | 50.0                                | 3.8 |
| 32                       | RTC   | Clean Water Way                   | Clean Water bypass (from Veterans Pkwy to I-80)(Eastbound)    | 0.0                                     | 40.0                     | 0.0                              | 40.0                                | 3.0 |
| 33                       | I-80 Reversible lanes                                   | Vista to USA                      | Reversible lanes from Vista to USA Pkwy                       | 26.7                                    | 20.0                     | 10.0                             | 56.7                                | 4.3 |
| 34                       | Eagle Canyon Alignment                                  | Lemmon Valley to Spanish Springs  | New alignment from Spanish Springs to Lemmon Valley (8.2 mi)  | 0.0                                     | 0.0                      | 0.0                              | 0.0                                 | 0.0 |
| <b>Transit/Rideshare</b> |   |                                   |   |   |                          |                                  |                                     |     |
|                          | RTC Commuter Rail                                       |                                   |   |   |                          |                                  |                                     |     |
|                          | TESLA Park and Ride                                     |                                   |   |   |                          |                                  |                                     |     |
|                          | RTC Vanpool   |                                   |   |   |                          |                                  |                                     |     |

| Operational Agency Plans |   |  |  |  |  |  |  |  |
|--------------------------|---|--|--|--|--|--|--|--|
|                          | NDOT and Inter-County Regional Transit Plan |  |  |  |  |  |  |  |
|                          | EDWAN Transit Management Association        |  |  |  |  |  |  |  |



California  
Department  
Of  
Transportation

# California Life-Cycle Benefit/Cost Analysis Model (Cal-B/C) Version 6.2



Office of Transportation Economics  
Division of Transportation Planning

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## INTRODUCTION

This spreadsheet model provides a method for preparing a simple economic analysis of both highway and transit projects. Given certain input data for a project, the model calculates its life-cycle costs, life-cycle benefits, net present value, benefit/cost ratio, internal rate of return, and payback period. Annual benefits are also calculated.

The model is arranged by worksheets and contains the following information, data, and results:

| <u>Worksheets</u>       | <u>Contents</u>   |
|-------------------------|---|
| Instructions            | General model description and assumptions                                     |
| 1) Project Information  | Project input data  |
| 2) Model Inputs         | Highway speed, volume, accident data, and trips estimated by model            |
| 3) Results              | Summary results of analysis   |
| Travel Time             | Calculation of travel time and induced demand impacts                         |
| Vehicle Operating Costs | Calculation of highway vehicle operating cost impacts                         |
| Accident Costs          | Calculation of accident cost impacts  |
| Emissions               | Calculation of emission impacts   |
| Final Calculations      | Calculation of net present value, internal rate of return, and payback period |
| Parameters              | Economic assumptions, lookup tables, and other model parameters               |

The model is designed so that the user generally needs to enter data only in the green boxes on the Project Information worksheet. The model estimates detailed highway speed, volume, and accident data for the user to review on the Model Inputs worksheet. Highway speeds are estimated from volumes using relationships found in the Highway Capacity Manual. Other adjustments are made for weaving and pavement conditions. An option is also available to conduct a simple queuing analysis. Accidents are estimated from statewide averages and recent data for the facility. If available, inputs from regional planning or traffic simulation models can be entered to override model calculations. Summary results are shown in Results worksheet.

The remaining worksheets are provided for the user to see, but model performs calculations automatically. Some projects (i.e., truck only lanes, bypasses, interchanges, and connectors) require the user to enter two sets of highway data, since two roads are involved. The model calculates benefits for the first road before the user enters information about the second road. The user clicks a button and the model clears the Project Information worksheet to receive information on other road.

In the process of economic analysis, some generally accepted economic assumptions are necessary. These assumptions include: the real and nominal discount rates, unit user costs (e.g., value of time), consumption rates (e.g., fuel consumption and vehicle emissions), and accident rates. These assumptions are given in the Parameters worksheet and should not be changed by the user.

After reading the instructions in this worksheet, the user should proceed to the Project Information worksheet and input data for the specific project in the **green boxes** (light gray when printed). The model provides default values in the **red boxes** (medium gray when printed). These values can be changed by the user, if information specific to the project is available. The model calculates some values based on relationships or assumptions, with results shown in the **blue boxes** (dark gray when printed). These values can be changed by the user.

## INSTRUCTIONS

The user can analyze most projects simply by entering limited data on the Project Information Sheet and getting results on the Results page. The Model Inputs page allows the user to enter more detailed data adjust estimated speeds, volumes, and accidents rates, and check the number of trips estimated for projects that affect vehicle occupancy.

## **PROJECT DATA (Box 1A)**

*This section provides general information about the project and is used for highway, rail, and transit projects. At the top of the sheet, the user can enter information about the project, such as the project name, Caltrans district, and funding information.*

### **Type of Project**

1 Please select the appropriate type of highway, rail, or transit project from the pull-down menu. The menu appears if user clicks on the green box next to the project type.

*For a truck only lane, bypass or intersection project, model reminds user that information must be entered for both roads impacted by project. After entering information for the first road, the user clicks a button at bottom of the worksheet to prepare model for data on the bypass or intersecting road. The user may also enter information for connector projects involving two roads.*

### **Project Location**

2 Insert a 1, 2, or 3 for the appropriate region of California. This information is used to estimate peak traffic and emissions benefits.

### **Length of Construction Period**

3 Insert the number of construction years before benefits begin. This must be a whole number (round to next higher integer).

### **One- or Two-Way Data**

4 Indicate whether Highway Design and Traffic Data to be entered in Box 1B is for a single direction or both directions of highway.

### **Length of Peak Period(s)**

5 Insert the number of peak period hours per typical day. The model provides a default of 5 hours (statewide average). Model estimates total % daily traffic occurring during peak period using a lookup table developed from Traffic Census data. Model does not distinguish between weekdays and weekends.

*To model a 24-hour HOV or HOT lane, enter 24 hours so peak is 100% of ADT. To model a ramp metering project, user should enter the number of hours per day that metering is operational.*

## **HIGHWAY DESIGN AND TRAFFIC DATA (Box 1B)**

*Highway design and traffic data must be entered for highway projects. Enter data consistent with one- or two-way answer in Box 1A. Statewide default values are provided for some inputs.*

### **Highway Design**

- 6 **Roadway Type:** Indicate if the road is a freeway, expressway, or conventional highway in build and no build cases.
- 7 **Number of General Traffic Lanes:** Insert number of general purpose (not HOV or bus) lanes in both directions for build and no build cases. Enter data consistent with Box 1A.
- 8 **Number of HOV Lanes:** Insert number of HOV lanes in both directions for the build and no build cases. A value must be provided if an HOV restriction is entered on the next row.
- 9 **HOV Restriction:** If highway facility has/will have HOV lanes, enter the HOV restriction (e.g., 2 means 2 people per vehicle). Must be entered for an HOV project. Enter for a non-HOV project, if facility has HOV lanes. Changes in HOV restrictions are special project types and handled automatically by model.
- 10 **Exclusive ROW for Buses:** If bus project, indicate (with "Y" or "N") whether buses have exclusive right-of-way. This information is used to estimate emissions.
- 11 **Highway Free-Flow Speed:** Insert free-flow speed for build and no build cases. Model assumes build is same as no build, if not entered.
- 12 **Ramp Design Speed:** If auxiliary lane or off-ramp project, enter the design speed of the appropriate on- or off-ramp. This is used to estimate the speed of traffic affected by weaving.
- 13 **Highway Segment:** Insert segment length for build and no build cases. Model assumes build is same as no build, if not entered.

14 **Impacted Length:** The model estimates an area affected by the project. In most cases, this equals the segment length. For passing lane projects, the default affected area is 3 miles longer than the project area. For auxiliary lane and off-ramp projects, the default affected area is 1500 feet. For connectors and HOV drop ramps, default affected area is 3250 feet. User can change these lengths.

#### **Average Daily Traffic (ADT)**

15 **Current:** For most projects, insert current two-way ADT on facility. For operational improvements, enter only the one-way ADT applicable for project. Enter data consistent with one-way or two-way answer in Box 1A.

16 **Forecast (Year 20):** Insert projected ADT for 20 years after construction completion for build and no build cases. Model assumes build is same as no build, if not entered.

*The model uses the current and forecasted ADT to estimate annual traffic for 20 years after construction, assuming a linear trend. User can change base (Year 1) forecasts.*

#### **Average Hourly HOV/HOT Lane Traffic**

17 Insert hourly HOV/HOT volumes for build and no build cases in a typical peak hour.

#### **Percent Traffic in Weave**

18 For operational improvements, insert % traffic affected by weaving. Model suggests a % based on the type of project (2 right lanes for auxiliary lanes, 3 right lanes for off-ramps, 2.5% of all traffic for freeway connectors, and 4% of HOV traffic for HOV connectors and drop ramps). Users can change values for project conditions.

#### **Percent Trucks**

19 Insert estimated % of ADT comprised of trucks in build and no build cases. Model provides a default value (statewide average).

#### **Truck Speed**

20 If passing lane project, enter estimated speed (in MPH) for slow vehicles (trucks, recreational vehicles, etc.). Values must be entered for passing lane projects.

#### **On-Ramp Volume**

21 **Hourly Ramp Volume:** If auxiliary lane or on-ramp widening project, insert average hourly ramp volume to estimate traffic affected by weaving for auxiliary lanes and metering effectiveness for on-ramp widening. No entry needed for ramp metering projects.

22 **Metering Strategy:** If on-ramp widening project, enter 1, 2, or 3 for vehicles allowed per green signal. Enter "D" for dual metering. No entry should be made for ramp metering projects.

#### **Queue Formation**

23 **Arrival Rate:** For queuing and rail grade crossing projects, enter vehicles per hour contributing to queue. Arrival rate should be estimated only for time queue grows. Model estimates queue dissipation automatically.

24 **Departure Rate:** For queuing and rail crossing projects, enter vehicles per hour leaving queue.

#### **Pavement Condition (for Pavement Rehab Projects)**

25 If pavement rehabilitation project, enter base (Year 1) International Roughness Index (IRI) for build and no build. Model will calculate Year 20 values using standard parameters unless entered by user.

#### **Average Vehicle Occupancy (AVO)**

26 Model provides default values. The figures change automatically, depending on the presence of HOV lanes. Adjust if project-specific data are available.

### **HIGHWAY ACCIDENT DATA (Box 1C)**

*Statewide default values are provided for transit projects. The model uses information provided to calculate accident rates for each accident type in the Model Inputs worksheet.*

#### **Actual 3-Year Accident Data (from Table B)**

27 Insert the total number of fatal, injury, and property damage only accidents on the segment over the three most recent years. For rail grade crossing projects, enter 10-year accident data from FRA WBAPS in fatal and injury rows and collision prediction in total accident row.

### **Statewide Basic Average Accident Rate**

28 Insert statewide average accident rates per million vehicle-miles (or million vehicles, as appropriate) for build and no build highway rate groups. Include Base Rate and ADT Factor where applicable.  
Insert statewide % of accidents that are fatal and injury accidents for road classifications similar to build and no build facilities.

29 *The model uses adjustment factors (the ration of actual rates to statewide rates for existing facility) to estimate accident rates by accident type for the new road classification. Additional adjustments (accident savings) are made for highway TMS projects. Results are presented in the Model Inputs worksheet and can be changed by the user.*

### **RAIL AND TRANSIT DATA (Box 1D)**

*This section is used for rail and transit projects only.*

#### **Annual Person-Trips**

30 **Base (Year 1):** Insert estimated annual transit person-trips for first year after construction completion in build and no build cases. For transit TMS projects, enter only person-trips on routes affected. If the routes are substantially different, the benefits analysis should be split into pieces.

31 **Forecast (Year 20):** Insert forecasted annual transit person-trips for 20 years after construction completion in build and no build cases.

#### **Percent Trips During Break Period**

32 Insert % annual person-trips that occur during a break period.

#### **Percent New Trips from Parallel Highway**

33 Insert % new transit person-trips originating on parallel highway.

#### **Annual Vehicle-Miles**

34 **Base (Year 1):** Insert estimated annual vehicle-miles for first year after construction completion in build and no build cases. For passenger rail projects, multiply the number of train-miles by the average number of rail cars per train consist.

35 **Forecast (Year 20):** Insert forecasted annual vehicle-miles for 20 years after construction completion in build and no build cases.

#### **Average Vehicles per Train**

36 If passenger rail project, insert the average number of rail cars per train consist. This is used to calculate emissions.

#### **Reduction in Transit Accidents**

37 If project affects transit/rail safety, insert estimated percent accident reduction due to project. Increases should be entered as negative %.

#### **Average Transit Travel Time**

38 **In-Vehicle:** Insert average in-vehicle transit travel time in minutes during peak and non-peak periods in build and no build cases. For TMS Projects, insert the average for all transit routes impacted. Model assumes build is same as no build for most projects. Signal priority and bus rapid transit projects reduce time. User can adjust build travel times.

39 **Out-of-Vehicle:** Insert average out-of-vehicle transit travel time in minutes during peak and non-peak periods. Model monetizes out-of-vehicle travel time at a higher value.

#### **Highway Grade Crossing**

40 **Annual Number of Trains:** Insert annual number of passenger and freight trains entering highway-rail crossing.

41 **Average Gate Down Time:** Insert average time per train that crossing gate is down for passenger and freight trains.

#### **Transit Agency Costs (for Transit TMS Projects)**

42 **Annual Capital Expenditure:** If transit TMS project, insert annual agency capital expenditures for routes impacted by project. Model calculates cost reductions for expenditures in build case due to transit TMS. Agency cost savings are entered automatically as a negative cost in Box 1E.

43 **Annual Ops. And Maintenance Expenditure:** If transit TMS project, insert the annual average operating and maintenance costs for routes impacted by project. Model calculates cost reductions for expenditures in build case due to transit TMS. Agency cost savings are entered automatically as a negative cost in Box 1E.

## **PROJECT COSTS** (Box 1E)

*Net project costs should be entered in the years they are expected to occur. Costs should be entered for construction period and for twenty years after construction completion. Construction Year 1 is the first year that costs are incurred. All costs should be entered in thousands of dollars.*

- 44 Insert project's initial costs in constant (Year 2016) dollars for project development, right-of-way, and construction. The number of construction years with costs should equal the length of the construction period (Box 1A, Input 5).
- 45 Insert estimated future incremental maintenance/ operating and rehabilitation costs in constant (Year 2016) dollars. These figures should be entered in the years after the project opens.
- 46 Insert estimated mitigation costs (e.g., wetlands, community, and sound walls) in constant (Year 2016) dollars during construction and for 20 years after construction completion.
- 47 Model adds agency cost savings due to transit TMS automatically.
- 48 Insert any other costs not already included.

## **HIGHWAY SPEED AND VOLUME INPUTS** (Box 2A)

*This section allows user to review detailed speed and volume data estimated by the model. These values are estimated from the inputs provided in the Project Information sheet.*

- 49 User may enter new speed and volume data for the highway in the green boxes to override model calculations, if detailed data are available from a travel demand or micro-simulation model. The model estimates speeds and volumes on highway for HOVs, non-HOVs, weaving vehicles, and trucks during peak and non-peak periods in Year 1 and Year 20 in build and no build cases. Speeds are estimated using a BPR curve (or queuing analysis). Adjustments are made to speed and volumes to account for weaving. Transit mode shifts, pavement condition, and TMS.
- 50 IF TMS Project and detailed simulation data are available, the highway results should be inputted in the green cells. Model will use the data in place of figures estimated by the model.

## **HIGHWAY ACCIDENT RATES** (Box 2B)

*User may adjust accident rates calculated by the model. User may also enter TASAS highway accident data for rail grade crossing projects in this box.*

- 51 **No Build:** Fatality, injury and PDO accident rates for no build facility are estimated using inputs from Box 1C of the Project Information sheet. User may change these rates in green boxes.
- 52 **Highway Safety or Weaving Improvement:** Model assumes an overall safety improvement for off-ramp and ramp metering projects. User may adjust this percentage. For safety projects, user should enter collision reduction factor from HSIP Guidelines.
- 53 **Adjustment Factor:** User may change the ratios of facility accident rates to statewide averages used in calculating rates for the build facility. These factors are also adjusted by the collision reduction factor.
- 54 **Build Facility:** User may modify the fatality, injury, and PDO accident rates using statewide average rates and the adjustment factors.

## **RAMP AND ARTERIAL INPUTS** (Box 2C)

*This section allows users to enter detailed arterial information for an arterial signal management project or detailed ramp and arterial data for highway TMS project.*

- 55 **Detailed Information Available:** Input "Y" if detailed arterial and/or ramp data are available. Model automatically selects "Y" if other data are inputted. User should enter detailed ramp and arterial data for TMS highway project if detailed highway data are entered in Box 2A.
- 56 **Aggregate Segment Length:** Input the total segment lengths for the ramps and arterials. These can be estimated from travel demand or micro-simulation model data as VMT/total trips.
- 57 User may enter speeds and volumes on ramps and arterials during peak and non-peak periods in Year 1 and Year 20 in build and no build cases. If arterial signal management project, user must enter arterial data. Benefits are estimated assuming all vehicles are automobiles.

## **ANNUAL PERSON-TRIPS** (Box 2D)

*This section is for information purposes only. It allows user to examine number trips estimated for projects that affect AVO (e.g., HOT lane and HOV conversions).*

## **NEXT STEPS**



58

For bypass, interchange, and connector projects, click button on Project Information page after data are verified for the first road. Enter data for the second road in Boxes 1B and 1C. As with the first road, detailed data may be verified on Model Inputs page. Model prompts user to save interim version of analysis before proceeding.

59

Summary results are available immediately in the Results worksheet.

## Clean Water Bypass

1A

### PROJECT DATA

**Type of Project**

Select project type from list

General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

2

Length of Construction Period  years

One- or Two-Way Data  enter 1 or 2

Current

**Length of Peak Period(s)** (up to 24 hrs)  hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 2        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 55       | 55    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.5      | 1.5   |
| Impacted Length                                 | 1.5      | 1.5   |

**Average Daily Traffic**

|  |                                    |        |
|--|------------------------------------|--------|
| Current  | <input type="text" value="5,000"/> |        |
|  | No Build                           | Build  |
| Base (Year 1)  | 11,934                             | 11,934 |
| Forecast (Year 20)                                       | 77,810                             | 77,810 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0                                  | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |                                    | 100%   |
| <b>Percent Traffic in Weave</b>                          | 2.5%                               | 2.5%   |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%                                | 16%    |
| <b>Truck Speed</b>                                       | 50                                 |        |

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 206  | 163      |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 5           | 0.61  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 0           | 0.00  |
| Property Damage Only (PDO) Accidents | 5           | 0.61  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.3%       | 0.3%       |
| Percent Injury Accidents (Pct Inj)        | 34.7%      | 34.7%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |             |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |             |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W       | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |             |              |                  |        |            |                             |                          |               |
| 1                          | \$1,000,000          | \$5,000,000 | \$0          |                  |        |            |                             | \$7,500,000              | \$7,500,000   |
| 2                          | 1,000,000            | 0           | 0            |                  |        |            |                             | 7,500,000                | 7,009,346     |
| 3                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |             |              |                  |        |            |                             |                          |               |
| 1                          |                      |             |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$2,000,000          | \$5,000,000 | \$0          | \$0              | \$0    | \$0        | \$0                         | \$15,000,000             | \$14,509,346  |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |                 |
|--------------------------------------|-----------------|
| Life-Cycle Costs (mil. \$)           | \$14.5          |
| Life-Cycle Benefits (mil. \$)        | \$32.2          |
| Net Present Value (mil. \$)          | \$17.7          |
| <b>Benefit / Cost Ratio:</b>         | <b>2.2</b>      |
| <b>Rate of Return on Investment:</b> | <b>12.2%</b>    |
| <b>Payback Period:</b>               | <b>14 years</b> |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$23.2             | \$6.2            | \$29.5              | \$1.5          |
| Veh. Op. Cost Savings             | \$1.2              | \$0.3            | \$1.5               | \$0.1          |
| Accident Cost Savings             | \$0.5              | \$0.1            | \$0.5               | \$0.0          |
| Emission Cost Savings             | \$0.2              | \$0.4            | \$0.7               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$25.2</b>      | <b>\$7.0</b>     | <b>\$32.2</b>       | <b>\$1.6</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>6,470,942</b>    | <b>323,547</b> |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 43                  | 2              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 21,051              | 1,053          | \$0.3               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 55                  | 3              | \$0.3               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 5                   | 0              | \$0.0               | \$0.0          |

**Disc Dr. (Pyramid to Vista)(Phase 2)**

1A

**PROJECT DATA**

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 2 years         |
| One- or Two-Way Data   | 2 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours         |

1B

**HIGHWAY DESIGN AND TRAFFIC DATA**

|   |  |          |          |
|---|--|----------|----------|
| <b>Highway Design</b>   |  | No Build | Build    |
| Roadway Type (Fwy, Exp, Conv Hwy)                             |  | F        | F        |
| Number of General Traffic Lanes                               |  | 4        | 6        |
| Number of HOV/HOT Lanes                                       |  | 0        | 0        |
| HOV Restriction (2 or 3)                                      |  | 2        |          |
| Exclusive ROW for Buses (y/n)                                 |  | N        |          |
| Highway Free-Flow Speed                                       |  | 40       | 40       |
| Ramp Design Speed (if aux. lane/off-ramp proj.)               |  | 0        | 0        |
| Length (in miles) Highway Segment                             |  | 1.4      | 1.4      |
| Impacted Length   |  | 1.4      | 1.4      |
| <b>Average Daily Traffic</b>                                  |  |          |          |
| Current   |  | 9,000    |          |
|   |  | No Build | Build    |
| Base (Year 1)   |  | 9,286    | 9,286    |
| Forecast (Year 20)  |  | 12,000   | 12,000   |
| <b>Average Hourly HOV/HOT Lane Traffic</b>                    |  |          |          |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)      |  |          | 100%     |
| <b>Percent Traffic in Weave</b>                               |  | 0.0%     | 0.0%     |
| <b>Percent Trucks</b> (include RVs, if applicable)            |  | 16%      | 16%      |
| <b>Truck Speed</b>  |  | 40       |          |
| <b>On-Ramp Volume</b>   |  | Peak     | Non-Peak |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)               |  | 0        | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.)           |  |          |          |
| <b>Queue Formation</b> (if queuing or grade crossing project) |  | Year 1   | Year 20  |
| Arrival Rate (in vehicles per hour)                           |  | 0        | 0        |
| Departure Rate (in vehicles per hour)                         |  | 0        | 0        |
| <b>Pavement Condition</b> (if pavement project)               |  | No Build | Build    |
| IRI (inches/mile) Base (Year 1)                               |  |          |          |
| Forecast (Year 20)  |  |          |          |
| <b>Average Vehicle Occupancy (AVO)</b>                        |  | No Build | Build    |
| General Traffic Non-Peak                                      |  | 1.74     | 1.74     |
| Peak  |  | 1.74     | 1.74     |
| High Occupancy Vehicle (if HOV/HOT lanes)                     |  | 2.15     | 2.15     |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 131         | 9.49  |
| Fatal Accidents (Fat)                | 1           | 0.072 |
| Injury Accidents (Inj)               | 49          | 3.55  |
| Property Damage Only (PDO) Accidents | 81          | 5.87  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.3%       | 0.3%       |
| Percent Injury Accidents (Pct Inj)        | 34.7%      | 34.7%      |

1D

**RAIL AND TRANSIT DATA**

| <b>Annual Person-Trips</b>                     | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  | 0        | 0     |
| Forecast (Year 20)                             | 0        | 0     |
| <b>Percent Trips during Peak Period</b>        | 17%      |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

| <b>Annual Vehicle-Miles</b>                     | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   | 0        | 0     |
| Forecast (Year 20)                              | 0        | 0     |
| <b>Average Vehicles/Train</b> (if rail project) | 0        | 0     |

| <b>Reduction in Transit Accidents</b> |    |
|---------------------------------------|----|
| Percent Reduction (if safety project) | 0% |

| <b>Average Transit Travel Time</b> |                       | No Build | Build |
|------------------------------------|-----------------------|----------|-------|
| In-Vehicle                         | Non-Peak (in minutes) | 0.0      | 0.0   |
|                                    | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle                     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                                    | Peak (in minutes)     | 0.0      | 0.0   |

| <b>Highway Grade Crossing</b> | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

| <b>Transit Agency Costs</b> (if TMS project) | No Build | Build |
|--|----------|-------|
| Annual Capital Expenditure                   | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure      | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$557,500            | \$0   | \$0          |                  |        |            |                             | \$11,150,000             | \$11,150,000  |
| 2                          | 557,500              |       |              |                  |        |            |                             | 11,150,000               | 10,420,561    |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$1,115,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$22,300,000             | \$21,570,561  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$21.6  |
| Life-Cycle Benefits (mil. \$) | \$32.4  |
| Net Present Value (mil. \$)   | \$10.8  |
| Benefit / Cost Ratio:         | 1.5     |
| Rate of Return on Investment: | 12.2%   |
| Payback Period:               | 8 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$0.4              | \$0.0            | \$0.4               | \$0.0          |
| Veh. Op. Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Accident Cost Savings             | \$26.9             | \$5.1            | \$32.0              | \$1.6          |
| Emission Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$27.3</b>      | <b>\$5.1</b>     | <b>\$32.4</b>       | <b>\$1.6</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>74,592</b>       | <b>3,730</b>   |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 0                   | 0              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 93                  | 5              | \$0.0               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 0                   | 0              | -\$0.0              | -\$0.0         |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 0                   | 0              | \$0.0               | \$0.0          |

## Eagle Canyon Connector

1A

### PROJECT DATA

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 2 years         |
| One- or Two-Way Data   | 2 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 5 hours         |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

| <b>Highway Design</b>                           | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | E        | C     |
| Number of General Traffic Lanes                 | 0        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 15       | 45    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 0        | 0     |
| Length (in miles) Highway Segment               | 8.2      | 8.2   |
| Impacted Length                                 | 8.2      | 8.2   |

| <b>Average Daily Traffic</b>                             |  | No Build | Build |
|--|--|----------|-------|
| Current  |  | 0        |       |
| Base (Year 1)  |  | 0        | 2,000 |
| Forecast (Year 20)                                       |  | 0        | 3,500 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | 0        | 0     |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  |          | 0%    |
| <b>Percent Traffic in Weave</b>                          |  |          | 0.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)       |  | 1%       | 1%    |
| <b>Truck Speed</b>                                       |  | 10       | 45    |

| <b>On-Ramp Volume</b>                               |  | Peak | Non-Peak |
|---|--|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     |  | 0    | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |  |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) |  | Year 1 | Year 20 |
|---|--|--------|---------|
| Arrival Rate (in vehicles per hour)                           |  | 0      | 0       |
| Departure Rate (in vehicles per hour)                         |  | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) |  | No Build | Build |
|---|--|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |  |          |       |
| Forecast (Year 20)                              |  |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    |          | No Build | Build |
|---|----------|----------|-------|
| General Traffic                           | Non-Peak | 1.20     | 1.74  |
|   | Peak     | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) |          | 0.00     | 0.00  |



1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                |             | 0.21  |
| Fatal Accidents (Fat)                |             | 0.006 |
| Injury Accidents (Inj)               |             | 0.65  |
| Property Damage Only (PDO) Accidents |             | 1.06  |

**Statewide Basic Average Accident Rate**

|   | No Build | Build |
|---|----------|-------|
| Rate Group                                |          |       |
| Accident Rate (per million vehicle-miles) | 0.00     | 0.21  |
| Percent Fatal Accidents (Pct Fat)         | 0.0%     | 0.6%  |
| Percent Injury Accidents (Pct Inj)        | 0.0%     | 1.1%  |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|  | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  |          |       |
| Forecast (Year 20)                             |          |       |
| <b>Percent Trips during Peak Period</b>        | 0%       |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

**Annual Vehicle-Miles**

|   | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   |          |       |
| Forecast (Year 20)                              |          |       |
| <b>Average Vehicles/Train</b> (if rail project) |          |       |

**Reduction in Transit Accidents**

|                                       |  |
|---------------------------------------|--|
| Percent Reduction (if safety project) |  |
|---------------------------------------|--|

**Average Transit Travel Time**

|                | No Build              | Build |
|----------------|-----------------------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       |         | 0      |         |
| Avg. Gate Down Time (in min.) |         | 0.0    |         |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              |          | \$0   |
| Annual Ops. and Maintenance Expenditure |          | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |         |              |             |              | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |                  |
|----------------------------|----------------------|---------|--------------|-------------|--------------|------------|-----------------------------|--------------------------|------------------|
|                            | Project Support      | R / W   | Construction | Maint./ Op. | Rehab.       |            |                             | Constant Dollars         | Present Value    |
| <b>Construction Period</b> |                      |         |              |             |              |            |                             |                          |                  |
| 1                          | \$0                  |         |              |             |              |            |                             | \$0                      | \$0              |
| 2                          | 0                    |         |              |             |              |            |                             | 0                        | 0                |
| 3                          | 5,000                |         |              |             |              |            |                             | 5,000,000                | 4,367,194        |
| 4                          | 1,000                | 1,000   | 30,000       |             |              |            |                             | 32,000,000               | 26,121,532       |
| 5                          | 0                    |         | 30,000       |             |              |            |                             | 30,000,000               | 22,886,856       |
| 6                          |                      |         | 0            |             |              |            |                             | 0                        | 0                |
| 7                          |                      |         | 0            |             |              |            |                             | 0                        | 0                |
| 8                          |                      |         | 0            |             |              |            |                             | 0                        | 0                |
| <b>Project Open</b>        |                      |         |              |             |              |            |                             |                          |                  |
| 1                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 17,468.77     |
| 2                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 16,325.96     |
| 3                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 15,257.90     |
| 4                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 14,259.72     |
| 5                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 13,326.84     |
| 6                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 12,454.99     |
| 7                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 11,640.18     |
| 8                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 10,878.67     |
| 9                          |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 10,166.99     |
| 10                         |                      |         |              | \$ 20.00    | \$ 20,000.00 |            |                             | \$ 20,020,000.00         | \$ 9,511,357.78  |
| 11                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 8,880.24      |
| 12                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 8,299.29      |
| 13                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 7,756.34      |
| 14                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 7,248.92      |
| 15                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 6,774.69      |
| 16                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 6,331.49      |
| 17                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,917.28      |
| 18                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,530.17      |
| 19                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,168.38      |
| 20                         |                      |         |              | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 4,830.26      |
| <b>Total</b>               | \$6,000              | \$1,000 | \$60,000     | \$ 400.00   | \$ 20,000.00 | \$ -       | \$ -                        | \$ 87,400,000.00         | \$ 63,075,456.95 |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |           |
|--------------------------------------|-----------|
| Life-Cycle Costs (mil. \$)           | \$63.1    |
| Life-Cycle Benefits (mil. \$)        | -\$57.0   |
| Net Present Value (mil. \$)          | -\$120.1  |
| <b>Benefit / Cost Ratio:</b>         | -0.9      |
| <b>Rate of Return on Investment:</b> | #NUM!     |
| <b>Payback Period:</b>               | 20+ years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits  | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|---------------------|------------------|---------------------|----------------|
|                                   | Travel Time Savings | -\$2.9           | -\$1.0              | -\$3.9         |
| Veh. Op. Cost Savings             | -\$38.0             | -\$0.7           | -\$38.7             | -\$1.9         |
| Accident Cost Savings             | -\$13.0             | -\$0.1           | -\$13.1             | -\$0.7         |
| Emission Cost Savings             | -\$1.2              | -\$0.2           | -\$1.4              | -\$0.1         |
| <b>TOTAL BENEFITS</b>             | <b>-\$55.1</b>      | <b>-\$2.0</b>    | <b>-\$57.0</b>      | <b>-\$2.9</b>  |
| <b>Person-Hours of Time Saved</b> |                     |                  | 0                   | 0              |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | -175                | -9             | -\$0.0              | -\$0.0         |
| CO <sub>2</sub> Emissions Saved   | -45,673             | -2,284         | -\$1.0              | -\$0.1         |
| NO <sub>x</sub> Emissions Saved   | -30                 | -1             | -\$0.3              | -\$0.0         |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | -\$0.0              | -\$0.0         |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | -\$0.0              | -\$0.0         |
| VOC Emissions Saved               | -8                  | 0              | -\$0.0              | -\$0.0         |

## I-80 Eastern Truckee Canyon, USA Parkway Interchange

1A

### PROJECT DATA

**Type of Project**

Select project type from list

General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

2

Length of Construction Period  years

One- or Two-Way Data  enter 1 or 2

Current

**Length of Peak Period(s)** (up to 24 hrs)  hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 2        | 3     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.2      | 1.2   |
| Impacted Length                                 | 1.2      | 1.2   |

**Average Daily Traffic**

|  |                                     |        |
|--|-------------------------------------|--------|
| Current  | <input type="text" value="32,000"/> |        |
|  | No Build                            | Build  |
| Base (Year 1)  | 34,143                              | 34,143 |
| Forecast (Year 20)                                       | 74,869                              | 74,869 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0                                   | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |                                     | 100%   |
| <b>Percent Traffic in Weave</b>                          | 25.0%                               | 25.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%                                 | 16%    |
| <b>Truck Speed</b>                                       | 40                                  |        |

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 620  | 421      |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 2           | 0.05  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 2           | 0.05  |
| Property Damage Only (PDO) Accidents | 0           | 0.00  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$1,957,500          | \$0   | \$0          |                  |        |            |                             | \$7,000,000              | \$7,000,000   |
| 2                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$1,957,500          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$7,000,000              | \$7,000,000   |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |                 |
|--------------------------------------|-----------------|
| Life-Cycle Costs (mil. \$)           | \$7.0           |
| Life-Cycle Benefits (mil. \$)        | \$27.0          |
| Net Present Value (mil. \$)          | \$20.0          |
| <b>Benefit / Cost Ratio:</b>         | <b>3.9</b>      |
| <b>Rate of Return on Investment:</b> | <b>16.7%</b>    |
| <b>Payback Period:</b>               | <b>12 years</b> |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$18.6             | \$6.1            | \$24.8              | \$1.2          |
| Veh. Op. Cost Savings             | \$0.6              | \$0.4            | \$1.0               | \$0.0          |
| Accident Cost Savings             | \$0.6              | \$0.1            | \$0.8               | \$0.0          |
| Emission Cost Savings             | \$0.1              | \$0.4            | \$0.5               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$20.0</b>      | <b>\$7.0</b>     | <b>\$27.0</b>       | <b>\$1.3</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>4,909,227</b>    | <b>245,461</b> |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 35                  | 2              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 11,782              | 589            | \$0.2               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 48                  | 2              | \$0.3               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 4                   | 0              | \$0.0               | \$0.0          |

I-80 EB McCarran Blvd. to Vista Blvd. (Widen to 3-lanes)

1A

**PROJECT DATA**

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 2 years         |
| One- or Two-Way Data   | 1 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours         |

1B

**HIGHWAY DESIGN AND TRAFFIC DATA**

| <b>Highway Design</b>                           | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 2        | 3     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 2        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 0        | 0     |
| Length (in miles) Highway Segment               | 2.1      | 2.1   |
| Impacted Length                                 | 2.1      | 2.1   |

| <b>Average Daily Traffic</b>                             | No Build | Build  |
|--|----------|--------|
| Current  | 48,000   |        |
| Base (Year 1)  | 51,475   | 51,475 |
| Forecast (Year 20)                                       | 84,485   | 84,485 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0        | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |          | 100%   |
| <b>Percent Traffic in Weave</b>                          | 25.0%    | 25.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%      | 16%    |
| <b>Truck Speed</b>                                       | 55       |        |

| <b>On-Ramp Volume</b>                               | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 1706 | 1685     |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) | Year 1 | Year 20 |
|---|--------|---------|
| Arrival Rate (in vehicles per hour)                           | 0      | 0       |
| Departure Rate (in vehicles per hour)                         | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) | No Build | Build |
|---|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |          |       |
| Forecast (Year 20)                              |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 74          | 0.67  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 33          | 0.30  |
| Property Damage Only (PDO) Accidents | 51          | 0.46  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$500,000            | \$0   | \$0          |                  |        |            |                             | \$10,000,000             | \$10,000,000  |
| 2                          | 500,000              |       |              |                  |        |            |                             | 10,000,000               | 9,345,794     |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$1,000,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$20,000,000             | \$19,345,794  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$19.3  |
| Life-Cycle Benefits (mil. \$) | \$72.9  |
| Net Present Value (mil. \$)   | \$53.5  |
| Benefit / Cost Ratio:         | 3.8     |
| Rate of Return on Investment: | 18.8%   |
| Payback Period:               | 8 years |

| ITEMIZED BENEFITS (mil. \$) | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings         | \$47.9             | \$10.9           | \$58.8              | \$2.9          |
| Veh. Op. Cost Savings       | \$1.8              | \$0.5            | \$2.4               | \$0.1          |
| Accident Cost Savings       | \$9.0              | \$1.7            | \$10.7              | \$0.5          |
| Emission Cost Savings       | \$0.3              | \$0.7            | \$1.0               | \$0.1          |
| <b>TOTAL BENEFITS</b>       | <b>\$59.0</b>      | <b>\$13.9</b>    | <b>\$72.9</b>       | <b>\$3.6</b>   |
| Person-Hours of Time Saved  | #####              |                  | 587,027             |                |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 74                  | 4              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 29,946              | 1,497          | \$0.5               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 89                  | 4              | \$0.5               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 8                   | 0              | \$0.0               | \$0.0          |



## I-80 Lockwood Interchange

1A

### PROJECT DATA

**Type of Project** Check percent traffic in weave in section 1B  
 Select project type from list Off-Ramp Widening

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) 2

Length of Construction Period 2 years  
 One- or Two-Way Data 2 enter 1 or 2  
Current

**Length of Peak Period(s)** (up to 24 hrs) 2 hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 1        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.0      | 1.0   |
| Impacted Length                                 | 0.3      | 0.3   |

**Average Daily Traffic**

|                    |          |        |
|--------------------|----------|--------|
| Current            | 37,500   |        |
|                    | No Build | Build  |
| Base (Year 1)      | 41,339   | 41,339 |
| Forecast (Year 20) | 77,810   | 77,810 |

**Average Hourly HOV/HOT Lane Traffic**

|  |   |      |
|--|---|------|
|  | 0 | 0    |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |   | 100% |

**Percent Traffic in Weave** 2.5% 2.5%

**Percent Trucks** (include RVs, if applicable) 16% 16%

**Truck Speed** 50

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 206  | 163      |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 5           | 0.12  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 0           | 0.00  |
| Property Damage Only (PDO) Accidents | 5           | 0.12  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.3%       | 0.3%       |
| Percent Injury Accidents (Pct Inj)        | 34.7%      | 34.7%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|  | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  | 0        | 0     |
| Forecast (Year 20)                             | 0        | 0     |
| <b>Percent Trips during Peak Period</b>        | 17%      |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

**Annual Vehicle-Miles**

|   | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   | 0        | 0     |
| Forecast (Year 20)                              | 0        | 0     |
| <b>Average Vehicles/Train</b> (if rail project) | 0        | 0     |

**Reduction in Transit Accidents**

|                                       |    |
|---------------------------------------|----|
| Percent Reduction (if safety project) | 0% |
|---------------------------------------|----|

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$1,250,000          | \$0   | \$0          |                  |        |            |                             | \$12,500,000             | \$12,500,000  |
| 2                          | 1,250,000            | 0     | 0            |                  |        |            |                             | 12,500,000               | 11,682,243    |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$2,500,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$25,000,000             | \$24,182,243  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$24.2  |
| Life-Cycle Benefits (mil. \$) | \$73.7  |
| Net Present Value (mil. \$)   | \$49.5  |
| Benefit / Cost Ratio:         | 3.0     |
| Rate of Return on Investment: | 19.1%   |
| Payback Period:               | 7 years |

| ITEMIZED BENEFITS (mil. \$) | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings         | \$55.5             | \$14.4           | \$69.9              | \$3.5          |
| Veh. Op. Cost Savings       | \$1.9              | \$0.6            | \$2.6               | \$0.1          |
| Accident Cost Savings       | \$0.1              | \$0.0            | \$0.1               | \$0.0          |
| Emission Cost Savings       | \$0.4              | \$0.7            | \$1.2               | \$0.1          |
| <b>TOTAL BENEFITS</b>       | <b>\$58.0</b>      | <b>\$15.8</b>    | <b>\$73.7</b>       | <b>\$3.7</b>   |
| Person-Hours of Time Saved  | #####              |                  | 583,937             |                |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 79                  | 4              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 30,402              | 1,520          | \$0.6               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 82                  | 4              | \$0.5               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 9                   | 0              | \$0.0               | \$0.0          |

## I-80 McCarran Interchange

1A

### PROJECT DATA

**Type of Project** Check percent traffic in weave in section 1B  
 Select project type from list Off-Ramp Widening

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) 2

Length of Construction Period 2 years  
 One- or Two-Way Data 2 enter 1 or 2

Length of Peak Period(s) (up to 24 hrs) 2 Current hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 2        | 3     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.2      | 1.2   |
| Impacted Length                                 | 0.3      | 0.3   |

**Average Daily Traffic**

|                    |          |         |
|--------------------|----------|---------|
| Current            | 94,000   |         |
|                    | No Build | Build   |
| Base (Year 1)      | 96,952   | 96,952  |
| Forecast (Year 20) | 125,000  | 125,000 |

**Average Hourly HOV/HOT Lane Traffic**

|  |      |      |
|--|------|------|
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) | 0    | 0    |
| <b>Percent Traffic in Weave</b>                          | 2.5% | 2.5% |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%  | 16%  |
| <b>Truck Speed</b>                                       | 50   |      |

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 1706 | 1685     |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 171         | 1.66  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 64          | 0.62  |
| Property Damage Only (PDO) Accidents | 107         | 1.04  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

|     |
|-----|
| 17% |
|-----|

**Percent New Trips from Parallel Highway**

|      |
|------|
| 100% |
|------|

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

|   |   |
|---|---|
| 0 | 0 |
|---|---|

**Reduction in Transit Accidents**

|                                       |    |
|---------------------------------------|----|
| Percent Reduction (if safety project) | 0% |
|---------------------------------------|----|

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |             |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |             |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W       | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |             |              |                  |        |            |                             |                          |               |
| 1                          | \$1,000,000          | \$2,500,000 | \$0          |                  |        |            |                             | \$18,961,500             | \$18,961,500  |
| 2                          | 1,000,000            | 2,500,000   |              |                  |        |            |                             | 18,961,500               | 17,721,028    |
| 3                          |                      |             |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |             |              |                  |        |            |                             |                          |               |
| 1                          |                      |             |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |             |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$2,000,000          | \$5,000,000 | \$0          | \$0              | \$0    | \$0        | \$0                         | \$37,923,000             | \$36,682,528  |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$36.7  |
| Life-Cycle Benefits (mil. \$) | \$71.0  |
| Net Present Value (mil. \$)   | \$34.3  |
| Benefit / Cost Ratio:         | 1.9     |
| Rate of Return on Investment: | 16.7%   |
| Payback Period:               | 6 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$42.8             | \$9.9            | \$52.7              | \$2.6          |
| Veh. Op. Cost Savings             | \$0.0              | \$0.1            | \$0.1               | \$0.0          |
| Accident Cost Savings             | \$15.0             | \$2.9            | \$17.9              | \$0.9          |
| Emission Cost Savings             | \$0.0              | \$0.3            | \$0.3               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$57.9</b>      | <b>\$13.2</b>    | <b>\$71.0</b>       | <b>\$3.6</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>6,880,325</b>    | <b>344,016</b> |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 37                  | 2              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 5,414               | 271            | \$0.1               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 19                  | 1              | \$0.2               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 3                   | 0              | \$0.0               | \$0.0          |

## I-80 McCarran Blvd to Sparks Blvd (EB Aux Lanes)

1A

### PROJECT DATA

|  |  |
|--|--|
| <b>Type of Project</b>   | Enter ramp design speed & on-ramp volume |
| Select project type from list  | Auxiliary Lane                           |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) | 2  |
| Length of Construction Period  | 1 years                                  |
| One- or Two-Way Data   | 1 enter 1 or 2                           |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours                                  |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

|   | No Build | Build    |
|---|----------|----------|
| <b>Highway Design</b>   |          |          |
| Roadway Type (Fwy, Exp, Conv Hwy)                             | F        | F        |
| Number of General Traffic Lanes                               | 2        | 3        |
| Number of HOV/HOT Lanes                                       | 0        | 0        |
| HOV Restriction (2 or 3)                                      | 0        |          |
| Exclusive ROW for Buses (y/n)                                 | N        |          |
| Highway Free-Flow Speed                                       | 65       | 65       |
| Ramp Design Speed (if aux. lane/off-ramp proj.)               | 45       | 45       |
| Length (in miles) Highway Segment                             | 0.8      | 0.8      |
| Impacted Length   | 0.3      | 0.3      |
| <b>Average Daily Traffic</b>                                  |          |          |
| Current   | 38,000   |          |
| Base (Year 1)   | 38,724   | 38,724   |
| Forecast (Year 20)  | 52,477   | 52,477   |
| <b>Average Hourly HOV/HOT Lane Traffic</b>                    | 0        | 0        |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)      |          | 100%     |
| <b>Percent Traffic in Weave</b>                               | 2.5%     | 2.5%     |
| <b>Percent Trucks</b> (include RVs, if applicable)            | 16%      | 16%      |
| <b>Truck Speed</b>  | 52       |          |
| <b>On-Ramp Volume</b>   | Peak     | Non-Peak |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)               | 2159     | 1655     |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.)           |          |          |
| <b>Queue Formation</b> (if queuing or grade crossing project) | Year 1   | Year 20  |
| Arrival Rate (in vehicles per hour)                           | 0        | 0        |
| Departure Rate (in vehicles per hour)                         | 0        | 0        |
| <b>Pavement Condition</b> (if pavement project)               | No Build | Build    |
| IRI (inches/mile) Base (Year 1)                               |          |          |
| Forecast (Year 20)  |          |          |
| <b>Average Vehicle Occupancy (AVO)</b>                        | No Build | Build    |
| General Traffic Non-Peak                                      | 1.74     | 1.74     |
| Peak  | 1.74     | 1.74     |
| High Occupancy Vehicle (if HOV/HOT lanes)                     | 2.15     | 2.15     |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 61          | 1.83  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 19          | 0.57  |
| Property Damage Only (PDO) Accidents | 49          | 1.47  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |



1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$0                  | \$0   | \$1,400,000  |                  |        |            |                             | \$14,000,000             | \$14,000,000  |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$0                  | \$0   | \$1,400,000  | \$0              | \$0    | \$0        | \$0                         | \$14,000,000             | \$14,000,000  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$14.0  |
| Life-Cycle Benefits (mil. \$) | \$36.3  |
| Net Present Value (mil. \$)   | \$22.3  |
| Benefit / Cost Ratio:         | 2.6     |
| Rate of Return on Investment: | 20.0%   |
| Payback Period:               | 6 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$26.5             | \$3.7            | \$30.2              | \$1.5          |
| Veh. Op. Cost Savings             | \$1.2              | \$0.3            | \$1.5               | \$0.1          |
| Accident Cost Savings             | \$3.8              | \$0.3            | \$4.1               | \$0.2          |
| Emission Cost Savings             | \$0.3              | \$0.2            | \$0.5               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$31.7</b>      | <b>\$4.6</b>     | <b>\$36.3</b>       | <b>\$1.8</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>4,494,180</b>    | <b>224,709</b> |

**Should benefit-cost results include:**

|                                   |                                |             |
|-----------------------------------|--------------------------------|-------------|
| 1) Induced Travel? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | <input type="text" value="Y"/> | Default = Y |
| 3) Accident Costs? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 4) Vehicle Emissions? (y/n)       | <input type="text" value="Y"/> | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 28                  | 1              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 12,365              | 618            | \$0.3               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 20                  | 1              | \$0.2               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 4                   | 0              | \$0.0               | \$0.0          |

## I-80 McCarran Blvd to Sparks Blvd (WB Aux Lanes)

1A

### PROJECT DATA

|  |   |              |
|--|---|--------------|
| <b>Type of Project</b>                       | <small>Enter ramp design speed &amp; on-ramp volume</small>           |              |
| <small>Select project type from list</small> | Auxiliary Lane  |              |
| <b>Project Location</b>                      | <small>(enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)</small> | 2            |
| Length of Construction Period                | 1   | years        |
| One- or Two-Way Data                         | 1   | enter 1 or 2 |
|  | <small>Current</small>  |              |
| <b>Length of Peak Period(s)</b>              | <small>(up to 24 hrs)</small>   | 2            |
|  |   | hours        |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

|   |     |                         |                      |
|---|-----|-------------------------|----------------------|
| <b>Highway Design</b>                           |     | <small>No Build</small> | <small>Build</small> |
| Roadway Type (Fwy, Exp, Conv Hwy)               | F   | F                       |                      |
| Number of General Traffic Lanes                 | 2   | 3                       |                      |
| Number of HOV/HOT Lanes                         | 0   | 0                       |                      |
| HOV Restriction (2 or 3)                        | 0   |                         |                      |
| Exclusive ROW for Buses (y/n)                   | N   |                         |                      |
| Highway Free-Flow Speed                         | 65  | 65                      |                      |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45  | 45                      |                      |
| Length (in miles) Highway Segment               | 0.8 | 0.8                     |                      |
| Impacted Length                                 | 0.3 | 0.3                     |                      |

|                              |        |                         |                      |
|------------------------------|--------|-------------------------|----------------------|
| <b>Average Daily Traffic</b> |        |                         |                      |
| Current                      | 38,000 |                         |                      |
|                              |        | <small>No Build</small> | <small>Build</small> |
| Base (Year 1)                | 38,724 | 38,724                  |                      |
| Forecast (Year 20)           | 52,477 | 52,477                  |                      |

|  |  |   |      |
|--|--|---|------|
| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | 0 | 0    |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  |   | 100% |

|  |      |      |
|--|------|------|
| <b>Percent Traffic in Weave</b>                    | 2.5% | 2.5% |
| <b>Percent Trucks</b> (include RVs, if applicable) | 16%  | 16%  |
| <b>Truck Speed</b>                                 | 52   |      |

|   |      |                     |                         |
|---|------|---------------------|-------------------------|
| <b>On-Ramp Volume</b>                               |      | <small>Peak</small> | <small>Non-Peak</small> |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 2744 | 1337                |                         |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |                     |                         |

|   |   |                       |                        |
|---|---|-----------------------|------------------------|
| <b>Queue Formation</b> (if queuing or grade crossing project) |   | <small>Year 1</small> | <small>Year 20</small> |
| Arrival Rate (in vehicles per hour)                           | 0 | 0                     |                        |
| Departure Rate (in vehicles per hour)                         | 0 | 0                     |                        |

|   |  |                         |                      |
|---|--|-------------------------|----------------------|
| <b>Pavement Condition</b> (if pavement project) |  | <small>No Build</small> | <small>Build</small> |
| IRI (inches/mile) Base (Year 1)                 |  |                         |                      |
| Forecast (Year 20)                              |  |                         |                      |

|   |          |                         |                      |
|---|----------|-------------------------|----------------------|
| <b>Average Vehicle Occupancy (AVO)</b>    |          | <small>No Build</small> | <small>Build</small> |
| General Traffic                           | Non-Peak | 1.74                    | 1.74                 |
|   | Peak     | 1.74                    | 1.74                 |
| High Occupancy Vehicle (if HOV/HOT lanes) |          | 2.15                    | 2.15                 |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 62          | 1.86  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 16          | 0.48  |
| Property Damage Only (PDO) Accidents | 49          | 1.47  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$0                  | \$0   | \$1,400,000  |                  |        |            |                             | \$14,000,000             | \$14,000,000  |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$0                  | \$0   | \$1,400,000  | \$0              | \$0    | \$0        | \$0                         | \$14,000,000             | \$14,000,000  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$14.0  |
| Life-Cycle Benefits (mil. \$) | \$66.4  |
| Net Present Value (mil. \$)   | \$52.4  |
| Benefit / Cost Ratio:         | 4.7     |
| Rate of Return on Investment: | 42.8%   |
| Payback Period:               | 3 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$53.0             | \$7.0            | \$60.0              | \$3.0          |
| Veh. Op. Cost Savings             | \$2.1              | \$0.3            | \$2.4               | \$0.1          |
| Accident Cost Savings             | \$3.0              | \$0.3            | \$3.3               | \$0.2          |
| Emission Cost Savings             | \$0.5              | \$0.3            | \$0.7               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$58.6</b>      | <b>\$7.9</b>     | <b>\$66.4</b>       | <b>\$3.3</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>7,879,791</b>    | <b>393,990</b> |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 40                  | 2              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 19,316              | 966            | \$0.5               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 23                  | 1              | \$0.2               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 6                   | 0              | \$0.0               | \$0.0          |

## I-80 Patrick Interchange

1A

### PROJECT DATA

|  |  |
|--|--|
| <b>Type of Project</b>   | Check percent traffic in weave in section 1B |
| Select project type from list  | Off-Ramp Widening                            |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) | 2  |
| Length of Construction Period  | 2 years                                      |
| One- or Two-Way Data   | 2 enter 1 or 2                               |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours                                      |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

|   |     |          |       |
|---|-----|----------|-------|
| <b>Highway Design</b>                           |     | No Build | Build |
| Roadway Type (Fwy, Exp, Conv Hwy)               | F   | F        |       |
| Number of General Traffic Lanes                 | 1   | 2        |       |
| Number of HOV/HOT Lanes                         | 0   | 0        |       |
| HOV Restriction (2 or 3)                        | 0   |          |       |
| Exclusive ROW for Buses (y/n)                   | N   |          |       |
| Highway Free-Flow Speed                         | 65  | 65       |       |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45  | 45       |       |
| Length (in miles) Highway Segment               | 1.2 | 1.2      |       |
| Impacted Length                                 | 0.3 | 0.3      |       |

|                              |        |          |       |
|------------------------------|--------|----------|-------|
| <b>Average Daily Traffic</b> |        |          |       |
| Current                      | 30,000 |          |       |
|                              |        | No Build | Build |
| Base (Year 1)                | 34,488 | 34,488   |       |
| Forecast (Year 20)           | 77,125 | 77,125   |       |

|  |  |   |      |
|--|--|---|------|
| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | 0 | 0    |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  |   | 100% |

|  |      |      |
|--|------|------|
| <b>Percent Traffic in Weave</b>                    | 2.5% | 2.5% |
| <b>Percent Trucks</b> (include RVs, if applicable) | 16%  | 16%  |
| <b>Truck Speed</b>                                 | 50   |      |

|   |     |      |          |
|---|-----|------|----------|
| <b>On-Ramp Volume</b>                               |     | Peak | Non-Peak |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 217 | 136  |          |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |     |      |          |

|   |   |        |         |
|---|---|--------|---------|
| <b>Queue Formation</b> (if queuing or grade crossing project) |   | Year 1 | Year 20 |
| Arrival Rate (in vehicles per hour)                           | 0 | 0      |         |
| Departure Rate (in vehicles per hour)                         | 0 | 0      |         |

|   |  |          |       |
|---|--|----------|-------|
| <b>Pavement Condition</b> (if pavement project) |  | No Build | Build |
| IRI (inches/mile) Base (Year 1)                 |  |          |       |
| Forecast (Year 20)                              |  |          |       |

|   |      |          |       |
|---|------|----------|-------|
| <b>Average Vehicle Occupancy (AVO)</b>    |      | No Build | Build |
| General Traffic Non-Peak                  | 1.74 | 1.74     |       |
| Peak                                      | 1.74 | 1.74     |       |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15 | 2.15     |       |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 5           | 0.15  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 5           | 0.15  |
| Property Damage Only (PDO) Accidents | 0           | 0.00  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$0                  | \$0   | \$1,250,000  |                  |        |            |                             | \$12,500,000             | \$12,500,000  |
| 2                          | 0                    | 0     | 1,250,000    |                  |        |            |                             | 12,500,000               | 11,682,243    |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$0                  | \$0   | \$2,500,000  | \$0              | \$0    | \$0        | \$0                         | \$25,000,000             | \$24,182,243  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |         |
|-------------------------------|---------|
| Life-Cycle Costs (mil. \$)    | \$24.2  |
| Life-Cycle Benefits (mil. \$) | \$55.8  |
| Net Present Value (mil. \$)   | \$31.6  |
| Benefit / Cost Ratio:         | 2.3     |
| Rate of Return on Investment: | 15.0%   |
| Payback Period:               | 9 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$40.5             | \$10.4           | \$50.9              | \$2.5          |
| Veh. Op. Cost Savings             | \$1.6              | \$0.5            | \$2.1               | \$0.1          |
| Accident Cost Savings             | \$1.5              | \$0.3            | \$1.8               | \$0.1          |
| Emission Cost Savings             | \$0.3              | \$0.6            | \$0.9               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$44.0</b>      | <b>\$11.8</b>    | <b>\$55.8</b>       | <b>\$2.8</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>8,751,426</b>    | <b>437,571</b> |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 64                  | 3              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 24,598              | 1,230          | \$0.5               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 67                  | 3              | \$0.4               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 7                   | 0              | \$0.0               | \$0.0          |

## I-80 Reversible Lanes

1A

### PROJECT DATA

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 2 years         |
| One- or Two-Way Data   | 1 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours         |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

| <b>Highway Design</b>                           | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 2        | 3     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 13.0     | 13.0  |
| Impacted Length                                 | 13.0     | 13.0  |

| <b>Average Daily Traffic</b> |  | No Build | Build  |
|------------------------------|--|----------|--------|
| Current                      |  | 48,000   |        |
| Base (Year 1)                |  | 51,475   | 51,475 |
| Forecast (Year 20)           |  | 84,485   | 84,485 |

| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | No Build | Build |
|--|--|----------|-------|
|  |  | 0        | 0     |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  |          | 100%  |
| <b>Percent Traffic in Weave</b>                          |  | 0.0%     | 0.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)       |  | 16%      | 16%   |
| <b>Truck Speed</b>                                       |  | 55       |       |

| <b>On-Ramp Volume</b>                               |  | Peak | Non-Peak |
|---|--|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     |  | 1986 | 1636     |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |  |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) |  | Year 1 | Year 20 |
|---|--|--------|---------|
| Arrival Rate (in vehicles per hour)                           |  | 0      | 0       |
| Departure Rate (in vehicles per hour)                         |  | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) |  | No Build | Build |
|---|--|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |  |          |       |
| Forecast (Year 20)                              |  |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    |  | No Build | Build |
|---|--|----------|-------|
| General Traffic Non-Peak                  |  | 1.74     | 1.74  |
| Peak                                      |  | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) |  | 2.15     | 2.15  |



1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 32          | 0.05  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 23          | 0.03  |
| Property Damage Only (PDO) Accidents | 57          | 0.08  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

| Col. no.                   | (1)                  | (2)        | (3)          | (4)         | (5)        | (6)        | (7)                         |                          |                      |
|----------------------------|----------------------|------------|--------------|-------------|------------|------------|-----------------------------|--------------------------|----------------------|
| Year                       | DIRECT PROJECT COSTS |            |              |             |            | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |                      |
|                            | Project Support      | R / V      | Construction | Maint./ Op. | Rehab.     |            |                             | Constant Dollars         | Present Value        |
| <b>Construction Period</b> |                      |            |              |             |            |            |                             |                          |                      |
| 1                          | \$5,000,000          | \$0        | \$0          |             |            |            |                             | \$112,500,000            | \$112,500,000        |
| 2                          | 5,000,000            |            |              |             |            |            |                             | 112,500,000              | 105,140,187          |
| 3                          |                      |            |              |             |            |            |                             |                          | 0                    |
| 4                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 5                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 6                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 7                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 8                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| <b>Project Open</b>        |                      |            |              |             |            |            |                             |                          |                      |
| 1                          |                      |            |              |             |            |            |                             | \$0                      | \$0                  |
| 2                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 3                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 4                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 5                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 6                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 7                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 8                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 9                          |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 10                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 11                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 12                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 13                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 14                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 15                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 16                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 17                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 18                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 19                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| 20                         |                      |            |              |             |            |            |                             | 0                        | 0                    |
| <b>Total</b>               | <b>\$10,000,000</b>  | <b>\$0</b> | <b>\$0</b>   | <b>\$0</b>  | <b>\$0</b> | <b>\$0</b> | <b>\$0</b>                  | <b>\$225,000,000</b>     | <b>\$217,640,187</b> |

**INVESTMENT ANALYSIS**  
SUMMARY RESULTS

|                                      |                 |
|--------------------------------------|-----------------|
| Life-Cycle Costs (mil. \$)           | \$217.6         |
| Life-Cycle Benefits (mil. \$)        | \$436.9         |
| Net Present Value (mil. \$)          | \$219.3         |
| <b>Benefit / Cost Ratio:</b>         | <b>2.0</b>      |
| <b>Rate of Return on Investment:</b> | <b>12.3%</b>    |
| <b>Payback Period:</b>               | <b>12 years</b> |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$331.6            | \$77.5           | \$409.1             | \$20.5         |
| Veh. Op. Cost Savings             | \$11.0             | \$3.0            | \$14.0              | \$0.7          |
| Accident Cost Savings             | \$6.0              | \$1.1            | \$7.1               | \$0.4          |
| Emission Cost Savings             | \$2.0              | \$4.8            | \$6.8               | \$0.3          |
| <b>TOTAL BENEFITS</b>             | <b>\$350.5</b>     | <b>\$86.4</b>    | <b>\$436.9</b>      | <b>\$21.8</b>  |
| <b>Person-Hours of Time Saved</b> |                    |                  | #####               | 4,058,120      |

**Should benefit-cost results include:**

|                                   |                                |             |
|-----------------------------------|--------------------------------|-------------|
| 1) Induced Travel? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | <input type="text" value="Y"/> | Default = Y |
| 3) Accident Costs? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 4) Vehicle Emissions? (y/n)       | <input type="text" value="Y"/> | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 554                 | 28             | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 202,303             | 10,115         | \$3.1               | \$0.2          |
| NO <sub>x</sub> Emissions Saved   | 599                 | 30             | \$3.5               | \$0.2          |
| PM <sub>10</sub> Emissions Saved  | 2                   | 0              | \$0.1               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 2                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 2                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 55                  | 3              | \$0.0               | \$0.0          |

# I-80 USA Parkway Interchange

1A

## PROJECT DATA

|  |   |
|--|---|
| <b>Type of Project</b><br>Select project type from list                        | Check percent traffic in weave in section 1B<br><span style="border: 1px solid black; padding: 2px;">Off-Ramp Widening</span> |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) | <span style="border: 1px solid black; padding: 2px;">2</span>   |
| Length of Construction Period  | <span style="border: 1px solid black; padding: 2px;">2</span> years   |
| One- or Two-Way Data   | <span style="border: 1px solid black; padding: 2px;">2</span> enter 1 or 2  |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | Current<br><span style="border: 1px solid black; padding: 2px;">2</span> hours  |

1B

## HIGHWAY DESIGN AND TRAFFIC DATA

| Highway Design                                  | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 1        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.2      | 1.2   |
| Impacted Length                                 | 0.3      | 0.3   |

| Average Daily Traffic                                    | No Build   | Build  |
|--|--|--------|
| Current  | <span style="border: 1px solid black; padding: 2px;">32,000</span> |        |
| Base (Year 1)  | 36,083   | 36,083 |
| Forecast (Year 20)                                       | 74,869   | 74,869 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0  | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  | 100%   |
| <b>Percent Traffic in Weave</b>                          | 25.0%  | 25.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%  | 16%    |
| <b>Truck Speed</b>                                       | 45   |        |

| On-Ramp Volume                                      | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 620  | 421      |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

| Queue Formation (if queuing or grade crossing project) | Year 1 | Year 20 |
|--|--------|---------|
| Arrival Rate (in vehicles per hour)                    | 0      | 0       |
| Departure Rate (in vehicles per hour)                  | 0      | 0       |

| Pavement Condition (if pavement project) | No Build | Build |
|--|----------|-------|
| IRI (inches/mile) Base (Year 1)          |          |       |
| Forecast (Year 20)                       |          |       |

| Average Vehicle Occupancy (AVO)           | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 2           | 0.06  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 2           | 0.06  |
| Property Damage Only (PDO) Accidents | 0           | 0.00  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$1,250,000          | \$0   | \$0          |                  |        |            |                             | \$20,000,000             | \$20,000,000  |
| 2                          | 1,250,000            |       |              |                  |        |            |                             | 15,000,000               | 14,018,692    |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$2,500,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$35,000,000             | \$34,018,692  |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |                |
|--------------------------------------|----------------|
| Life-Cycle Costs (mil. \$)           | \$34.0         |
| Life-Cycle Benefits (mil. \$)        | \$58.3         |
| Net Present Value (mil. \$)          | \$24.3         |
| <b>Benefit / Cost Ratio:</b>         | <b>1.7</b>     |
| <b>Rate of Return on Investment:</b> | <b>12.5%</b>   |
| <b>Payback Period:</b>               | <b>9 years</b> |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits  | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|---------------------|------------------|---------------------|----------------|
|                                   | Travel Time Savings | \$43.8           | \$11.0              | \$54.8         |
| Veh. Op. Cost Savings             | \$1.5               | \$0.5            | \$1.9               | \$0.1          |
| Accident Cost Savings             | \$0.6               | \$0.1            | \$0.7               | \$0.0          |
| Emission Cost Savings             | \$0.3               | \$0.5            | \$0.8               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$46.2</b>       | <b>\$12.1</b>    | <b>\$58.3</b>       | <b>\$2.9</b>   |
| <b>Person-Hours of Time Saved</b> |                     |                  | <b>8,714,442</b>    | <b>435,722</b> |

**Should benefit-cost results include:**

|  |  |
|--|--|
| 1) Induced Travel? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 2) Vehicle Operating Costs? (y/n)  | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 3) Accident Costs? (y/n)   | <input type="text" value="Y"/><br><small>Default = Y</small> |
| 4) Vehicle Emissions? (y/n)<br><small>includes value for CO<sub>2</sub>e</small> | <input type="text" value="Y"/><br><small>Default = Y</small> |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 60                  | 3              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 20,355              | 1,018          | \$0.4               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 59                  | 3              | \$0.4               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 7                   | 0              | \$0.0               | \$0.0          |

I-80 WB McCarran Blvd. to Vista Blvd. (Widen to 3-lanes)

1A **PROJECT DATA**

**Type of Project**  
 Select project type from list: General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural): 2

Length of Construction Period: 2 years  
 One- or Two-Way Data: 1 enter 1 or 2

Length of Peak Period(s) (up to 24 hrs): Current 2 hours

1B **HIGHWAY DESIGN AND TRAFFIC DATA**

| <b>Highway Design</b>                           |  | No Build | Build |
|---|--|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               |  | F        | F     |
| Number of General Traffic Lanes                 |  | 2        | 3     |
| Number of HOV/HOT Lanes                         |  | 0        | 0     |
| HOV Restriction (2 or 3)                        |  | 0        |       |
| Exclusive ROW for Buses (y/n)                   |  | N        |       |
| Highway Free-Flow Speed                         |  | 65       | 65    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) |  | 45       | 45    |
| Length (in miles) Highway Segment               |  | 2.1      | 2.1   |
| Impacted Length                                 |  | 2.1      | 2.1   |

| <b>Average Daily Traffic</b> |  | No Build | Build  |
|------------------------------|--|----------|--------|
| Current                      |  | 48,000   |        |
| Base (Year 1)                |  | 51,475   | 51,475 |
| Forecast (Year 20)           |  | 84,485   | 84,485 |

| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | No Build | Build |
|--|--|----------|-------|
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  | 0        | 100%  |

| <b>Percent Traffic in Weave</b>             |  | No Build | Build |
|---|--|----------|-------|
| Percent Trucks (include RVs, if applicable) |  | 0.0%     | 0.0%  |

| <b>Truck Speed</b> |  | No Build | Build |
|--------------------|--|----------|-------|
| Truck Speed        |  | 55       |       |

| <b>On-Ramp Volume</b>                               |  | Peak | Non-Peak |
|---|--|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     |  | 1986 | 1636     |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |  |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) |  | Year 1 | Year 20 |
|---|--|--------|---------|
| Arrival Rate (in vehicles per hour)                           |  | 0      | 0       |
| Departure Rate (in vehicles per hour)                         |  | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) |  | No Build | Build |
|---|--|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |  |          |       |
| Forecast (Year 20)                              |  |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    |  | No Build | Build |
|---|--|----------|-------|
| General Traffic Non-Peak                  |  | 1.74     | 1.74  |
| Peak                                      |  | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) |  | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 73          | 0.66  |
| Fatal Accidents (Fat)                | 1           | 0.009 |
| Injury Accidents (Inj)               | 22          | 0.20  |
| Property Damage Only (PDO) Accidents | 57          | 0.52  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$500,000            | \$0   | \$0          |                  |        |            |                             | \$10,000,000             | \$10,000,000  |
| 2                          | 500,000              |       |              |                  |        |            |                             | 10,000,000               | 9,345,794     |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$1,000,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$20,000,000             | \$19,345,794  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |         |
|--------------------------------------|---------|
| Life-Cycle Costs (mil. \$)           | \$19.3  |
| Life-Cycle Benefits (mil. \$)        | \$98.3  |
| Net Present Value (mil. \$)          | \$79.0  |
| <b>Benefit / Cost Ratio:</b>         | 5.1     |
| <b>Rate of Return on Investment:</b> | 24.1%   |
| <b>Payback Period:</b>               | 6 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$53.6             | \$12.5           | \$66.1              | \$3.3          |
| Veh. Op. Cost Savings             | \$1.8              | \$0.5            | \$2.3               | \$0.1          |
| Accident Cost Savings             | \$24.2             | \$4.6            | \$28.9              | \$1.4          |
| Emission Cost Savings             | \$0.3              | \$0.8            | \$1.1               | \$0.1          |
| <b>TOTAL BENEFITS</b>             | <b>\$79.9</b>      | <b>\$18.4</b>    | <b>\$98.3</b>       | <b>\$4.9</b>   |
| <b>Person-Hours of Time Saved</b> | #####              |                  | 655,542             |                |

**Should benefit-cost results include:**

|                                   |   |
|-----------------------------------|---|
| 1) Induced Travel? (y/n)          | Y |
| 2) Vehicle Operating Costs? (y/n) | Y |
| 3) Accident Costs? (y/n)          | Y |
| 4) Vehicle Emissions? (y/n)       | Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 89                  | 4              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 32,680              | 1,634          | \$0.5               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 97                  | 5              | \$0.6               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 9                   | 0              | \$0.0               | \$0.0          |



## La Posada

1A

### PROJECT DATA

**Type of Project**  
 Select project type from list General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) 2

Length of Construction Period 3 years  
 One- or Two-Way Data 2 enter 1 or 2

Current

**Length of Peak Period(s)** (up to 24 hrs) 5 hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

| <b>Highway Design</b>                           | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | E        | C     |
| Number of General Traffic Lanes                 | 4        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 45       | 55    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 0        | 0     |
| Length (in miles) Highway Segment               | 20.0     | 16.7  |
| Impacted Length                                 | 20.0     | 16.7  |

| <b>Average Daily Traffic</b> | No Build | Build  |
|------------------------------|----------|--------|
| Current                      | 0        |        |
| Base (Year 1)                | 9,514    | 9,514  |
| Forecast (Year 20)           | 12,843   | 12,843 |

| <b>Average Hourly HOV/HOT Lane Traffic</b>               | No Build | Build |
|--|----------|-------|
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |          | 0%    |

| <b>Percent Traffic in Weave</b> | No Build | Build |
|---------------------------------|----------|-------|
|                                 |          | 0.0%  |

| <b>Percent Trucks</b> (include RVs, if applicable) | No Build | Build |
|--|----------|-------|
|  | 6%       | 2%    |

| <b>Truck Speed</b> | No Build | Build |
|--------------------|----------|-------|
|                    | 40       | 55    |

| <b>On-Ramp Volume</b>                               | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 0    | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) | Year 1 | Year 20 |
|---|--------|---------|
| Arrival Rate (in vehicles per hour)                           | 0      | 0       |
| Departure Rate (in vehicles per hour)                         | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) | No Build | Build |
|---|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |          |       |
| Forecast (Year 20)                              |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.20     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 0.00     | 0.00  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                |             | 0.21  |
| Fatal Accidents (Fat)                |             | 0.006 |
| Injury Accidents (Inj)               |             | 0.65  |
| Property Damage Only (PDO) Accidents |             | 1.06  |

**Statewide Basic Average Accident Rate**

|   | No Build | Build |
|---|----------|-------|
| Rate Group                                |          |       |
| Accident Rate (per million vehicle-miles) | 0.00     | 0.21  |
| Percent Fatal Accidents (Pct Fat)         | 0.0%     | 0.6%  |
| Percent Injury Accidents (Pct Inj)        | 0.0%     | 1.1%  |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|  | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  |          |       |
| Forecast (Year 20)                             |          |       |
| <b>Percent Trips during Peak Period</b>        | 0%       |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

**Annual Vehicle-Miles**

|   | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   |          |       |
| Forecast (Year 20)                              |          |       |
| <b>Average Vehicles/Train</b> (if rail project) |          |       |

**Reduction in Transit Accidents**

|                                       |  |
|---------------------------------------|--|
| Percent Reduction (if safety project) |  |
|---------------------------------------|--|

**Average Transit Travel Time**

|                | No Build              | Build |
|----------------|-----------------------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       |         | 0      |         |
| Avg. Gate Down Time (in min.) |         | 0.0    |         |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              |          | \$0   |
| Annual Ops. and Maintenance Expenditure |          | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |         |                  |             |              | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |                   |
|----------------------------|----------------------|---------|------------------|-------------|--------------|------------|-----------------------------|--------------------------|-------------------|
|                            | INITIAL COSTS        |         | SUBSEQUENT COSTS |             |              |            |                             | Constant Dollars         | Present Value     |
|                            | Project Support      | R / W   | Construction     | Maint./ Op. | Rehab.       |            |                             |                          |                   |
| <b>Construction Period</b> |                      |         |                  |             |              |            |                             |                          |                   |
| 1                          | \$0                  |         |                  |             |              |            |                             | \$0                      | \$0               |
| 2                          | 0                    |         |                  |             |              |            |                             | 0                        | 0                 |
| 3                          | 5,000                |         |                  |             |              |            |                             | 5,000,000                | 4,367,194         |
| 4                          | 6,000                | 1,000   |                  |             |              |            |                             | 7,000,000                | 5,714,085         |
| 5                          | 8,000                |         |                  |             |              |            |                             | 8,000,000                | 6,103,162         |
| 6                          |                      |         | 60,000           |             |              |            |                             | 60,000,000               | 42,779,171        |
| 7                          |                      |         | 90,000           |             |              |            |                             | 90,000,000               | 59,970,800        |
| 8                          |                      |         | 50,000           |             |              |            |                             | 50,000,000               | 31,137,487        |
| <b>Project Open</b>        |                      |         |                  |             |              |            |                             |                          |                   |
| 1                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 16,325.96      |
| 2                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 15,257.90      |
| 3                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 14,259.72      |
| 4                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 13,326.84      |
| 5                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 12,454.99      |
| 6                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 11,640.18      |
| 7                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 10,878.67      |
| 8                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 10,166.99      |
| 9                          |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 9,501.86       |
| 10                         |                      |         |                  | \$ 20.00    | \$ 20,000.00 |            |                             | \$ 20,020,000.00         | \$ 8,889,119.42   |
| 11                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 8,299.29       |
| 12                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 7,756.34       |
| 13                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 7,248.92       |
| 14                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 6,774.69       |
| 15                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 6,331.49       |
| 16                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,917.28       |
| 17                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,530.17       |
| 18                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 5,168.38       |
| 19                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 4,830.26       |
| 20                         |                      |         |                  | \$ 20.00    |              |            |                             | \$ 20,000.00             | \$ 4,514.26       |
| <b>Total</b>               | \$19,000             | \$1,000 | \$200,000        | \$ 400.00   | \$ 20,000.00 | \$ -       | \$ -                        | \$ 240,400,000.00        | \$ 159,137,202.11 |

3

**INVESTMENT ANALYSIS**

**SUMMARY RESULTS**

|                                      |          |
|--------------------------------------|----------|
| Life-Cycle Costs (mil. \$)           | \$159.1  |
| Life-Cycle Benefits (mil. \$)        | \$174.4  |
| Net Present Value (mil. \$)          | \$15.3   |
| <b>Benefit / Cost Ratio:</b>         | 1.1      |
| <b>Rate of Return on Investment:</b> | 336.3%   |
| <b>Payback Period:</b>               | 14 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$84.6             | \$1.9            | \$86.5              | \$4.3          |
| Veh. Op. Cost Savings             | \$43.2             | \$19.5           | \$62.7              | \$3.1          |
| Accident Cost Savings             | \$14.8             | \$5.4            | \$20.2              | \$1.0          |
| Emission Cost Savings             | \$1.0              | \$4.0            | \$5.0               | \$0.3          |
| <b>TOTAL BENEFITS</b>             | <b>\$143.6</b>     | <b>\$30.8</b>    | <b>\$174.4</b>      | <b>\$8.7</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>15,446,283</b>   | <b>772,314</b> |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 310                 | 16             | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 137,504             | 6,875          | \$3.0               | \$0.1          |
| NO <sub>x</sub> Emissions Saved   | 169                 | 8              | \$1.8               | \$0.1          |
| PM <sub>10</sub> Emissions Saved  | 2                   | 0              | \$0.2               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 2                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 2                   | 0              | \$0.1               | \$0.0          |
| VOC Emissions Saved               | 12                  | 1              | \$0.0               | \$0.0          |

## Pyramid Highway (Queen Way to Sparks Blvd.) (Phase 1)

1A

### PROJECT DATA

**Type of Project**

Select project type from list

General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

2

Length of Construction Period  years

One- or Two-Way Data  enter 1 or 2

Current

**Length of Peak Period(s)** (up to 24 hrs)  hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 4        | 6     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 2        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 55       | 55    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 0        | 0     |
| Length (in miles) Highway Segment               | 3.5      | 3.5   |
| Impacted Length                                 | 3.5      | 3.5   |

**Average Daily Traffic**

|  |                                     |        |
|--|-------------------------------------|--------|
| Current  | <input type="text" value="38,000"/> |        |
|  | No Build                            | Build  |
| Base (Year 1)  | 39,048                              | 39,048 |
| Forecast (Year 20)                                       | 49,000                              | 49,000 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0                                   | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |                                     | 100%   |
| <b>Percent Traffic in Weave</b>                          | 1.2%                                | 1.2%   |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%                                 | 16%    |
| <b>Truck Speed</b>                                       | 55                                  |        |

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 0    | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 311         | 2.14  |
| Fatal Accidents (Fat)                | 2           | 0.014 |
| Injury Accidents (Inj)               | 121         | 0.83  |
| Property Damage Only (PDO) Accidents | 188         | 1.29  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$1,342,500          | \$0   | \$0          |                  |        |            |                             | \$26,850,000             | \$26,850,000  |
| 2                          | 1,342,500            |       |              |                  |        |            |                             | 26,850,000               | 25,093,458    |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$2,685,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$53,700,000             | \$51,943,458  |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                                      |         |
|--------------------------------------|---------|
| Life-Cycle Costs (mil. \$)           | \$51.9  |
| Life-Cycle Benefits (mil. \$)        | \$69.9  |
| Net Present Value (mil. \$)          | \$18.0  |
| <b>Benefit / Cost Ratio:</b>         | 1.3     |
| <b>Rate of Return on Investment:</b> | 10.7%   |
| <b>Payback Period:</b>               | 8 years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Veh. Op. Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Accident Cost Savings             | \$58.7             | \$11.2           | \$69.9              | \$3.5          |
| Emission Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | \$58.7             | \$11.2           | \$69.9              | \$3.5          |
| <b>Person-Hours of Time Saved</b> |                    |                  | 0                   | 0              |

**Should benefit-cost results include:**

|                                   |   |
|-----------------------------------|---|
| 1) Induced Travel? (y/n)          | Y |
| 2) Vehicle Operating Costs? (y/n) | Y |
| 3) Accident Costs? (y/n)          | Y |
| 4) Vehicle Emissions? (y/n)       | Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 0                   | 0              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 0                   | 0              | \$0.0               | \$0.0          |

**Pyramid Highway (Sparks Blvd. to Calle De La Platta) (Phase 5)**

**1A PROJECT DATA**

**Type of Project**  
 Select project type from list

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

Length of Construction Period  years  
 One- or Two-Way Data  enter 1 or 2  
 Current

**Length of Peak Period(s)** (up to 24 hrs)  hours

**1B HIGHWAY DESIGN AND TRAFFIC DATA**

| <b>Highway Design</b>                           |  | No Build | Build |
|---|--|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               |  | F        | F     |
| Number of General Traffic Lanes                 |  | 4        | 6     |
| Number of HOV/HOT Lanes                         |  | 0        | 0     |
| HOV Restriction (2 or 3)                        |  | 0        |       |
| Exclusive ROW for Buses (y/n)                   |  | N        |       |
| Highway Free-Flow Speed                         |  | 55       | 55    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) |  | 0        | 0     |
| Length (in miles) Highway Segment               |  | 4.3      | 4.3   |
| Impacted Length                                 |  | 4.3      | 4.3   |

| <b>Average Daily Traffic</b> |  | No Build | Build  |
|------------------------------|--|----------|--------|
| Current                      |  | 38,000   |        |
| Base (Year 1)                |  | 39,048   | 39,048 |
| Forecast (Year 20)           |  | 49,000   | 49,000 |

| <b>Average Hourly HOV/HOT Lane Traffic</b>               |  | No Build | Build |
|--|--|----------|-------|
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |  | 0        | 100%  |

| <b>Percent Traffic in Weave</b> |  | No Build | Build |
|---------------------------------|--|----------|-------|
|                                 |  | 0.0%     | 0.0%  |

| <b>Percent Trucks</b> (include RVs, if applicable) |  | No Build | Build |
|--|--|----------|-------|
|  |  | 16%      | 16%   |

| <b>Truck Speed</b> |  | No Build | Build |
|--------------------|--|----------|-------|
|                    |  | 55       |       |

| <b>On-Ramp Volume</b>                               |  | Peak | Non-Peak |
|---|--|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     |  | 0    | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |  |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) |  | Year 1 | Year 20 |
|---|--|--------|---------|
| Arrival Rate (in vehicles per hour)                           |  | 0      | 0       |
| Departure Rate (in vehicles per hour)                         |  | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) |  | No Build | Build |
|---|--|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |  |          |       |
| Forecast (Year 20)                              |  |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    |  | No Build | Build |
|---|--|----------|-------|
| General Traffic Non-Peak                  |  | 1.74     | 1.74  |
| Peak                                      |  | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) |  | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 165         | 0.92  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 63          | 0.35  |
| Property Damage Only (PDO) Accidents | 102         | 0.57  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|  | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  | 0        | 0     |
| Forecast (Year 20)                             | 0        | 0     |
| <b>Percent Trips during Peak Period</b>        | 17%      |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

**Annual Vehicle-Miles**

|   | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   | 0        | 0     |
| Forecast (Year 20)                              | 0        | 0     |
| <b>Average Vehicles/Train</b> (if rail project) | 0        | 0     |

**Reduction in Transit Accidents**

|                                       |    |
|---------------------------------------|----|
| Percent Reduction (if safety project) | 0% |
|---------------------------------------|----|

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |



1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$5,125,000          | \$0   | \$0          |                  |        |            |                             | \$102,500,000            | \$102,500,000 |
| 2                          | 5,125,000            |       |              |                  |        |            |                             | 102,500,000              | 95,794,393    |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$10,250,000         | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$205,000,000            | \$198,294,393 |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |           |
|-------------------------------|-----------|
| Life-Cycle Costs (mil. \$)    | \$198.3   |
| Life-Cycle Benefits (mil. \$) | \$17.2    |
| Net Present Value (mil. \$)   | -\$181.1  |
| Benefit / Cost Ratio:         | 0.1       |
| Rate of Return on Investment: | -12.2%    |
| Payback Period:               | 20+ years |

| ITEMIZED BENEFITS (mil. \$) | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings         | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Veh. Op. Cost Savings       | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Accident Cost Savings       | \$14.5             | \$2.8            | \$17.2              | \$0.9          |
| Emission Cost Savings       | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| <b>TOTAL BENEFITS</b>       | <b>\$14.5</b>      | <b>\$2.8</b>     | <b>\$17.2</b>       | <b>\$0.9</b>   |
| Person-Hours of Time Saved  |                    |                  | 0                   | 0              |

**Should benefit-cost results include:**

|                                   |   |
|-----------------------------------|---|
| 1) Induced Travel? (y/n)          | Y |
| 2) Vehicle Operating Costs? (y/n) | Y |
| 3) Accident Costs? (y/n)          | Y |
| 4) Vehicle Emissions? (y/n)       | Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 0                   | 0              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 0                   | 0              | \$0.0               | \$0.0          |

## South Meadows Parkway Extension

1A

### PROJECT DATA

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 4 years         |
| One- or Two-Way Data   | 2 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 5 hours         |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

|   |          |          |       |
|---|----------|----------|-------|
| <b>Highway Design</b>   |          | No Build | Build |
| Roadway Type (Fwy, Exp, Conv Hwy)                             | E        | C        |       |
| Number of General Traffic Lanes                               | 4        | 2        |       |
| Number of HOV/HOT Lanes                                       | 0        | 0        |       |
| HOV Restriction (2 or 3)                                      | 0        |          |       |
| Exclusive ROW for Buses (y/n)                                 | N        |          |       |
| Highway Free-Flow Speed                                       | 45       | 55       |       |
| Ramp Design Speed (if aux. lane/off-ramp proj.)               | 0        | 0        |       |
| Length (in miles) Highway Segment                             | 18.0     | 22.6     |       |
| Impacted Length   | 18.0     | 22.6     |       |
| <b>Average Daily Traffic</b>                                  |          |          |       |
| Current   | 0        |          |       |
|   | No Build | Build    |       |
| Base (Year 1)   | 5,097    | 5,097    |       |
| Forecast (Year 20)  | 6,881    | 6,881    |       |
| <b>Average Hourly HOV/HOT Lane Traffic</b>                    |          | 0        | 0     |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)      |          |          | 0%    |
| <b>Percent Traffic in Weave</b>                               |          |          | 0.0%  |
| <b>Percent Trucks</b> (include RVs, if applicable)            |          | 6%       | 0%    |
| <b>Truck Speed</b>  |          | 45       | 0     |
| <b>On-Ramp Volume</b>   |          |          |       |
|   | Peak     | Non-Peak |       |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)               | 0        | 0        |       |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.)           |          |          |       |
| <b>Queue Formation</b> (if queuing or grade crossing project) |          |          |       |
|   | Year 1   | Year 20  |       |
| Arrival Rate (in vehicles per hour)                           | 0        | 0        |       |
| Departure Rate (in vehicles per hour)                         | 0        | 0        |       |
| <b>Pavement Condition</b> (if pavement project)               |          |          |       |
|   | No Build | Build    |       |
| IRI (inches/mile) Base (Year 1)                               |          |          |       |
| Forecast (Year 20)  |          |          |       |
| <b>Average Vehicle Occupancy (AVO)</b>                        |          |          |       |
|   | No Build | Build    |       |
| General Traffic Non-Peak                                      | 1.20     | 1.74     |       |
| Peak  | 1.74     | 1.74     |       |
| High Occupancy Vehicle (if HOV/HOT lanes)                     | 0.00     | 0.00     |       |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                |             | 0.21  |
| Fatal Accidents (Fat)                |             | 0.006 |
| Injury Accidents (Inj)               |             | 0.65  |
| Property Damage Only (PDO) Accidents |             | 1.06  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build | Build |
|---|----------|-------|
| Accident Rate (per million vehicle-miles) | 0.00     | 0.21  |
| Percent Fatal Accidents (Pct Fat)         | 0.0%     | 0.6%  |
| Percent Injury Accidents (Pct Inj)        | 0.0%     | 1.1%  |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|  | No Build | Build |
|--|----------|-------|
| Base (Year 1)                                  |          |       |
| Forecast (Year 20)                             |          |       |
| <b>Percent Trips during Peak Period</b>        | 0%       |       |
| <b>Percent New Trips from Parallel Highway</b> |          | 100%  |

**Annual Vehicle-Miles**

|   | No Build | Build |
|---|----------|-------|
| Base (Year 1)                                   |          |       |
| Forecast (Year 20)                              |          |       |
| <b>Average Vehicles/Train</b> (if rail project) |          |       |

**Reduction in Transit Accidents**

|                                       |  |
|---------------------------------------|--|
| Percent Reduction (if safety project) |  |
|---------------------------------------|--|

**Average Transit Travel Time**

|                | No Build              | Build |
|----------------|-----------------------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0   |
|                | Peak (in minutes)     | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       |         | 0      |         |
| Avg. Gate Down Time (in min.) |         | 0.0    |         |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              |          | \$0   |
| Annual Ops. and Maintenance Expenditure |          | \$0   |

1E

### PROJECT COSTS (enter costs in thousands of dollars)

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |         |                  |                         |              | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |                   |
|----------------------------|----------------------|---------|------------------|-------------------------|--------------|------------|-----------------------------|--------------------------|-------------------|
|                            | INITIAL COSTS        |         | SUBSEQUENT COSTS |                         |              |            |                             | Constant Dollars         | Present Value     |
|                            | Project Support      | R / W   | Construction     | Maint./ Op.             | Rehab.       |            |                             |                          |                   |
| <b>Construction Period</b> |                      |         |                  |                         |              |            |                             |                          |                   |
| 1                          | \$0                  |         |                  | <- Must enter a cost -> |              |            |                             | \$0                      | \$0               |
| 2                          | 5,000                |         |                  |                         |              |            |                             | 5,000,000                | 4,672,897         |
| 3                          | 6,000                |         |                  |                         |              |            |                             | 6,000,000                | 5,240,632         |
| 4                          | 7,000                | 5,000   |                  |                         |              |            |                             | 12,000,000               | 9,795,575         |
| 5                          | 8,000                |         | 51,000           |                         |              |            |                             | 59,000,000               | 45,010,818        |
| 6                          |                      |         | 76,000           |                         |              |            |                             | 76,000,000               | 54,186,950        |
| 7                          |                      |         | 96,000           |                         |              |            |                             | 96,000,000               | 63,968,853        |
| 8                          |                      |         | 81,000           |                         |              |            |                             | 81,000,000               | 50,442,729        |
| <b>Project Open</b>        |                      |         |                  |                         |              |            |                             |                          |                   |
| 1                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 15,257.90      |
| 2                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 14,259.72      |
| 3                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 13,326.84      |
| 4                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 12,454.99      |
| 5                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 11,640.18      |
| 6                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 10,878.67      |
| 7                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 10,166.99      |
| 8                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 9,501.86       |
| 9                          |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 8,880.24       |
| 10                         |                      |         |                  | \$ 20.00                | \$ 25,000.00 |            |                             | \$ 25,020,000.00         | \$ 10,382,410.49  |
| 11                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 7,756.34       |
| 12                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 7,248.92       |
| 13                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 6,774.69       |
| 14                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 6,331.49       |
| 15                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 5,917.28       |
| 16                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 5,530.17       |
| 17                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 5,168.38       |
| 18                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 4,830.26       |
| 19                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 4,514.26       |
| 20                         |                      |         |                  | \$ 20.00                |              |            |                             | \$ 20,000.00             | \$ 4,218.94       |
| <b>Total</b>               | \$26,000             | \$5,000 | \$304,000        | \$ 400.00               | \$ 25,000.00 | \$ -       | \$ -                        | \$ 360,400,000.00        | \$ 243,865,522.44 |

3

### INVESTMENT ANALYSIS

#### SUMMARY RESULTS

|                                      |           |
|--------------------------------------|-----------|
| Life-Cycle Costs (mil. \$)           | \$243.9   |
| Life-Cycle Benefits (mil. \$)        | -\$58.0   |
| Net Present Value (mil. \$)          | -\$301.9  |
| <b>Benefit / Cost Ratio:</b>         | -0.2      |
| <b>Rate of Return on Investment:</b> | #NUM!     |
| <b>Payback Period:</b>               | 20+ years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits  | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|---------------------|------------------|---------------------|----------------|
|                                   | Travel Time Savings | -\$3.3           | \$0.0               | -\$3.3         |
| Veh. Op. Cost Savings             | -\$53.1             | \$12.4           | -\$40.7             | -\$2.0         |
| Accident Cost Savings             | -\$18.0             | \$3.4            | -\$14.7             | -\$0.7         |
| Emission Cost Savings             | -\$1.8              | \$2.5            | \$0.7               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>-\$76.3</b>      | <b>\$18.2</b>    | <b>-\$58.0</b>      | <b>-\$2.9</b>  |
| <b>Person-Hours of Time Saved</b> |                     |                  | <b>-635,555</b>     | <b>-31,778</b> |

**Should benefit-cost results include:**

|   |   |
|---|---|
| 1) Induced Travel? (y/n)  | <input type="text" value="Y"/><br>Default = Y |
| 2) Vehicle Operating Costs? (y/n)                                   | <input type="text" value="Y"/><br>Default = Y |
| 3) Accident Costs? (y/n)  | <input type="text" value="Y"/><br>Default = Y |
| 4) Vehicle Emissions? (y/n)<br>includes value for CO <sub>2</sub> e | <input type="text" value="Y"/><br>Default = Y |

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | -122                | -6             | -\$0.0              | -\$0.0         |
| CO <sub>2</sub> Emissions Saved   | -6,760              | -338           | -\$0.2              | -\$0.0         |
| NO <sub>x</sub> Emissions Saved   | 77                  | 4              | \$0.8               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 1                   | 0              | \$0.1               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 1                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | -3                  | 0              | -\$0.0              | -\$0.0         |

## Sun Valley Interchange (Phase 6)

1A

### PROJECT DATA

|  |  |
|--|--|
| <b>Type of Project</b><br>Select project type from list                        | Check percent traffic in weave in section 1B<br><input type="text" value="Off-Ramp Widening"/> |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) | <input type="text" value="2"/>   |
| Length of Construction Period  | <input type="text" value="2"/> years   |
| One- or Two-Way Data   | <input type="text" value="2"/> enter 1 or 2  |
|  | Current  |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | <input type="text" value="2"/> hours   |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

| <b>Highway Design</b>                           | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 1        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 2        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 55       | 55    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 45       | 45    |
| Length (in miles) Highway Segment               | 1.2      | 1.2   |
| Impacted Length                                 | 0.3      | 0.3   |

| <b>Average Daily Traffic</b>                             |                                     |        |
|--|-------------------------------------|--------|
| Current  | <input type="text" value="24,000"/> |        |
|  | No Build                            | Build  |
| Base (Year 1)  | 26,476                              | 26,476 |
| Forecast (Year 20)                                       | 50,000                              | 50,000 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               |                                     |        |
|  | 0                                   | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |                                     | 100%   |
| <b>Percent Traffic in Weave</b>                          |                                     |        |
|  | 2.5%                                | 2.5%   |
| <b>Percent Trucks</b> (include RVs, if applicable)       |                                     |        |
|  | 16%                                 | 16%    |
| <b>Truck Speed</b>                                       |                                     |        |
|  | 55                                  |        |

| <b>On-Ramp Volume</b>                               | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 400  | 600      |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

| <b>Queue Formation</b> (if queuing or grade crossing project) | Year 1 | Year 20 |
|---|--------|---------|
| Arrival Rate (in vehicles per hour)                           | 0      | 0       |
| Departure Rate (in vehicles per hour)                         | 0      | 0       |

| <b>Pavement Condition</b> (if pavement project) | No Build | Build |
|---|----------|-------|
| IRI (inches/mile) Base (Year 1)                 |          |       |
| Forecast (Year 20)                              |          |       |

| <b>Average Vehicle Occupancy (AVO)</b>    |          |       |
|---|----------|-------|
|   | No Build | Build |
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 5           | 0.19  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 5           | 0.19  |
| Property Damage Only (PDO) Accidents | 0           | 0.00  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.6%       | 0.6%       |
| Percent Injury Accidents (Pct Inj)        | 71.0%      | 71.0%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$3,000,000          | \$0   | \$0          |                  |        |            |                             | \$33,000,000             | \$33,000,000  |
| 2                          | 3,000,000            |       |              |                  |        |            |                             | 33,000,000               | 30,841,121    |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$6,000,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$66,000,000             | \$63,841,121  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |           |
|-------------------------------|-----------|
| Life-Cycle Costs (mil. \$)    | \$63.8    |
| Life-Cycle Benefits (mil. \$) | \$8.8     |
| Net Present Value (mil. \$)   | -\$55.0   |
| Benefit / Cost Ratio:         | 0.1       |
| Rate of Return on Investment: | -5.9%     |
| Payback Period:               | 20+ years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$5.4              | \$1.4            | \$6.8               | \$0.3          |
| Veh. Op. Cost Savings             | \$0.3              | \$0.0            | \$0.3               | \$0.0          |
| Accident Cost Savings             | \$1.4              | \$0.3            | \$1.6               | \$0.1          |
| Emission Cost Savings             | \$0.1              | \$0.1            | \$0.1               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$7.1</b>       | <b>\$1.7</b>     | <b>\$8.8</b>        | <b>\$0.4</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>1,281,989</b>    | <b>64,099</b>  |

**Should benefit-cost results include:**

|                                   |                                |             |
|-----------------------------------|--------------------------------|-------------|
| 1) Induced Travel? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | <input type="text" value="Y"/> | Default = Y |
| 3) Accident Costs? (y/n)          | <input type="text" value="Y"/> | Default = Y |
| 4) Vehicle Emissions? (y/n)       | <input type="text" value="Y"/> | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 10                  | 0              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 3,460               | 173            | \$0.1               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 9                   | 0              | \$0.1               | \$0.0          |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 1                   | 0              | \$0.0               | \$0.0          |

## US 395 Connector (Parr to Pyramid) (Phase 3)

1A

### PROJECT DATA

**Type of Project**

Select project type from list

General Highway

**Project Location** (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural)

2

Length of Construction Period  years

One- or Two-Way Data  enter 1 or 2

Current

**Length of Peak Period(s)** (up to 24 hrs)  hours

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

**Highway Design**

|   | No Build | Build |
|---|----------|-------|
| Roadway Type (Fwy, Exp, Conv Hwy)               | F        | F     |
| Number of General Traffic Lanes                 | 1        | 2     |
| Number of HOV/HOT Lanes                         | 0        | 0     |
| HOV Restriction (2 or 3)                        | 0        |       |
| Exclusive ROW for Buses (y/n)                   | N        |       |
| Highway Free-Flow Speed                         | 45       | 45    |
| Ramp Design Speed (if aux. lane/off-ramp proj.) | 0        | 0     |
| Length (in miles) Highway Segment               | 4.2      | 4.2   |
| Impacted Length                                 | 4.2      | 4.2   |

**Average Daily Traffic**

|  |                                     |        |
|--|-------------------------------------|--------|
| Current  | <input type="text" value="40,000"/> |        |
|  | No Build                            | Build  |
| Base (Year 1)  | 38,636                              | 38,636 |
| Forecast (Year 20)                                       | 30,000                              | 30,000 |
| <b>Average Hourly HOV/HOT Lane Traffic</b>               | 0                                   | 0      |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.) |                                     | 100%   |
| <b>Percent Traffic in Weave</b>                          | 2.5%                                | 2.5%   |
| <b>Percent Trucks</b> (include RVs, if applicable)       | 16%                                 | 16%    |
| <b>Truck Speed</b>                                       | 45                                  |        |

**On-Ramp Volume**

|   | Peak | Non-Peak |
|---|------|----------|
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)     | 0    | 0        |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.) |      |          |

**Queue Formation** (if queuing or grade crossing project)

|                                       | Year 1 | Year 20 |
|---------------------------------------|--------|---------|
| Arrival Rate (in vehicles per hour)   | 0      | 0       |
| Departure Rate (in vehicles per hour) | 0      | 0       |

**Pavement Condition** (if pavement project)

|                                 | No Build | Build |
|---------------------------------|----------|-------|
| IRI (inches/mile) Base (Year 1) |          |       |
| Forecast (Year 20)              |          |       |

**Average Vehicle Occupancy (AVO)**

|   | No Build | Build |
|---|----------|-------|
| General Traffic Non-Peak                  | 1.74     | 1.74  |
| Peak                                      | 1.74     | 1.74  |
| High Occupancy Vehicle (if HOV/HOT lanes) | 2.15     | 2.15  |



1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 52          | 0.28  |
| Fatal Accidents (Fat)                | 0           | 0.000 |
| Injury Accidents (Inj)               | 11          | 0.06  |
| Property Damage Only (PDO) Accidents | 41          | 0.22  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.3%       | 0.3%       |
| Percent Injury Accidents (Pct Inj)        | 34.7%      | 34.7%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$4,219,999          | \$0   | \$0          |                  |        |            |                             | \$140,666,666            | \$140,666,666 |
| 2                          | 3,000,000            |       |              |                  |        |            |                             | 140,666,666              | 131,464,174   |
| 3                          | 2,000,000            |       |              |                  |        |            |                             | 140,666,666              | 122,863,714   |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$9,219,999          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$421,999,998            | \$394,994,554 |

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |          |
|-------------------------------|----------|
| Life-Cycle Costs (mil. \$)    | \$395.0  |
| Life-Cycle Benefits (mil. \$) | \$243.9  |
| Net Present Value (mil. \$)   | -\$151.0 |
| Benefit / Cost Ratio:         | 0.6      |
| Rate of Return on Investment: | 0.6%     |
| Payback Period:               | 18 years |

| ITEMIZED BENEFITS (mil. \$) | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings         | \$179.4            | \$45.2           | \$224.6             | \$11.2         |
| Veh. Op. Cost Savings       | \$9.8              | \$2.7            | \$12.5              | \$0.6          |
| Accident Cost Savings       | \$2.1              | \$0.4            | \$2.5               | \$0.1          |
| Emission Cost Savings       | \$2.4              | \$2.0            | \$4.4               | \$0.2          |
| <b>TOTAL BENEFITS</b>       | <b>\$193.7</b>     | <b>\$50.2</b>    | <b>\$243.9</b>      | <b>\$12.2</b>  |
| Person-Hours of Time Saved  | #####              |                  |                     | 1,322,961      |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 265                 | 13             | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 107,551             | 5,378          | \$2.6               | \$0.1          |
| NO <sub>x</sub> Emissions Saved   | 173                 | 9              | \$1.5               | \$0.1          |
| PM <sub>10</sub> Emissions Saved  | 2                   | 0              | \$0.2               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 2                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 1                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 38                  | 2              | \$0.0               | \$0.0          |

## US 395 Direct Connect Ramps (Phase 4)

1A

### PROJECT DATA

|  |                 |
|--|-----------------|
| <b>Type of Project</b>   |                 |
| Select project type from list  | General Highway |
| <b>Project Location</b> (enter 1 for So. Cal., 2 for No. Cal., or 3 for rural) |                 |
|  | 2               |
| Length of Construction Period  | 2 years         |
| One- or Two-Way Data   | 2 enter 1 or 2  |
|  | Current         |
| <b>Length of Peak Period(s)</b> (up to 24 hrs)                                 | 2 hours         |

1B

### HIGHWAY DESIGN AND TRAFFIC DATA

|   |          |          |       |
|---|----------|----------|-------|
| <b>Highway Design</b>   |          | No Build | Build |
| Roadway Type (Fwy, Exp, Conv Hwy)                             | F        | F        |       |
| Number of General Traffic Lanes                               | 2        | 3        |       |
| Number of HOV/HOT Lanes                                       | 0        | 0        |       |
| HOV Restriction (2 or 3)                                      | 0        |          |       |
| Exclusive ROW for Buses (y/n)                                 | N        |          |       |
| Highway Free-Flow Speed                                       | 45       | 45       |       |
| Ramp Design Speed (if aux. lane/off-ramp proj.)               | 0        | 0        |       |
| Length (in miles) Highway Segment                             | 2.0      | 2.0      |       |
| Impacted Length   | 2.0      | 2.0      |       |
| <b>Average Daily Traffic</b>                                  |          |          |       |
| Current   | 20,000   |          |       |
|   | No Build | Build    |       |
| Base (Year 1)   | 20,952   | 20,952   |       |
| Forecast (Year 20)  | 30,000   | 30,000   |       |
| <b>Average Hourly HOV/HOT Lane Traffic</b>                    |          |          |       |
| Percent of Induced Trips in HOV (if HOT or 2-to-3 conv.)      | 0        | 0        |       |
| <b>Percent Traffic in Weave</b>                               | 0.0%     | 0.0%     |       |
| <b>Percent Trucks</b> (include RVs, if applicable)            | 16%      | 16%      |       |
| <b>Truck Speed</b>  | 40       |          |       |
| <b>On-Ramp Volume</b>   |          |          |       |
|   | Peak     | Non-Peak |       |
| Hourly Ramp Volume (if aux. lane/on-ramp proj.)               | 800      | 1200     |       |
| Metering Strategy (1, 2, 3, or D, if on-ramp proj.)           |          |          |       |
| <b>Queue Formation</b> (if queuing or grade crossing project) |          |          |       |
|   | Year 1   | Year 20  |       |
| Arrival Rate (in vehicles per hour)                           | 0        | 0        |       |
| Departure Rate (in vehicles per hour)                         | 0        | 0        |       |
| <b>Pavement Condition</b> (if pavement project)               |          |          |       |
|   | No Build | Build    |       |
| IRI (inches/mile) Base (Year 1)                               |          |          |       |
| Forecast (Year 20)  |          |          |       |
| <b>Average Vehicle Occupancy (AVO)</b>                        |          |          |       |
|   | No Build | Build    |       |
| General Traffic Non-Peak                                      | 1.74     | 1.74     |       |
| Peak  | 1.74     | 1.74     |       |
| High Occupancy Vehicle (if HOV/HOT lanes)                     | 2.15     | 2.15     |       |

1C

**HIGHWAY ACCIDENT DATA****Actual 3-Year Accident Data (from Table B)**

|                                      | Count (No.) | Rate  |
|--------------------------------------|-------------|-------|
| Total Accidents (Tot)                | 94          | 2.15  |
| Fatal Accidents (Fat)                | 1           | 0.023 |
| Injury Accidents (Inj)               | 2           | 0.05  |
| Property Damage Only (PDO) Accidents | 91          | 2.08  |

**Statewide Basic Average Accident Rate**

| Rate Group                                | No Build   | Build      |
|---|------------|------------|
|   | Interstate | Interstate |
| Accident Rate (per million vehicle-miles) | 2.07       | 2.07       |
| Percent Fatal Accidents (Pct Fat)         | 0.3%       | 0.3%       |
| Percent Injury Accidents (Pct Inj)        | 34.7%      | 34.7%      |

1D

**RAIL AND TRANSIT DATA****Annual Person-Trips**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Percent Trips during Peak Period**

17%

**Percent New Trips from Parallel Highway**

100%

**Annual Vehicle-Miles**

|                    | No Build | Build |
|--------------------|----------|-------|
| Base (Year 1)      | 0        | 0     |
| Forecast (Year 20) | 0        | 0     |

**Average Vehicles/Train** (if rail project)

0

0

**Reduction in Transit Accidents**

Percent Reduction (if safety project)

0%

**Average Transit Travel Time**

|                |                       | No Build | Build |
|----------------|-----------------------|----------|-------|
| In-Vehicle     | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |
| Out-of-Vehicle | Non-Peak (in minutes) | 0.0      | 0.0   |
|                | Peak (in minutes)     | 0.0      | 0.0   |

**Highway Grade Crossing**

|                               | Current | Year 1 | Year 20 |
|-------------------------------|---------|--------|---------|
| Annual Number of Trains       | 0       | 0      | 0       |
| Avg. Gate Down Time (in min.) | 0.0     | 0.0    | 0.0     |

**Transit Agency Costs** (if TMS project)

|   | No Build | Build |
|---|----------|-------|
| Annual Capital Expenditure              | \$0      | \$0   |
| Annual Ops. and Maintenance Expenditure | \$0      | \$0   |

1E

**PROJECT COSTS (enter costs in thousands of dollars)**

Col. no. (1) (2) (3) (4) (5) (6) (7)

| Year                       | DIRECT PROJECT COSTS |       |              |                  |        | Mitigation | Transit Agency Cost Savings | TOTAL COSTS (in dollars) |               |
|----------------------------|----------------------|-------|--------------|------------------|--------|------------|-----------------------------|--------------------------|---------------|
|                            | INITIAL COSTS        |       |              | SUBSEQUENT COSTS |        |            |                             | Constant Dollars         | Present Value |
|                            | Project Support      | R / W | Construction | Maint./ Op.      | Rehab. |            |                             |                          |               |
| <b>Construction Period</b> |                      |       |              |                  |        |            |                             |                          |               |
| 1                          | \$2,125,000          | \$0   | \$0          |                  |        |            |                             | \$42,500,000             | \$42,500,000  |
| 2                          | 2,125,000            |       |              |                  |        |            |                             | 42,500,000               | 39,719,626    |
| 3                          |                      |       |              |                  |        |            |                             |                          | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Project Open</b>        |                      |       |              |                  |        |            |                             |                          |               |
| 1                          |                      |       |              |                  |        |            |                             | \$0                      | \$0           |
| 2                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 3                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 4                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 5                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 6                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 7                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 8                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 9                          |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 10                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 11                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 12                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 13                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 14                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 15                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 16                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 17                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 18                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 19                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| 20                         |                      |       |              |                  |        |            |                             | 0                        | 0             |
| <b>Total</b>               | \$4,250,000          | \$0   | \$0          | \$0              | \$0    | \$0        | \$0                         | \$85,000,000             | \$82,219,626  |

3

**INVESTMENT ANALYSIS SUMMARY RESULTS**

|                               |           |
|-------------------------------|-----------|
| Life-Cycle Costs (mil. \$)    | \$82.2    |
| Life-Cycle Benefits (mil. \$) | \$21.9    |
| Net Present Value (mil. \$)   | -\$60.3   |
| Benefit / Cost Ratio:         | 0.3       |
| Rate of Return on Investment: | -4.8%     |
| Payback Period:               | 20+ years |

| ITEMIZED BENEFITS (mil. \$)       | Passenger Benefits | Freight Benefits | Total Over 20 Years | Average Annual |
|-----------------------------------|--------------------|------------------|---------------------|----------------|
| Travel Time Savings               | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Veh. Op. Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| Accident Cost Savings             | \$18.4             | \$3.5            | \$21.9              | \$1.1          |
| Emission Cost Savings             | \$0.0              | \$0.0            | \$0.0               | \$0.0          |
| <b>TOTAL BENEFITS</b>             | <b>\$18.4</b>      | <b>\$3.5</b>     | <b>\$21.9</b>       | <b>\$1.1</b>   |
| <b>Person-Hours of Time Saved</b> |                    |                  | <b>2,406</b>        | <b>120</b>     |

**Should benefit-cost results include:**

|                                   |   |             |
|-----------------------------------|---|-------------|
| 1) Induced Travel? (y/n)          | Y | Default = Y |
| 2) Vehicle Operating Costs? (y/n) | Y | Default = Y |
| 3) Accident Costs? (y/n)          | Y | Default = Y |
| 4) Vehicle Emissions? (y/n)       | Y | Default = Y |

includes value for CO<sub>2</sub>e

| EMISSIONS REDUCTION               | Tons                |                | Value (mil. \$)     |                |
|-----------------------------------|---------------------|----------------|---------------------|----------------|
|                                   | Total Over 20 Years | Average Annual | Total Over 20 Years | Average Annual |
| CO Emissions Saved                | 0                   | 0              | \$0.0               | \$0.0          |
| CO <sub>2</sub> Emissions Saved   | 92                  | 5              | \$0.0               | \$0.0          |
| NO <sub>x</sub> Emissions Saved   | 0                   | 0              | -\$0.0              | -\$0.0         |
| PM <sub>10</sub> Emissions Saved  | 0                   | 0              | \$0.0               | \$0.0          |
| PM <sub>2.5</sub> Emissions Saved | 0                   | 0              |                     |                |
| SO <sub>x</sub> Emissions Saved   | 0                   | 0              | \$0.0               | \$0.0          |
| VOC Emissions Saved               | 0                   | 0              | \$0.0               | \$0.0          |