

Texas Department of Transportation
TECHNICAL PROVISIONS

STATE HIGHWAY 71 TOLL LANES

Attachment 8-1
ESAL Counts
Execution Version

| | | | | | | | | | Total Number of Equivalent 18K ESAL | |
|---|-----------------------|--------|--------------|----------|---------------|-----|--------|--------------------------|--|----------------|
| Description of Location | Average Daily Traffic | | Base Year | | | | ATHWLD | % Tandem Axles in ATHWLD | Single Axle Load Applications in One Direction Expected for a <u>20 Year</u> Period (2016 to 2036) | |
| | 2016 | 2036 | Dir. Dist. % | K factor | Percent Truck | | | | Flexible Pavement | Rigid Pavement |
| | | | | | ADT | DHV | | | | |
| <u>SH71 Toll Lanes</u> From Presidential Blvd to SH130 New Lanes and Inside Widening Section Travis County | 24,887 | 29,532 | 50 | 8.7 | 10.4 | 5.1 | 15,100 | 50 | 6,325,996 | -- |
| | | | | | | | | | Total Number of Equivalent 18K ESAL | |
| Description of Location | Average Daily Traffic | | Base Year | | | | ATHWLD | % Tandem Axles in ATHWLD | Single Axle Load Applications in One Direction Expected for a <u>30 Year</u> Period (2016 to 2046) | |
| | 2016 | 2046 | Dir. Dist. % | K factor | Percent Truck | | | | Flexible Pavement | Rigid Pavement |
| | | | | | ADT | DHV | | | | |
| <u>SH71 Toll Lanes</u> From Presidential Blvd to SH130 New Lanes Travis County | 24,993 | 35,138 | 50 | 8.7 | 10.4 | 5.1 | 15,100 | 50 | 13,858,879 | 20,888,445 |
| | | | | | | | | | Total Number of Equivalent 18K ESAL | |
| Description of Location | Average Daily Traffic | | Base Year | | | | ATHWLD | % Tandem Axles in ATHWLD | Single Axle Load Applications in One Direction Expected for a <u>20 Year</u> Period (2016 to 2036) | |
| | 2016 | 2036 | Dir. Dist. % | K factor | Percent Truck | | | | Flexible Pavement | Rigid Pavement |
| | | | | | ADT | DHV | | | | |
| <u>SH71 General Purpose Lanes</u> New Lanes (20-y Design) and 4' Widening- Outside Shoulder Travis County | 41,898 | 50,848 | 50 | 8.7 | 10.4 | 5.1 | 15,000 | 50 | 10,645,733 | -- |

| | | | | | | | | | | Total Number of Equivalent 18K ESAL | | | |
|---|-----------------------|--------|--------------|----------|---------------|-----|--------|--------------------------|---|-------------------------------------|----------------|------|--|
| Description of Location | Average Daily Traffic | | Base Year | | | | ATHWLD | % Tandem Axles in ATHWLD | Single Axle Load Applications in One Direction Expected for a 20 Year Period (2016 to 2036) | | | | |
| | | | Dir. Dist. % | K Factor | Percent Truck | | | | Flexible Pavement | S N | Rigid Pavement | SLAB | |
| | 2016 | 2036 | | | ADT | DHV | | | | | | | |
| <u>FM973</u> From Harold Green Dr (CR1594) to 0.5mi South of SH71 Travis County | 21,775 | 32,275 | 73 - 27 | 13.5 | 8.1 | 6.1 | 13,600 | 70 | 7,510,720 | 3 | 10,231,272 | 8" | |
| | | | | | | | | | | Total Number of Equivalent 18K ESAL | | | |
| Description of Location | Average Daily Traffic | | Base Year | | | | ATHWLD | % Tandem Axles in ATHWLD | Single Axle Load Applications in One Direction Expected for a 20 Year Period (2016 to 2046) | | | | |
| | | | Dir. Dist. % | K Factor | Percent Truck | | | | Flexible Pavement | S N | Rigid Pavement | SLAB | |
| | 2016 | 2046 | | | ADT | DHV | | | | | | | |
| <u>FM973</u> From Harold Green Dr (CR1594) to 0.5mi South of SH71 Travis County | 21,775 | 35,380 | 73 - 27 | 13.5 | 8.1 | 6.1 | 13,700 | 70 | 11,872,272 | 3 | 16,172,646 | 8" | |