Intersection Collision Rate Calculation
for the
Skyway Corridor Study

Study Intersection # 1: Skyway & Neal-Schmale Lane

Date of Count: Thursday, April 10, 2008

Number of Collisions: 12
ADT: 21600
Start Date: January 1, 1998
End Date: December 31, 2006
Number of Years: 9

Intersection Type: FOUR-LEGGED
Control Type: SIGNALS
Area: URBAN

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1 \text{ MILLION}}{\text{ADT} \times 365 \text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{12 \times 1,000,000}{21,600 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.17 \text{ c/mve}
\]

statewide average collision rate* = 0.43 c/mve

Study Intersection # 2: Skyway & Pearson

Date of Count: Thursday, April 10, 2008

Number of Collisions: 13
ADT: 24000
Start Date: January 1, 1998
End Date: December 31, 2006
Number of Years: 9

Intersection Type: TEE
Control Type: SIGNALS
Area: URBAN

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1 \text{ MILLION}}{\text{ADT} \times 365 \text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{13 \times 1,000,000}{24,000 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.16 \text{ c/mve}
\]

statewide average collision rate* = 0.28 c/mve

---

ADT = average daily total vehicles entering intersection (adjusted for seasonal & weekday changes)
c/mve = collisions per million vehicles entering intersection

* 2002 Collision Data on California State Highways, Caltrans
Intersection Collision Rate Calculation
for the
Skyway Corridor Study

Study Intersection # 3: Skyway & Honey Run-Birch
Date of Count: Thursday, April 10, 2008

Number of Collisions: 21
ADT: 18100
Start Date: January 1, 1998
End Date: December 31, 2006
Number of Years: 9
Intersection Type: OFFSET
Control Type: STOP & YEILD SIGNS
Area: URBAN

collision rate = \frac{\text{NUMBER OF COLLISIONS x 1 MILLION}}{\text{ADT x 365 DAYS PER YEAR x NUMBER OF YEARS}}

collision rate = \frac{21 \times 1,000,000}{18,100 \times 365 \times 9}

collision rate = 0.35 \text{ c/mve}

statewide average collision rate* = 0.22 \text{ c/mve}

Study Intersection # 4: Skyway & Foster
Date of Count: Thursday, April 10, 2008

Number of Collisions: 16
ADT: 21400
Start Date: January 1, 1998
End Date: December 31, 2006
Number of Years: 9
Intersection Type: TEE
Control Type: STOP & YEILD SIGNS
Area: URBAN

collision rate = \frac{\text{NUMBER OF COLLISIONS x 1 MILLION}}{\text{ADT x 365 DAYS PER YEAR x NUMBER OF YEARS}}

collision rate = \frac{16 \times 1,000,000}{21,400 \times 365 \times 9}

collision rate = 0.23 \text{ c/mve}

statewide average collision rate* = 0.14 \text{ c/mve}

ADT = average daily total vehicles entering intersection (adjusted for seasonal & weekday changes)
c/mve = collisions per million vehicles entering intersection
* 2002 Collision Data on California State Highways, Caltrans
### Intersection Collision Rate Calculation for the Skyway Corridor Study

#### Study Intersection # 5: Skyway & Fir

<table>
<thead>
<tr>
<th>Date of Count</th>
<th>Thursday, April 10, 2008</th>
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</thead>
<tbody>
<tr>
<td>Number of Collisions</td>
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</tr>
<tr>
<td>ADT</td>
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<td>Start Date</td>
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<td>End Date</td>
<td>December 31, 2006</td>
</tr>
<tr>
<td>Number of Years</td>
<td>9</td>
</tr>
<tr>
<td>Intersection Type</td>
<td>TEE</td>
</tr>
<tr>
<td>Control Type</td>
<td>STOP &amp; YEILD SIGNS</td>
</tr>
<tr>
<td>Area</td>
<td>URBAN</td>
</tr>
</tbody>
</table>

**Collision Rate Calculation**

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1,000,000}{\text{ADT} \times 365 \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{15 \times 1,000,000}{19,500 \times 365 \times 9}
\]

**Statewide Average Collision Rate**

\[
\text{statewide average collision rate*} = 0.14 \text{ c/mve}
\]

#### Study Intersection # 6: Skyway & Elliott

<table>
<thead>
<tr>
<th>Date of Count</th>
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<tbody>
<tr>
<td>Number of Collisions</td>
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<tr>
<td>ADT</td>
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<tr>
<td>End Date</td>
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</tr>
<tr>
<td>Number of Years</td>
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</tr>
<tr>
<td>Intersection Type</td>
<td>FOUR-LEGGED</td>
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<tr>
<td>Control Type</td>
<td>SIGNALS</td>
</tr>
<tr>
<td>Area</td>
<td>URBAN</td>
</tr>
</tbody>
</table>

**Collision Rate Calculation**

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1,000,000}{\text{ADT} \times 365 \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{32 \times 1,000,000}{24,100 \times 365 \times 9}
\]

**Statewide Average Collision Rate**

\[
\text{statewide average collision rate*} = 0.43 \text{ c/mve}
\]

---

ADT = average daily total vehicles entering intersection (adjusted for seasonal & weekday changes)

c/mve = collisions per million vehicles entering intersection

* 2002 Collision Data on California State Highways, Caltrans
# Intersection Collision Rate Calculation
## for the
## Skyway Corridor Study

### Study Intersection # 7: Skyway & Oliver

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tr>
<td>ADT</td>
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<tr>
<td>Start Date</td>
<td>January 1, 1998</td>
</tr>
<tr>
<td>End Date</td>
<td>December 31, 2006</td>
</tr>
<tr>
<td>Number of Years</td>
<td>9</td>
</tr>
<tr>
<td>Intersection Type</td>
<td>TEE</td>
</tr>
<tr>
<td>Control Type</td>
<td>SIGNALS</td>
</tr>
<tr>
<td>Area</td>
<td>URBAN</td>
</tr>
</tbody>
</table>

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1 \text{ MILLION}}{\text{ADT} \times 365 \text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{18 \times 1,000,000}{21,600 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.25 \text{ c/mve}
\]

\[
\text{statewide average collision rate}^* = 0.28 \text{ c/mve}
\]

### Study Intersection # 8: Skyway & Maxwell

<table>
<thead>
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<th>Parameter</th>
<th>Value</th>
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<tbody>
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<tr>
<td>End Date</td>
<td>December 31, 2006</td>
</tr>
<tr>
<td>Number of Years</td>
<td>9</td>
</tr>
<tr>
<td>Intersection Type</td>
<td>TEE</td>
</tr>
<tr>
<td>Control Type</td>
<td>SIGNALS</td>
</tr>
<tr>
<td>Area</td>
<td>URBAN</td>
</tr>
</tbody>
</table>

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1 \text{ MILLION}}{\text{ADT} \times 365 \text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{0 \times 1,000,000}{19,400 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.00 \text{ c/mve}
\]

\[
\text{statewide average collision rate}^* = 0.28 \text{ c/mve}
\]

---

ADT = average daily total vehicles entering intersection (adjusted for seasonal & weekday changes)
c/mve = collisions per million vehicles entering intersection

* 2002 Collision Data on California State Highways, Caltrans
Intersection Collision Rate Calculation  
for the  
Skyway Corridor Study

Study Intersection # 9: Skyway & Bille  
Date of Count: Thursday, April 10, 2008  
Number of Collisions: 30  
ADT: 20300  
Start Date: January 1, 1998  
End Date: December 31, 2006  
Number of Years: 9  
Intersection Type: FOUR-LEGGED  
Control Type: SIGNALS  
Area: URBAN  

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1\text{ MILLION}}{\text{ADT} \times 365\text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{30 \times 1,000,000}{20,300 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.45 \text{ c/mve}
\]

\[
\text{statewide average collision rate}^* = 0.43 \text{ c/mve}
\]

Study Intersection # 10: Skyway & Wagstaff  
Date of Count: Thursday, April 10, 2008  
Number of Collisions: 9  
ADT: 13500  
Start Date: January 1, 1998  
End Date: December 31, 2006  
Number of Years: 9  
Intersection Type: FOUR-LEGGED  
Control Type: 4 WAY STOP  
Area: URBAN  

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1\text{ MILLION}}{\text{ADT} \times 365\text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{9 \times 1,000,000}{13,500 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.20 \text{ c/mve}
\]

\[
\text{statewide average collision rate}^* = 0.41 \text{ c/mve}
\]

\[
\text{ADT} = \text{average daily total vehicles entering intersection (adjusted for seasonal & weekday changes)}
\]
\[
\text{c/mve} = \text{collisions per million vehicles entering intersection}
\]
\[
^* \text{ 2002 Collision Data on California State Highways, Caltrans}
\]
Intersection Collision Rate Calculation
for the
Skyway Corridor Study

Study Intersection # 11: Skyway & Black Olive

Date of Count: Wednesday, April 9, 2008

Number of Collisions: 29
ADT: 22900
Start Date: January 1, 1998
End Date: December 31, 2006
Number of Years: 9

Intersection Type: TEE
Control Type: STOP & YEILD SIGNS
Area: URBAN

\[
\text{collision rate} = \frac{\text{NUMBER OF COLLISIONS} \times 1 \text{ MILLION}}{\text{ADT} \times 365 \text{ DAYS PER YEAR} \times \text{NUMBER OF YEARS}}
\]

\[
\text{collision rate} = \frac{29 \times 1,000,000}{22,900 \times 365 \times 9}
\]

\[
\text{collision rate} = 0.39 \text{ c/mve}
\]

\[
\text{statewide average collision rate}^* = 0.14 \text{ c/mve}
\]