HIGHWAY-RAIL GRADE SEPARATION IN THE SCAG REGION

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Southern California Association of Governments

SCAG Transportation Committee
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Highway-Rail Grade Crossing Safety in the U.S.

- A Grade Crossing is a location where a public highway, road, street, or private roadway, including associated sidewalks, and pathways, crosses railroad tracks at grade (same level as the street).
- Grade crossings pose challenges related to congestion and harmful emissions, but safety remains a critical concern.
- Nearly every 180 minutes in America, someone is hit by a train. (FRA)
- There have been about 270 deaths a year at public and private grade crossings, but the number of fatalities has gone down by 54 percent over the last two decades.
Federal Railroad Administration (FRA) Web Accident Prediction System

• Generates report listing highway-rail grade crossings ranked by predicted collisions per year.
• Does not rank grade-crossings in terms of most dangerous to least dangerous
• Intended to assist decision-makers in determining where scarce highway-rail grade crossing resources can best be directed
• Not the sole indicator of the condition of a specific public highway-rail intersection
Predicted Collisions per Year

- Of the Top 100 grade crossings, 8 are in the SCAG region
- 4 of the 6 SCAG have a grade crossing listed in the Top 100 (Los Angeles, Orange, Riverside, and Ventura)
- Of those 8, three are in the top 50, and 1 is the third-most dangerous (Nogales St.)

<table>
<thead>
<tr>
<th>RANK</th>
<th>PRED. COLLIS</th>
<th>RR</th>
<th>COUNTY</th>
<th>CITY</th>
<th>ROAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0.4635</td>
<td>UP</td>
<td>LOS ANGELES</td>
<td>LOS ANGELES</td>
<td>NOGALES ST.</td>
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<tr>
<td>42</td>
<td>0.245081</td>
<td>BNSF</td>
<td>LOS ANGELES</td>
<td>SANTA FE SPRINGS</td>
<td>LOS NIETOS RD.</td>
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<td>49</td>
<td>0.234305</td>
<td>BNSF</td>
<td>RIVERSIDE</td>
<td>RIVERSIDE</td>
<td>CHICAGO AVE.</td>
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<tr>
<td>53</td>
<td>0.226187</td>
<td>UP</td>
<td>VENTURA</td>
<td>OXNARD</td>
<td>RICE ROAD</td>
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<tr>
<td>62</td>
<td>0.217115</td>
<td>BNSF</td>
<td>LOS ANGELES</td>
<td>SANTA FE SPRINGS</td>
<td>ROSECRANS/MAR Q</td>
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<tr>
<td>64</td>
<td>0.216157</td>
<td>BNSF</td>
<td>RIVERSIDE</td>
<td>RIVERSIDE</td>
<td>ADAMS ST.</td>
</tr>
<tr>
<td>65</td>
<td>0.207159</td>
<td>SCAX</td>
<td>ORANGE</td>
<td>SANTA ANA</td>
<td>GRAND AVE.</td>
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<tr>
<td>73</td>
<td>0.20364</td>
<td>BNSF</td>
<td>ORANGE</td>
<td>ANAHEIM</td>
<td>TUSTIN AVE.</td>
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</table>
ACTUAL COLLISIONS

• Between 2008-2011, the 8 grade crossings in the SCAG region had 23 total collisions.
• The Nogales St. had the most (6) followed by Rice Road (4).

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>63</td>
<td>80</td>
<td>73</td>
<td>66</td>
<td>282</td>
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<tr>
<td>SCAG Region</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Percentage</td>
<td>10%</td>
<td>11%</td>
<td>7%</td>
<td>5%</td>
<td>8%</td>
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</table>
MEETING THE CHALLENGE

• SCAG and its partners have assessed and included 71 grade-separation projects in the Constrained Plan of the 2010-2035 RTP/SCS.

• These projects are estimated to eliminate 5,782 vehicle hours of delay, reduce safety concerns, and decrease emissions from idling vehicles.
Freight train strikes tractor trailer in Rowland Heights
By Ruoy Gonzales, Staff Writer @RuoyGonzales2 on Twitter San Gabriel Valley Tribune
Posted: 08/02/2013 09:36:47 PM PDT
Updated: 08/02/2013 02:11:39 PM PDT

Metrolink train hits pedestrian in Pomona
By Liset Marquez, Inland Valley Daily Bulletin
and Monica Rodriguez, Inland Valley Daily Bulletin
09/06/13

POMONA >> A male pedestrian died Thursday morning after being hit by a Metrolink train in the area of Hamilton Boulevard and First Street, Pomona police said.
Construction started in May 2013. 40 freight & 12 Metrolink trains daily—will increase to 91 trains by 2025. 43,000 vehicles. 9 crossing collisions over the last 10 years (three in 2013).
Baldwin Avenue
Grade Separation
City of El Monte

Construction started in January 2013.

Two train-vehicle collisions at the crossing in the past 10 years.
Construction started in 2012. Four crossing collisions over the last 10 years, with two motorists killed and two injured.
CONSTRUCTION IN 2014

Puente Avenue Grade Separation  City of Industry/Los Angeles County

Five train-vehicle collisions at the crossing in the past 10 years.
CONSTRUCTION IN 2014

Fairway Drive Grade Separation  City of Industry/Los Angeles County

Two train-vehicle collisions at the crossing in the past 10 years.
CONSTRUCTION IN 2016
Durfee Avenue Grade Separation  Pico Rivera

One train-vehicle collision at the crossing in the past 10 years.
Two train-vehicle collisions at the crossing in the past 10 years.
CONSTRUCTION IN 2016
Hamilton Avenue Grade Separation  City of Pomona

One train-vehicle collision at the crossing in the past 10 years.
# ADOPTED FUTURE PROJECTS

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>JOBS CREATED</th>
<th>LOCATION</th>
<th>COST (EST. IN MILLIONS)</th>
<th>STATUS</th>
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<tbody>
<tr>
<td>Greenwood Ave. Grade Separation</td>
<td>1,253</td>
<td>Montebello</td>
<td>$69.6</td>
<td>Concept Plans</td>
</tr>
<tr>
<td>Fairway Dr. (Alhambra Sub.) Grade Separation – Flyover</td>
<td>1,519</td>
<td>Industry/Walnut</td>
<td>$84.4</td>
<td>Concept Plans</td>
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<tr>
<td>Turnbull Canyon Rd. Grade Separation</td>
<td>1,728</td>
<td>Industry/LA County</td>
<td>$96.0</td>
<td>Concept Plans</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,500</strong></td>
<td></td>
<td><strong>$250</strong></td>
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<tr>
<td><strong>UNALLOCATED FUNDS AVAILABLE</strong></td>
<td></td>
<td></td>
<td><strong>$85.0</strong></td>
<td></td>
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<tr>
<td><strong>FUNDING SHORTFALL</strong></td>
<td></td>
<td></td>
<td><strong>$165.0</strong></td>
<td></td>
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</table>
Funds Committed to Date

Total: $1.602 billion

- Federal: $233.341 million (14%)
- State: $610.379 million (38%)
- Local MTA: $688.74 million (43%)
- City/County: $11.807 million (1%)
- Railroad: $31.921 million (2%)
- Betterments: $26.274 million (2%)
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