Hispanic Safety & Health in Roadway Construction
Work Zone or Danger Zone?
The Good News

Highway Construction Spending

Year


Billions of Dollars

42.54 $45.30 49.6 53.7 59.7 59.9 62.4


The Good News

43.54 $45.30 49.6 53.7 59.7 59.9 62.4
Roadway Construction Work Is Dangerous

Annual Fatalities

Year | Fatalities
--- | ---
1995 | 789
1996 | 717
1997 | 693
1998 | 772
1999 | 868
2000 | 1027
2001 | 1079
2002 | 1181
2003 | 1028
Worrisome Trend?

Annual Fatalities

Highway Construction Spending

Billions of Dollars

Year

1998 1999 2000 2001 2002

1998 1999 2000 2001 2002

0 200 400 600 800 1000 1200

$0.00 $10.00 $20.00 $30.00 $40.00 $50.00 $60.00

772 868 1027 1079 1181

45.30 49.6 53.7 59.7 59.8
Hispanic Factors

Industry analysts project Hispanic workers will hold 47 percent of construction jobs by 2010.

Hispanics fill more construction jobs, which traditionally have higher than average injury and illness rates.
Private Sector Fatality Rates (Deaths/100,000 Workers)

<table>
<thead>
<tr>
<th>Year</th>
<th>Road Construction</th>
<th>All Construction</th>
<th>All Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>96</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>97</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>98</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>99</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>99</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>99</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>2000</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Fatality Rate

0 10 20 30 40 50

Year

95 96 97 98 99 2000
## Hispanic Participation in Construction Work Force

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total Employment</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Women</td>
</tr>
<tr>
<td>paving, surfacing and tamping equipment operators</td>
<td>13,000</td>
<td>0.0</td>
</tr>
<tr>
<td>grader, dozer and scraper operators</td>
<td>52,000</td>
<td>5.2</td>
</tr>
<tr>
<td>industrial truck and tractor operators</td>
<td>563,000</td>
<td>7.1</td>
</tr>
<tr>
<td>construction laborers</td>
<td>1,089,000</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>1,717,000</td>
<td></td>
</tr>
</tbody>
</table>
Hispanic Participation in Construction Work Force

• Based on 2000 data, the estimated percentage of Hispanic transportation construction workforce is 28.9%.

• In terms of numbers of Hispanic workers, there are between 368,000 and 497,000 total Hispanic workers in the transportation construction industry
Contractors Characterize Hispanic Workers

- Hard working
- Some immigration problems
- Multiple families / generations share dwelling
- Often work to support family in native country
- Not likely to complain about safety problems
- Often have language problems
Hispanic Demographics

- Not all Spanish Speaking Workers are “Alike”
  - Over 30 different Spanish-speaking nations
  - Dialects vary greatly from country to country, and region to region
  - Each Spanish-speaking worker has holidays and customs unique to his/her country
Hispanic Demographics

• Not all Spanish Speaking Workers Understand Each Other Well
  – May be many dialects within one country
  – Vocabulary varies greatly
  – Spanish is influenced by other “native” languages of the country of origin (e.g. Indian vocabulary and accents.)
Guess the Country of Origin?

- Teotihuacán, Xochimilco  
  Mexico Sites
- Machu Picchu  
  Peru Site
- Huowki, Pachuri  
  Ecuador Quichua
- Occoquan, Aquia  
  Northern Virginia Rivers
- Simón Bolívar  
  Liberator - Columbia, Bolivia Venezuela, Panama, Ecuador
- Carnivál  
  Marti Gras
What Are We Doing About It?
The Roadway Work Zone Safety and Health Coalition

- OSHA
- NIOSH
- American Road & Transportation Builders Association [ARTBA]
- National Asphalt Pavement Association [NAPA]
- Laborers International Union of North America [LIUNA]
- International Union of Operating Engineers [IUOE]
The Roadway Work Zone Safety and Health Coalition

“Develop hazard awareness training and education programs on roadway work zone safety and health issues targeted to Spanish-speaking and "hard-to-reach" highway construction contractor/workers, including toolbox talk modules and instructor manuals for train-the-trainer programs.”
Roadway Safety
Orientation Training

• OSHA Harwood Grant Funded:
  – Industry Specific
  – Many Mediums
  – English & Spanish
  – 13 Modules/Topics on Top Hazards
OSHA 10-Hour Training
Exclusively for the Roadway Construction Industry

• OSHA Authorized Training
  – Industry Specific
  – Widely Recognized
  – English & Spanish
  – Comprehensive
Customized Safety Grant Training

- Industry, Area & Employer Specific
- Tied to Insurance Data
- English or Spanish
- Based on 10-Hour Course
- Provided FREE
Safety Video Training Library

- Avoiding Collisions
- PPE
- First Aid & Working Outdoors
- Night Work
- Materials Handling
- Fleet Safety
- Falls
Hollywood is not far from truth . . .

Clip from U.S. Marshals - Paramount Pictures
End

Bradley Sant
Vice President, Safety & Education
American Road & Transportation Builders Association
(202) 289-4434
bsant@artba.org