RIEGL
3D Laser Technology Brings Innovation and Efficiency to Help Clear Crash Scenes Faster

Presentation to: Florida Transportation Commission
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Brief Recap of FTC Presentation
July 20, 2017
IN CRASHES WHERE THERE IS A FATALITY –

LANES MUST BE CLOSED AND THE SCENE MUST BE DOCUMENTED
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2016 Total Crash Reports - Florida

Crash Summary

- Total Crashes: 395,521
- Injury Crashes: 165,980
- Crashes with Traffic Fatalities: 2,946
- Total Traffic Fatalities: 3,191

- Commercial Vehicle Crashes: 41,086
- Commercial Vehicles: 44,317
- Property Damage Crashes: 226,595
- *Pedestrian Crashes: 9,097
- *Pedestrian Fatalities: 650
- **Bicycle Crashes: 6,667
- **Bicycle Fatalities: 141

Total Crashes By Month
### Crash Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Crashes</td>
<td>346,326</td>
</tr>
<tr>
<td>Injury Crashes</td>
<td>143,981</td>
</tr>
<tr>
<td>Total Injuries</td>
<td>219,420</td>
</tr>
<tr>
<td><strong>Crashes with Traffic Fatalities</strong>:</td>
<td><strong>2,355</strong></td>
</tr>
<tr>
<td>Total Traffic Fatalities</td>
<td><strong>2,509</strong></td>
</tr>
</tbody>
</table>

- Commercial vehicle Crashes: 37,674
- Commercial Vehicles: 40,673
- Property Damage Crashes: 199,990
- *Pedestrian Crashes*: 7,865
- *Pedestrian Fatalities*: 523
- **Bicycle Crashes**: 5,795
- **Bicycle Fatalities**: 92

**As of Date: 11/28/2017**

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**2017 Total Crash Reports – Florida**

![Total Crashes By Month](chart.png)

**Total Crashes By Month**

- January: 33K
- February: 37K
- March: 34K
- April: 32K
- May: 30K
- June: 30K
- July: 30K
- August: 22K
- September: 34K
- October: 22K
- November: 22K
Fatal Crashes: 257
Total Fatalities: 274

Fatal Crashes: 85
Total Fatalities: 92

Fatal Crashes: 69
Total Fatalities: 76

Fatal Crashes: 199
Total Fatalities: 221

Fatal Crashes: 244
Total Fatalities: 255

Fatal Crashes: 150
Total Fatalities: 164

Fatal Crashes: 173
Total Fatalities: 187

Fatal Crashes: 257
Total Fatalities: 274

Fatal Crashes: 85
Total Fatalities: 92

Fatal Crashes: 69
Total Fatalities: 76

Florida Highway Patrol Fatal Investigations as of Nov. 28th, 2017 by Troop

Total Fatal Crashes: 1,412
EFFICIENCIES COULD BE ACHIEVED BY STAGING SCANNERS IN EACH AREA TO BE ON SCENE WITHIN 30 MINUTES
Evolution of Crash Reconstruction Technology

1960: Measuring Tape
1970: Roller Wheel
1980: Total Station
1990:
2000:
2010: RIEGL Laser Scanners
2020:
What Makes This Technology So Important?

• Restores traffic flow 5 times faster than Total Station
• Accurately documents the scene in any light or weather condition
• Reduces secondary crashes
• Requires one operator, rather than two
• Improves investigation in the weeks and months after a crash and is an excellent, court admissible tool
New Information
RIEGL’s Forensic Scanning Package is being used around the world!
The scans allow teams to recreate the point of impact, as well as at rest.
LiDAR scans allow users to better see beginning and end of skid marks for accurate speed estimates.
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Rural Area, No Artificial Lighting Other Than Camera Flash
Florida rain presents no problem or effect in scanning
Pilot Project Updates

- CFX/FHP compared all top models and RIEGL came in #1
- Actual pilot started November 2016
- Used in well over 200 crashes so far (Orange, Osceola & Lake Counties only – a couple of Seminole and Volusia cases)
- Parameters – Side by side comparison of old vs. new method on scene. FHP abandoned old method after only one month of using the RIEGL system
- Other troops have expressed great interest
Recent Crash – Case Study

- Total Station started 25 minutes before RIEGL arrived.
- RIEGL scan took 25 minutes
- Total Station was finished an hour after the RIEGL
- Total time saved using RIEGL = 1 hour 25 minutes
Lessons Learned

• FHP now contact Medical Examiner (ME) as they arrive on scene instead of after their measurements are completed with the Total Station

• Scans are usually well completed by the time the ME arrives on the scene
Retired Captain Herrell

I watched your equipment become a game changer for us, and is an essential tool to properly document fatal crash scenes quickly and accurately. The scanning occurs in a fraction of the time we used to require, and is performed by only one Corporal; in any weather condition – day or night! This frees up one or two other Corporal’s to handle other aspects of the investigation, and aids in ultimately being able to reopen roadways faster. Your equipment has really helped us do our job faster, safer and with the highest professionalism.
WE RECOMMEND THE PURCHASE OF 21 RIEGL VZ-400i UNITS

Consider the purchase of a VUX-1LR pod helicopter mounted system for the NEW FLIR team.
System Roll Out

• RIEGL USA is prepared to begin rollout for delivery and training in January 2018
• Full statewide implementation in less than six months!
Why RIEGL?

- Automated instrument AND software
- Simplicity and ease of use
- Superior technology suited for use in the elements
- The most reliable
- THE FASTEST on the market
- Outstanding personal customer support
- Software that is valid indefinitely
- Service on instrument done right here in FLORIDA
Thank You!
For more information, please contact us

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