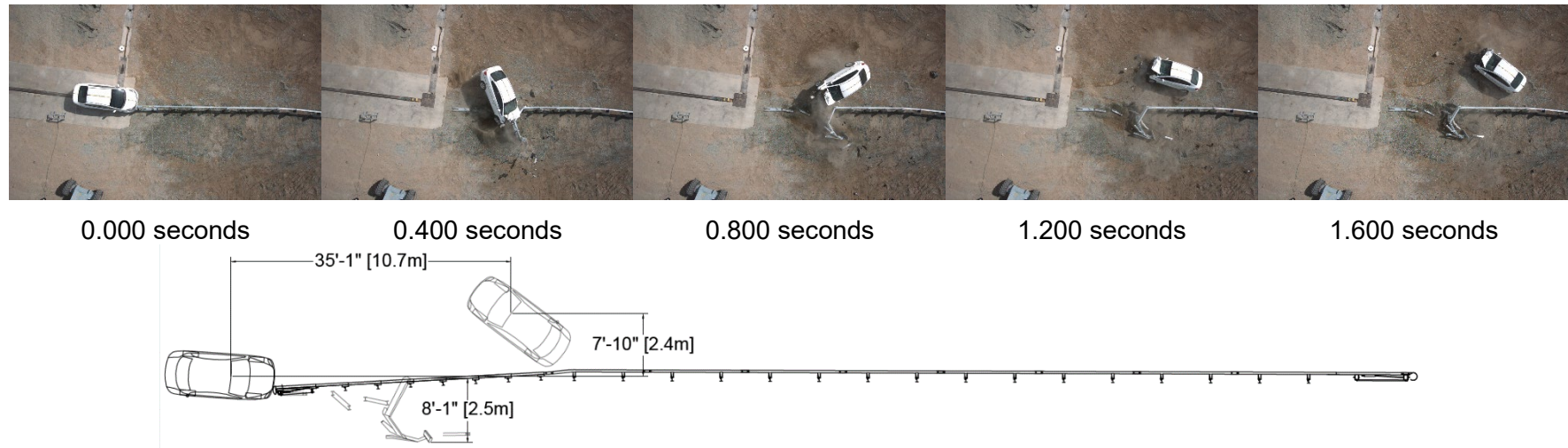


## MASH 2016 Test 3-30 Summary



|                            |                                    |                             |                                         |                                 |                      |
|----------------------------|------------------------------------|-----------------------------|-----------------------------------------|---------------------------------|----------------------|
| <b>GENERAL INFORMATION</b> |                                    | <b>Impact Conditions</b>    |                                         | <b>Occupant Risk</b>            |                      |
| Test Agency.....           | Applus IDIADA KARCO                | Impact Velocity.....        | 62.55 mph (100.67 km/h)                 | Longitudinal OIV.....           | 32.5 ft/s (9.9 m/s)  |
| Test Number.....           | P43089-01                          | Impact Angle.....           | 0.7°                                    | Lateral OIV.....                | -2.6 ft/s (-0.8 m/s) |
| Test Designation.....      | 3-30                               | Location / Orientation..... | 15.29 in. from the center of resistance | Longitudinal RA.....            | -14.7 g              |
| Test Date.....             | 9/15/23                            | Kinetic Energy.....         | 322.1 kip-ft (436.7 kJ)                 | Lateral RA.....                 | 7.6 g                |
| <b>TEST ARTICLE</b>        |                                    | Minimum KE Required.....    | 288.0 kip-ft (390.0 kJ)                 | THIV.....                       | 33.1 ft/s (10.1 m/s) |
| Name / Model.....          | 4F-T flared terminal               | <b>Exit Conditions</b>      |                                         | PHD.....                        | 14.7 g               |
| Type.....                  | Terminal                           | Exit Velocity.....          | N/A                                     | ASI.....                        | 0.80                 |
| Installation Length.....   | 141.4 ft. (43.1 m)                 | Exit Angle.....             | N/A                                     | <b>Test Article Deflections</b> |                      |
| Terminal Length.....       | 34.4 ft. (10.5 m)                  | Final Vehicle Position..... | 35.1 ft. (10.7 m) Downstream            | Static.....                     | 7.4 ft. (2.2 m)      |
| Road Surface.....          | Smooth concrete to fine silty soil |                             | 7.8 ft. (2.4 m) Left                    | Dynamic.....                    | 9.8 ft. (3.0 m)      |
| <b>TEST VEHICLE</b>        |                                    | Vehicle Snagging.....       | Satisfactory                            | Working Width.....              | 8.1 ft. (2.5 m)      |
| Type / Designation.....    | 1100C                              | Vehicle Pocketing.....      | Satisfactory                            | Debris Field.....               | N/A                  |
| Year, Make, and Model....  | 2017 Kia Rio                       | Vehicle Stability.....      | Satisfactory                            | <b>Vehicle Damage</b>           |                      |
| Curb Mass.....             | 2,555.1 lbs (1,159.0 kg)           | Maximum Roll Angle.....     | -32.1 °                                 | Vehicle Damage Scale.....       | 12-FD-7              |
| Test Inertial Mass.....    | 2,464.7 lbs (1,118.0 kg)           | Maximum Pitch Angle.....    | -6.3 °                                  | CDC.....                        | 12FDEW8              |
| Gross Static Mass.....     | 2,611.3 lbs (1,184.5 kg)           | Maximum Yaw Angle.....      | 223.6 °                                 | Maximum Deformation....         | (0.0 in.) 0.0 mm     |

Figure 2 Summary of Test 3-30