



# CARS™

Curve Advisory Reporting Service

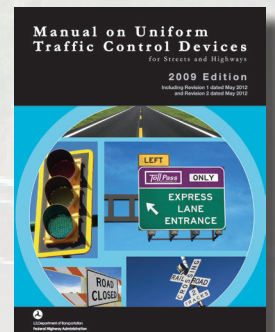
Get your State compliant to the FHWA 2019 MUTCD mandate for roadway signing with the patented CARS Service.

**Better** - Fully Automated Reports to satisfy 2009 MUTCD mandate & more...

**Faster** - Projects with 10,000 miles can be completed in a month...

**Safer** - Drive the entire road, one pass, with traffic...

**Cheaper** - Reduces man hours & eliminates wasted dollars on resurveying



**Utilizing CARS will provide:**

- Elevated Safety
- Higher Accuracy
- Chevron Spacing
- Sign Inventory
- TORT Protection
- Future Fed, State & Local Standards Change Ready

**Solutions to meet your needs:**

- DIY - training & equipment provided
- Project based - tailored to agency project scope
- Turnkey - Certified CARS technicians & engineers do the field work, project management & provide reports

Together.  
Shaping the future of roadway safety.

Call us today at  
610-500-2000  
or visit us online  
[www.riekerinc.com](http://www.riekerinc.com)



# Studies show the use of CARS service over traditional ball-bank methods will significantly decrease your costs and time it takes to complete this first, crucial step toward the 2019 Mandate compliance.

## Better - Automates the enormous tasks to satisfy the 2009 MUTCD mandate for safe curve evaluations and so much more...

- Fully automated - alleviates human error
- Automatically captures all road telemetry
  - Auto-saves to the secure cloud
  - Accessible at your desktop
- Automatically determines curve radius, super-elevation, & vertical profile
- Automatic sign placement and recommendation reports
  - Including chevron location - now requires the curve radius.
  - Customizable, searchable and downloadable data
  - Customizable horizontal speed limits to meet State requirements

## Faster - Projects with 10,000 miles can be completed in a month...

- Manage the entire State from your desktop
- Drive continuously, with traffic
- Survey 100+ miles a day
- Increase and expedite your coverage with multiple teams
- For all roadway types, paved and unpaved, as well as on-off ramps

## Safer - Drive the entire road, one pass, any speed with traffic...

- Reduces risk to your engineers and drivers
- Hands free eyes on the road operation
- Drive the entire corridor at any speed, one pass each direction, with traffic
- Eliminates the dangers of multiple turn-arounds in traffic
- Eliminates accidents by removing the need to stop or U-turn per curve
- Eliminates the dangers of interacting with devices while driving
- Only method available today that doesn't require the driver to turn around at every curve.

## Cheaper - Reduces man hours and saves money wasted with resurveying...

- Saves countless hours getting the entire job done
- Surveys the entire corridor
  - Eliminates the need to re-assess curves when future standards change
- Accommodates speed limit changes with a click of a button
- Reduces tort losses significantly with calibration verified results
- CARS has you covered in the future!

## Safe Curve Speed Analysis Report Sample

### Analysis Summary

Pass #	Curve Direction	Travel Direction	Point of Curvature		Point of Tangent		Fit	Average Test Speed	Curve Radius	Curve Length	Deflection Angle	Curve Class	Elevation at Apex	Curve Grade	Min. Calculated Advisory Speed	Recommended Advisory Speed
			Latitude	Longitude	Latitude	Longitude										
1	L (incr)	N	40.10576 °	-82.00191 °	40.10647 °	-82.00237 °	99.9 %	23.7 mph	282.8 ft	313.8 ft	56 °	F	4.9 %	B	33.0 mph	30 mph
2	R (decr)	SE	40.10647 °	-82.00239 °	40.10574 °	-82.00189 °	99.8 %	23.2 mph	276.8 ft	321.6 ft	57 °	F	4.1 %	B	32.2 mph	30 mph
3	L (incr)	N	40.10582 °	-82.00186 °	40.10647 °	-82.00236 °	99.7 %	24.9 mph	295.0 ft	286.3 ft	50 °	F	3.1 %	C	32.4 mph	30 mph
4	R (decr)	SE	40.10644 °	-82.00241 °	40.10575 °	-82.00191 °	99.7 %	23.3 mph	278.2 ft	304.7 ft	55 °	F	3.3 %	C	31.7 mph	30 mph

### Sign placement summary

Pass #	Differential	Curve Sign	Curve Sign Requirements	Advisory Speed Sign	Speed Sign Requirements	Chevron Sign	Chevron Spacing	Chevron Requirements	Note
1	-25 mph	W1-1	required	30 mph	required	W1-8	80 ft	required	
2	-25 mph	W1-1	required	30 mph	required	W1-8	80 ft	required	
3	-25 mph	W1-1	required	30 mph	required	W1-8	80 ft	required	
4	-25 mph	W1-1	required	30 mph	required	W1-8	80 ft	required	



Rieker Inc., the leader in ball bank solutions since the 1950's, provides CARS service and support to State & local agencies, offering DIY enterprise packages to turnkey solutions via our engineering partners.

CARS Service builds on collaborative work done by the American Association of State Highway and Transportation Officials (AASHTO), FHWA, the Transportation Research Board and industry over the past two decades. Many agencies throughout the US have implemented CARS service in their safety management process, and promoting this service to state and local agencies.

### BENEFITS

*Optimizing Investment* - With limited resources, agencies applying the most current analytical methods have powerful tools to optimize investments and the safety of all users.

*Improved Safety* - States and other transportation agencies are proactively applying safety countermeasures today, effectively reducing fatalities & serious injuries.

*Partner Value Added Services* - Engineers, trained by Rieker CARS Master Instructors, are Certified Providers of CARS Service.

- FHWA & MUTCD Compliance
- Project Management
- Data Collection
- Summary Reports
- Asset Management

Call us today at 610-500-2000  
www.riekerinc.com

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