



Making Your Roads Safer

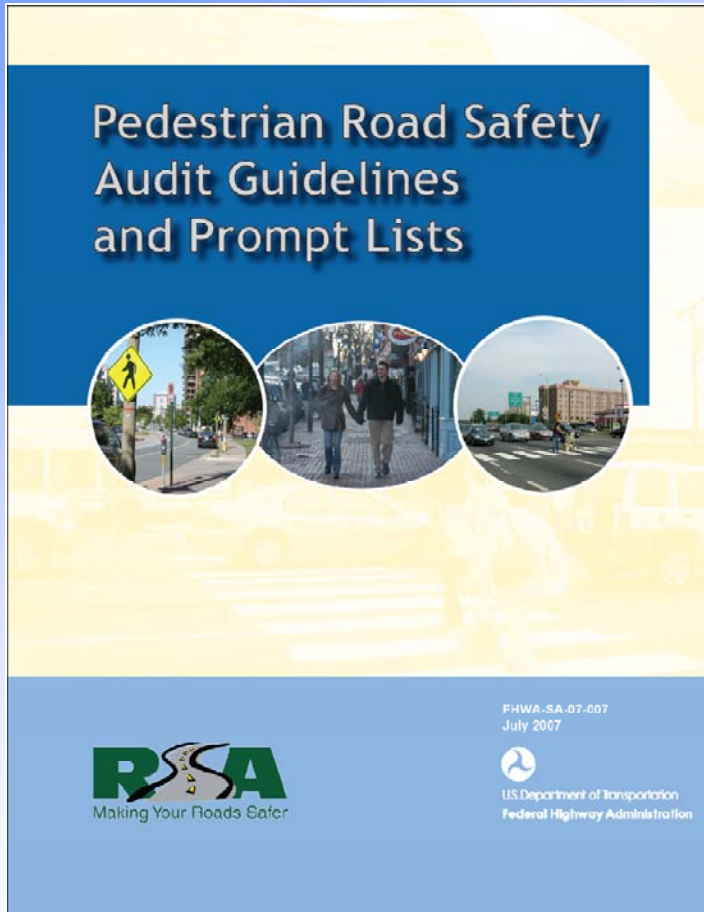
# What RSAs Are!

- ↳ Focused on road safety
- ↳ A formal examination
- ↳ Proactive in nature
- ↳ Conducted by a multidisciplinary team
- ↳ Conducted by an audit team that is independent of the design team
- ↳ Conducted by an audit team that is adequately qualified, both individually and as a team
- ↳ Broad enough to consider the safety of all road users and road facilities
- ↳ Qualitative in nature

# What RSAs are NOT!

- ✎ Not a means to evaluate, praise, or critique design work
- ✎ Not a check of compliance with standards
- ✎ Not a means of ranking or justifying one project over another
- ✎ Not a means of rating one design option over another
- ✎ Not a redesign of a project
- ✎ Not a crash investigation
- ✎ Not a Safety Review

# Focused RSAs



- Pedestrians
- Cyclists
- Older/younger drivers
- Special situations

# Responsibilities



RSA Team

Design Team / Project Owner

1

Identify project

2

Select RSA team

3

Conduct  
start-up meeting

4

Perform field  
reviews

5

Conduct  
analysis and  
prepare report

6

Present  
findings to Project  
Owner

7

Prepare formal  
response

8

Incorporate findings

# RSAs? Why?

- ↳ Stewardship and Accountability
- ↳ Best use of limited funds
- ↳ Increase Roadway Life Cycle
- ↳ Multi Disciplinary Approach
- ↳ Making Roads Safer
- ↳ Where are the issues?

# RSA Benefits

- ↳ **Helps produce designs that reduce the number and severity of crashes**
- ↳ **Promote awareness of safe design practices**
- ↳ **Process to identify and address problems**
- ↳ **Considers human factors and multimodal issues**
- ↳ **Low cost**



# When do we conduct RSAs?

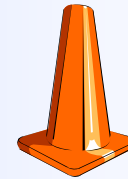
## pre-construction:

- ▣ planning / feasibility
- ▣ preliminary (draft) design
- ▣ detailed design



## construction:

- ▣ work zones
- ▣ pre-opening



## post-construction/operational:

- ▣ existing roads





# *Will an RSA delay the project?*



- ↳ RSAs require a relatively short time (1 to 3 weeks from start-up meeting to submission of RSA report).
- ↳ RSAs can occur concurrently with the agency's review of the design drawings.

# *Will an RSA drive up costs?*

RSA suggestions:

- ↳ must be consistent with the project stage,
- ↳ can focus on low-cost safety improvements,
- ↳ It is easier and less costly to erase and re-draw lines on a set of plans than it is to remove steel and concrete to rebuild a project.

# ***Do RSAs expose agencies to more legal liability?***

***“[RSAs] demonstrate a proactive approach to identifying and mitigating safety concerns.”***

***“Our attorneys say that once safety issues are identified, and if we have financial limitations on how much and how fast we can correct the issues, then the RSA will help us in defense of liability.”***

## Select RSA Team



- **Independent**
- **Experienced**
- **Multi-disciplinary**

# RSA Team

- ↳ Traffic Safety
- ↳ Traffic Operations
- ↳ Road and/or Bridge Design
- ↳ District Maintenance – County Supervisor
- ↳ District Construction
- ↳ Local Contact Person – Police or VFD
- ↳ Other Areas of Specialty – Bike/Ped, Planners

# Typical RSA Schedule

## Pre – Field Review

- ↳ Assemble Team and Delegate Responsibilities
- ↳ Select Site
- ↳ Gather all Pertinent Data for Locations
- ↳ Compare Site Safety Data to Statewide Crash Data – Identify Locations of Interest
- ↳ Schedule Dates for Field Review

# Typical RSA Schedule

## Field Review

- ↳ Typically 1-2 Days and 1 Night
- ↳ Meet with Team Members and Review Data
- ↳ Discuss Site's issues with Local Experts
- ↳ Perform Daytime Review of Locations – Time is dependant on specific parameters associate with site
- ↳ Perform Nighttime Review of Location

# Typical Schedule Post Field Review

- ↳ Discuss Site Specifics
- ↳ Identify Good Practices and Areas where Safety could be Enhanced
- ↳ Identify Actions Needed – Short Term, Intermediate, and Long Term
- ↳ Identify Possible Funding Sources and Hurdles to Enhancements
- ↳ Prepare Report Outlining all Recommendations



# What are WV's Safety Concerns?

## Strategic Highway Safety Plan

- Roadway Departure
- Impaired Driving
- No/Improper Occupant Protection Use
- At Risk Driver Age Groups

# Where Will We Use RSAs?

- HSIP
- HRRRP
- School Zone Traffic Control Upgrades
- Traffic Studies
- Answering Political Requests
- Public Request

# Completed RSAs District 2

- ↳ Intersection of Blake St and College Ave, Cabell County
- ↳ School Zone, Barboursville Middle School
- ↳ Isolated Congestion during a.m. drop off



# Completed RSAs District 3

- ↳ WV 2, Wood County
- ↳ 3.15 miles
- ↳ 4 Primary Areas of Focus
- ↳ Reviewed additional site based on information from Police at RSA

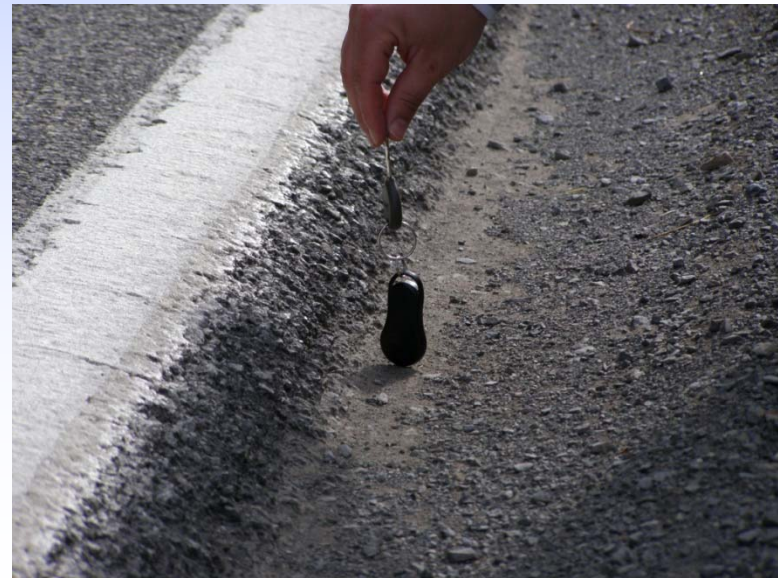


# Completed RSAs District 4

- ↳ Two Intersections in Monongalia County
  - WV 705 and CR 67
  - US 119 and CR 73

# Completed RSAs District 5

- ↳ WV 127, Hampshire County
- ↳ 7.57 miles
- ↳ Roadway Departure Concerns
- ↳ Horizontal and Vertical Geometry





# Completed RSAs District 1

- ↳ WV 62, Putnam County
- ↳ 23.5 miles
- ↳ 5 Primary Areas of Focus
- ↳ WV's 1<sup>st</sup> Official RSA
- ↳ Varied Challenges in Each Zone



# Completed RSAs District 6

↳ WV 2, Hancock County

↳ 2.56 miles

↳ 3 Primary Areas of Focus

▣ Highway Rail Crossing

▣ Intersection

▣ Intersection with Private Facility





# Completed RSAs District 7

- ✎ I-79 at Exit 91 Interchange, Lewis County
- ✎ Main Concern on I-79 NB at Interchange
- ✎ Night time review revealed additional concerns not apparent during day review
- ✎ County Supervisor's input was invaluable



# Completed RSAs District 8

- ↳ US 219, Randolph County
- ↳ 9.61 miles Millcreek to Beverly

# Planned RSAs District 9

- ↳ WV 41 and US 19 Intersection, Nicholas County
- ↳ Access Control Concerns
- ↳ Planned for November 2010

# Planned RSAs

## District 10

- ↳ US 460, Mercer County
- ↳ 15.73 miles
- ↳ Overlap with US 52 and US 19
- ↳ Planned for November 2010

## Future RSA's

If you would like to discuss outcome of RSA's or suggest a future location

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