ROAD SAFETY ASSESSMENTS
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Making Your Roads Safer
Definition

Road Safety Audit
A formal and independent safety performance review of a road transportation project by an experienced team of safety professionals, addressing the safety of all road users.
Key Points

• **Formal:** Procedures & Documentation

• **Independent:** Auditors Detached from Road Agency & Design Team, No Bias

• **Safety Performance:** Focus on Substanative Safety

• **Experienced Team:** Audit work is based on experience and knowledge

• **All Road Users:** All relevant human travel modes are considered
Road Safety Audit
A formal and independent safety performance review of a road project by an independent, multidisciplinary, experienced team of safety professionals, addressing the safety of all road users.

Transportation Safety Plan
A data-driven plan developed by a multi-disciplinary team to improve safety on the entire road network by prioritizing the activities implemented by a government and communicating these priorities with safety partners.
**Nominal vs. Substantive Safety**

**Nominal Safety**

Nominal safety is meeting the standards.

**Substantive Safety**

Substantive safety is doing what works for the site.
Nominal vs. Substantive Safety
Responsibilities

RSA Team
Design Team / Project Owner

1. Identify project
2. Select RSA team
3. Conduct Kick-off meeting
4. Perform data & field reviews
5. Conduct analysis and prepare report
6. Present findings to Project Owner
7. Prepare formal response
8. Incorporate findings

Responsibilities: RSA Team (red) and Design Team / Project Owner (blue)
Objectives
• Input from owner/operator
• Questions from team on Road’s History
• Inform everyone of RSA process
• Coordinate available resources
RSA Team Review

• Data Review
  – Planned projects, construction history
  – Traffic volumes
  – Existing Infrastructure
  – Crash Reports
  – Crash Statistics

• Field Review
  – Day / Night
  – Observe
  – Field review of serious crash sites
Close Out Meeting

- Identified Risks / Observations
- Preliminary recommendations

Word Message Signs

- Warn drivers of a condition, not with messages like “slow down”
Close Out Meeting

ID RISK FIRST

- Identified Risks / Observations

- Preliminary recommendations

- High frequency of angle and rear end crashes
- Traffic detection is updated (good)
- Dual left turns are rarely used, unexpected use
- Pavement markings and lane designation signs conflict
- X-walk alignment/length
- Signal timing/Ped timing
- Frequent ped use from [Fill in] Tower
Close Out Meeting

• Identified Risks / Observations

• Preliminary recommendations

- Are dual left turns off Jefferson warranted? Mostly unused.
- Add lane designation for Tongass traffic
- Evaluate the pedestrian signal timing (seems short)
- Evaluate signal timing: length of amber signal, adding all red clearance phase
- Look at protected left off Tongass w/ turn pocket
- Shorten crosswalk distance and improve ADA by realigning x-walks
- Road diet (details to follow)
High Risk, No Crash History

- Document facts
  - Lack of crash history
  - Observed behaviors
  - Quantify what you can

- Look at Safety performance of similar facilities

- Multi-disciplinary Brainstorm

Mic Mac, ME
High Risk: No Crash Data

Organized Village of Saxman, AK
Low Severity, Rare Occurrence
Unnecessary Risks

La Jolla, CA
Medium Severity, Rare Occurrence
High Severity, Occasional

Minto, AK
Risks w/ significant crash history

- 5 ¼ years:
  - 3 fatal & 48 serious injuries
  - 37 motorcycle crashes
Occasional, High Severity