**MCSAC Task 12-03: Evaluation of and Recommendations on the Compliance, Safety, Accountability (CSA) Program**

**CSA Subcommittee Meeting, December 6, 2012**

**Topics for Recommendations Not Considered**

1. **Address BASICs that are not well correlated to future crash risk**
	1. Driver Fitness BASIC – consider weighting?
	2. Look at BASICs that are inverted (i.e., inversely correlated to crashes).
	3. Eliminate BASICs that statistically have no correlation as a crash predictor.
	4. We need to figure out the problems with the Driver Fitness and Drug/Alcohol BASICs.
	5. Rebecca M. Brewster, President and Chief Operating Officer, American Transportation Research Institute (ATRI): ATRI concluded that the SMS methodology for determining percentile scores is not calibrated correctly for the Controlled Substances and Alcohol or Driver Fitness BASICs (Behavior Analysis & Safety Improvement Categories).
		1. ATRI concluded that it is likely that FMCSA’s severity weighting methodology places too much weight on safety-irrelevant violations and too little weight on safety-critical violations in these two BASICs.
	6. David Madsen, Volpe Center: Driver Fitness BASIC is negatively correlated with crash risk.
		1. This may occur due to the lack of specificity in certain violations within the Driver Fitness BASIC. For example:
			1. Missing medical card (most common violation in this BASIC)
				1. Could be misplaced – not safety related.
				2. Could be expired – may be safety related.
				3. Driver could be medically unqualified to drive – is safety related.
			2. Operating while suspended (no reason specified for this violation)
				1. Sometimes CDL suspension occurs because of non-safety-related reasons such as unpaid child support.
		2. SMS should be able to emphasize violations for safety-related reasons but because those reasons are not specified the SMS model assigns a lower weight to that violation within the BASIC.
2. **Use of absolute, rather than relative scores**
	1. BASIC scores should be absolute, rather than relative scores.
	2. Develop scoring based on absolute, not relative measures.
3. **CSA scores are not correlated with actual crashes**
	1. Tying the relativity of crash risk predictability to public scores.
	2. Anthony P. Gallo, Wells Fargo Securities: Looking at individual carriers (without aggregation) shows less correlation with accidents per million miles and BASIC scores.
		1. Lack of “responsibility” assigned to accidents in crash data is problematic.
		2. Fifty seven percent of crashes involve carriers with no score above any BASIC threshold.
			1. But this population of carriers that have a BASIC score that is not above threshold is approximately 400,000.
			2. Forty five % of crashes involve 10% of the carrier population.
	3. ATRI found that the best indicator of crashes was how many “Alerts”[[1]](#footnote-1) a carrier has: Carriers with an “Alert” in all five public BASICs have a crash rate roughly 5.1 times higher than a carrier with “Sufficient Data But No Score.”
		1. ATRI recommended an Alternative Scoring Mechanism (ASM) based on number of Alerts per carrier. It stated that this Alternative Scoring Mechanism would present more valid fleet safety profiles to the public (than the current CSA scoring system).
		2. One subcommittee member stated that the ATRI recommended ASM is good because it removes the precision of percentile ranks, which may give the impression of more precise differentiation than is actually possible based on the data.
4. **Data Outliers**
	1. Data outliers should be addressed (i.e., carriers with relatively high non-crash BASIC scores, but very low crash indicator BASIC scores).
	2. Outliers (i.e., carriers with a low crash rate, but that are deficient in one BASIC): How many of those outliers are out there? (Question asked by subcommittee member)
		1. Madsen was unable to answer this question, but did explain that SMS tries to screen out carriers reporting a very large fleet, but no violations (assume those fleets are not operating very much).
		2. SMS also screens out leasing companies (e.g., Penske).
	3. Daniel Blower, UMTRI: It is worthwhile to look at outliers, but outliers should not drive the CSA program.
		1. Outliers problem also go both ways – some carriers are involved in unsafe driving and yet do not have crashes. This results from the variability and random component of crashes.
	4. An outlier carrier that has high violations but no crashes might be very good at hiring good drivers.
	5. Spencer, OOIDA: “Outliers” are the small operators. They get violations because of more likely small carriers to get inspections, but they do not have reportable crashes.
	6. Small carriers make up the vast majority of the industry.
5. **Drug/Alcohol BASIC**
	1. Acquire more data to improve the Drug Testing BASIC.
6. **Cargo Securement**
	1. It bothers us that cargo securement is not a BASIC anymore. Concern is that it was moved to make another basic “look better,” but the effect is dilution of emphasis on the importance of cargo securement.
7. **There should be a Fatigue BASIC**
8. **Separate motorcoach from trucking**
	1. No one has examined passenger carrier violation/crash data alone.
	2. There is not as much data on passenger carriers (not as many inspections).
		1. There are unlikely to be many Driver Fitness, Driver Qualification, and Unsafe Driving violations because motorcoaches generally do not get pulled over full of passengers.
	3. There are also fewer passenger carrier companies, so the data that exists may not be sufficient to provide a relevant rank.
	4. Supina (DATTCO Inc.): Many states do not require inspections. SMS studies should look at motorcoaches.
9. **Study the correlation between driver wages/working conditions and safety**
1. An “Alert” in a BASIC is received as a result of possessing a percentile score above FMCSA’s cutoff and/or a Severe Violation in that BASIC. [↑](#footnote-ref-1)