Michigan



Over 120,000 miles of public road

9,700 miles of state maintained highway

Michigan usRAP Overview	Partners	Michigan DOT, AAAFTS		Statewide totals for rural state highways19 billion annual veh-mi of travel (VMT)
	usRAP network	Interstate, US, and State routes	l Figures	 6,170 fatal and serious injury crashes Statewide averages for analysis sections on rural state highways Average length = 5.3 mi
	usRAP road sections	1,360 sections (latest data period 2002-2006)		 AADT = 7,400 veh/day Fatal and serious injury crashes = 0.91 crashes/section/year
	Length of usRAP network	7,130 road miles		 Fatal and serious injury crash density = 0.29 crashes/mi/year Average crash rate = 6.40/100MVMT

Risk Mapping

The first usRAP risk maps for Michigan were prepared using 2000-2004 data for fatal and major injury crashes. These maps were later updated using 2002-2006 data. The map to the right is risk map #1, fatal and major injury crashes per mile. Based on the updated version of the maps, an analysis was conducted to identify road sections in Michigan whose safety was most improved between the 2000 to 2004 and 2002 to 2006 periods.



Summary Risk Mapping Data

MICHIGAN RURAL, TRUNKLINE 2000-2004													
	Sections	Road Miles	Average Length (mi)	Average AADT (veh/ day)	Annual VMT (Billion)	Fatal & Serious Injury Crashes							
Road lype						Total Frequency	Annual Frequency	Annual Density	Annual Rate (HMVM)				
Interstate/Freeway	160	1,001	6.3	23,922	8.7	1,362.6	1.70	0.27	3.12				
Multilane Divided	33	85	2.6	13,937	0.4	117.0	0.71	0.28	5.42				
Multilane Undivided	38	78	2.1	11,259	0.3	149.6	0.79	0.38	9.28				
Two-lane Undivided	1,126	5,970	5.3	4,492	9.8	4,612.8	0.82	0.15	9.43				
Total	1,357	7,134	5.3	7,405	19.3	6,242.0	0.92	0.29	6.47				

Specific Applications of usRAP in Michigan

usRAP risk maps for Michigan were used in a set of site investigations to test their usefulness in identifying sites as candidates for safety improvements. Crash summaries were prepared for these sites and each site was visited and reviewed in the field. Potential improvement types at the selected sites were identified to address concentrations of crashes at particular intersections and more widely distributed patterns of lane departure and run-off-road crashes.



