

# lowa





8,900 miles of state maintained highway

	8	Partners	lowa DOT, AAAFTS		Sta • 1 • 2 Sta on • A • F
	P Overview	usRAP network	Interstate, US, and State routes	Facts and Figures	
	lowa usRA	usRAP road sections	1,580 sections (latest data period 2000-2004)		
_		Length of usRAP network	7,780 road miles		• F 0 • A

#### Statewide totals for rural state highways

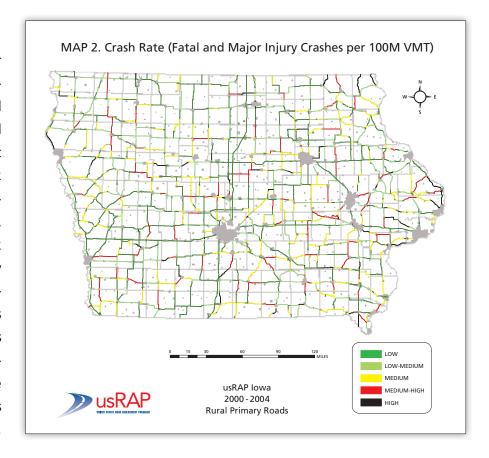
- 13 billion annual veh-mi of travel (VMT)
- 2,841 fatal and serious injury crashes

# Statewide averages for analysis sections on rural state highways

- Average length = 4.92 mi
- AADT = 4,600 veh/day
- Fatal and serious injury crashes = 0.36 crashes/section/year
- Fatal and serious injury crash density = 0.12 crashes/mi/year
- Average crash rate = 4.39/100MVMT

#### **Risk Mapping**

The first usRAP risk maps for Iowa were prepared in 2005 using 2000-2004 data for fatal and major injury crashes. Updated maps were used to supplement Iowa's identification of high risk rural roads in response to Federal SAFETEA-LU requirements. The map to the right is risk map #2, fatal and major injury crashes per hundred million vehicle miles traveled. It represents average relative risk to motorists traveling on lowa's state maintained highways. Relatively, the safest roads are the Interstates and other freeways of the State.

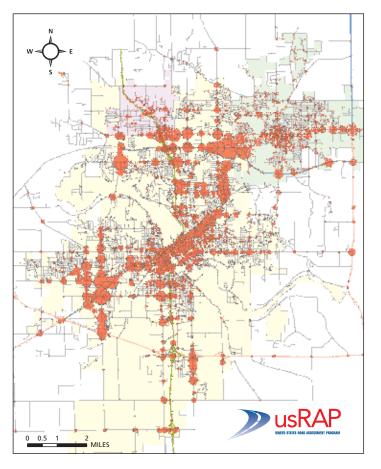


### **Summary Risk Mapping Data**

IOWA RURAL PRIMARY ROADS 2000-2004													
	Sections	Road Miles	Average Length (mi)	Average AADT (veh/ day)	Annual VMT (Billion)	Fatal & Serious Injury Crashes							
Road Type						Total Frequency	Annual Frequency	Annual Density	Annual Rate (HMVM)				
Interstate/Freeway	119	860	7.2	17,204	5.4	541	0.91	0.13	2.00				
Multilane Divided	152	547	3.6	8,550	1.7	479	0.63	0.18	5.61				
Multilane Undivided	71	63	0.9	4,218	0.1	35	0.10	0.11	7.20				
Two-lane Undivided	1,239	6,307	5.1	2,498	5.8	1,786	0.29	0.06	6.21				
Total	1,581	7,777	4.9	4,564	13.0	2,841	0.36	0.12	4.39				

## **Specific Applications of usRAP in Iowa**

The Iowa DOT has used updated risk maps to supplement Iowa's identification of high-risk rural roads in response to Federal SAFETEA-LU requirements. In addition, supplementary risk maps have been prepared for Iowa to illustrate crash costs and intersection crash frequencies. The maps below show examples of intersection crash frequency maps.



MAP 8. Intersection Crash Frequency (Crashes per Year)

Cedar Rapids 2001 - 2003

