

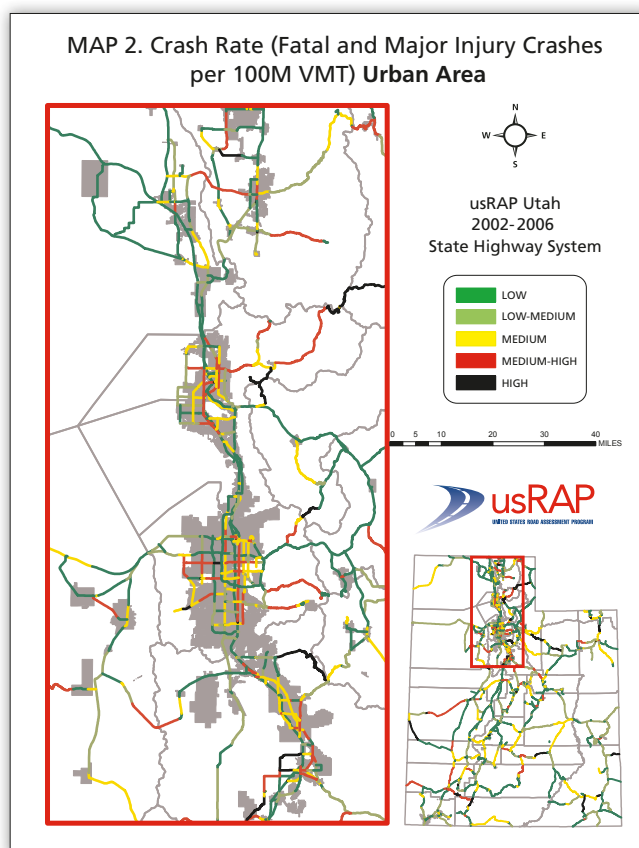


-  Over 43,000 miles of public road
 5,800 miles of state maintained highway

Utah usRAP Overview	Partners	Utah DOT, AAAFTS	Facts and Figures	Statewide totals for rural and urban state highways
	usRAP network	Interstate, US, and State routes		• 17 billion annual veh-mi of travel (VMT)
	usRAP road sections	1,180 sections (latest data period 2002-2006)		• 10,022 fatal and serious injury crashes
	Length of usRAP network	5,800 road miles		Statewide averages for analysis sections on rural state highways
				• Average length = 5.8 mi
				• AADT = 4,100 veh/day
				• Fatal and serious injury crashes = 1.03 crashes/section/year
				• Fatal and serious injury crash density = 0.18 crashes/mi/year
				• Average crash rate = 11.89/100MVMT

Risk Mapping

State highways in both rural and urban areas were included in the scope for the Utah pilot study. In this pilot study, the four standard usRAP risk maps were developed for all state highways, as well as detailed maps for state highways in urban areas. The example at right shows an urban area risk map based on fatal and serious injury crash rate per 100 million vehicle-miles traveled. This represents the crash risk to individual motorists on the roads shown on the map. Substantial database integration and cleanup was provided by the usRAP team working with UDOT staff, to facilitate the mapping included in the pilot study.



Summary Risk Mapping Data

UTAH RURAL STATE HIGHWAY SYSTEM ROADS 2002-2006									
Road Type	Sections	Road Miles	Average Length (mi)	Average AADT (veh/day)	Annual VMT (Billion)	Fatal & Serious Injury Crashes			
						Total Frequency	Annual Frequency	Annual Density	Annual Rate (HMVM)
Interstate/Freeway	57	784	13.8	13,107	3.8	1,853	6.50	0.47	9.88
Multilane Divided	1	3	3.0	12,767	0.0	9	1.80	0.60	12.90
Multilane Undivided	67	191	2.8	13,324	0.9	504	1.50	0.53	10.86
Two-lane Undivided	760	4,147	5.5	1,985	3.0	2,212	0.58	0.11	14.72
Total	885	5,125	5.8	4,116	7.7	4,578	1.03	0.18	11.89

UTAH URBAN STATE HIGHWAY SYSTEM ROADS 2002-2006									
Road Type	Sections	Road Miles	Average Length (mi)	Average AADT (veh/day)	Annual VMT (Billion)	Fatal & Serious Injury Crashes			
						Total Frequency	Annual Frequency	Annual Density	Annual Rate (HMVM)
Interstate/Freeway	41	158	3.9	91,815	5.3	1,275	6.22	1.61	4.80
Multilane Divided	8	28	3.5	34,961	0.4	161	4.03	1.16	9.07
Multilane Undivided	158	323	2.0	27,015	3.2	3,321	4.20	2.06	20.88
Two-lane Undivided	91	192	2.1	12,181	0.9	687	1.51	0.71	16.07
Total	298	701	2.4	37,906	9.7	5,444	3.65	1.55	11.22

Specific Applications of usRAP in Utah

Supplementary usRAP risk maps were developed for a range of crash types for Utah, including roadway-departure, aggressive-driving, unrestrained-occupant, and young-driver crashes (see Map 1). A special map series was prepared for State Route 112 (Map 2) as part of a public awareness campaign to explain the need for roadway improvements in that corridor and build public support for them. Detailed maps were also prepared for each of the regions of the state (see Map 4).

