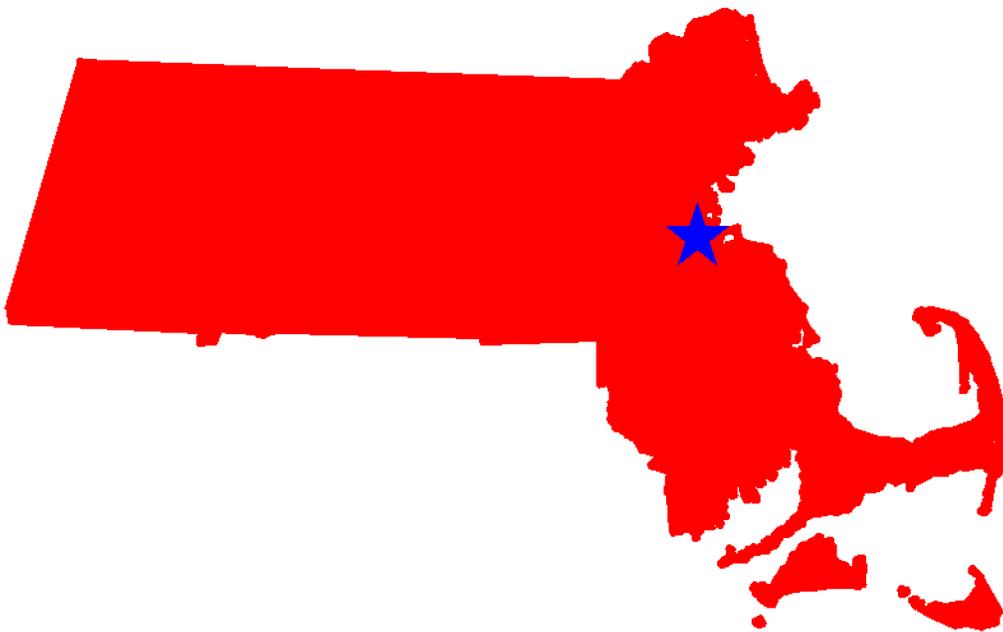




Traffic Safety Facts Massachusetts 2003-2007



This Report Contains Data From the Following Sources:

- Fatality Data - NCSA Fatality Analysis Reporting System (FARS): 2003-2006 Final File and 2007 Annual Report File (ARF)
- Observed Safety Belt Data - NCSA National Occupant Protection Use Survey (NOPUS) and the Massachusetts State Survey
- Vehicle Miles of Travel Data and Motorcycle Registrations - Federal Highway Administration (FHWA)
- Population Data - U.S. Bureau of the Census



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Traffic Safety Performance (Core Outcome) Measures For Massachusetts *

Core Outcome Measures		Year				
		2003	2004	2005	2006	2007
Traffic Fatalities	Total	462	476	441	429	417
	Rural	50	104	39	48	32
	Urban	412	372	402	381	385
	Unknown	0	0	0	0	0
Fatalities Per 100 Million Vehicle Miles Driven**	Total	0.86	0.87	0.80	0.78	
	Rural	1.19	2.51	0.92	1.14	
	Urban	0.83	0.73	0.78	0.75	
Passenger Vehicle Occupant Fatalities (All Seat Positions)	Total	324	309	298	300	277
	Restrained	92	89	84	79	76
	Unrestrained	177	165	171	158	142
	Unknown	55	55	43	63	59
Alcohol-Impaired Driving Fatalities (BAC=.08+)**		156	169	148	144	146
Speeding-Related Fatalities		156	158	145	148	140
Motorcyclist Fatalities	Total	35	60	56	50	61
	Helmeted	30	49	50	43	55
	Unhelmeted	4	9	4	5	3
	Unknown	1	2	2	2	3
Drivers Involved in Fatal Crashes	Total	615	616	598	568	551
	Aged Under 15	0	1	0	0	0
	Aged 15-20	94	89	88	69	77
	Aged Under 21	94	90	88	69	77
	Aged 21 and Over	512	521	502	488	467
	Unknown Age	9	5	8	11	7
Pedestrian Fatalities		86	81	76	61	61

*These Performance Measures Were Developed By The National Highway Traffic Safety Administration (NHTSA) and the Governors Highway Safety Association (GHSA) (See Publication: DOT HS 811 025)

**2007 State Vehicle Miles Traveled (VMT) Data is Not Yet Available

***Based on the BAC of All Involved Drivers and Motorcycle Riders (Operators) Only

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Fatality Rates: Massachusetts , U.S. and Best State

Year		Fatalities	Total Vehicle Miles Traveled (Millions)	Fatalities Per 100 Million Vehicle Miles Traveled	Total Population	Fatalities Per 100,000 Population
2003	Massachusetts	462	53,709	0.86	6,438,510	7.18
	US	42,884	2,890,450	1.48	290,447,644	14.76
	Best State*			0.83		7.18
2004	Massachusetts	476	54,771	0.87	6,433,676	7.40
	US	42,836	2,964,788	1.44	293,191,511	14.61
	Best State*			0.87		7.40
2005	Massachusetts	441	55,458	0.80	6,429,137	6.86
	US	43,510	2,989,430	1.46	295,895,897	14.70
	Best State*			0.80		6.86
2006	Massachusetts	429	55,136	0.78	6,434,389	6.67
	US	42,708	3,014,116	1.42	298,754,819	14.30
	Best State*			0.78		6.32
2007	Massachusetts	417			6,449,755	6.47
	US	41,059	2,996,409	1.37	301,621,157	13.61
	Best State*					6.47

*State (or States) With Lowest Rates: Lowest VMT and Population Rates Could Be in Different States

2007 National VMT is a Preliminary Estimate and Subject to Change

2007 State Vehicle Miles Traveled (VMT) Data is Not Yet Available

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Fatalities By The Highest Blood Alcohol Concentration (BAC) in the Crash**:
 Massachusetts , U.S. and Best State
 (Old Definition)

Year		Total Fatalities in all Crashes	Highest BAC level in the Crash				
			BAC = .01+		BAC = .08+		Per 100 Million VMT
			Number	Percent	Number	Percent	
2003	Massachusetts	462	215	47	172	37	0.32
	US	42,884	17,105	40	14,678	34	0.51
	Best State*			15		13	0.16
2004	Massachusetts	476	207	43	186	39	0.34
	US	42,836	16,919	39	14,593	34	0.49
	Best State*			25		21	0.27
2005	Massachusetts	441	186	42	162	37	0.29
	US	43,510	17,590	40	15,102	35	0.51
	Best State*			14		12	0.14
2006	Massachusetts	429	186	43	157	37	0.28
	US	42,708	17,738	42	15,144	35	0.50
	Best State*			24		20	0.22
2007	Massachusetts	417	193	46	160	38	
	US	41,059	17,036	41	14,575	35	0.49
	Best State*			23		19	

*State (or States) With Lowest Percents: Lowest Percents Could Be in Different States

**Based on the BAC of All Involved Drivers, Motorcycle Riders (Operators), Pedalcyclists and Pedestrians

2007 National VMT is a Preliminary Estimate and Subject to Change

2007 State Vehicle Miles Traveled (VMT) Data is Not Yet Available

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Alcohol-Impaired Driving Fatalities**:
Massachusetts, U.S. and Best State
(New Definition)

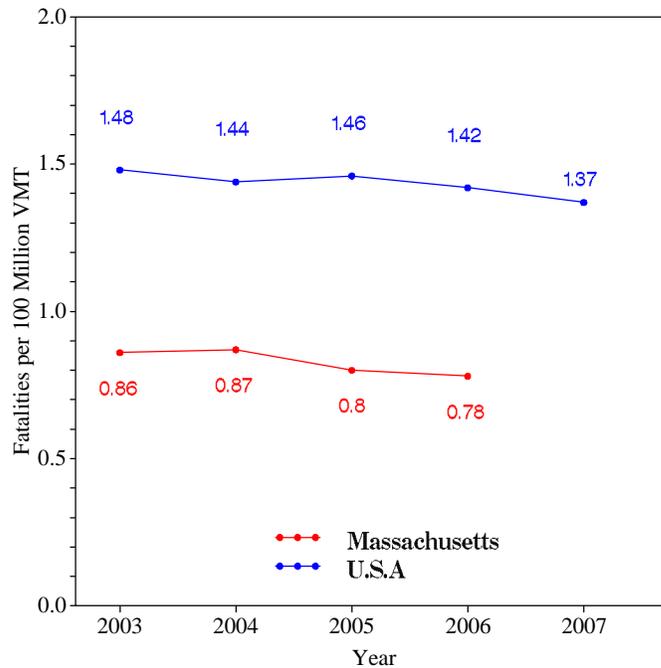
Year		Total Fatalities in all Crashes	Alcohol-Impaired Driving Fatalities (BAC = .08+)		
			Number	Percent	Per 100 Million VMT
2003	Massachusetts	462	156	34	0.29
	US	42,884	13,096	31	0.45
	Best State*			12	0.15
2004	Massachusetts	476	169	36	0.31
	US	42,836	13,099	31	0.44
	Best State*			20	0.25
2005	Massachusetts	441	148	34	0.27
	US	43,510	13,582	31	0.45
	Best State*			12	0.13
2006	Massachusetts	429	144	34	0.26
	US	42,708	13,491	32	0.45
	Best State*			18	0.20
2007	Massachusetts	417	146	35	
	US	41,059	12,998	32	0.43
	Best State*			17	

*State (or States) With Lowest Percents: Lowest Percents Could Be in Different States
 **Based on the BAC of All Involved Drivers and Motorcycle Riders (Operators) Only
 2007 National VMT is a Preliminary Estimate and Subject to Change
 2007 State Vehicle Miles Traveled (VMT) Data is Not Yet Available

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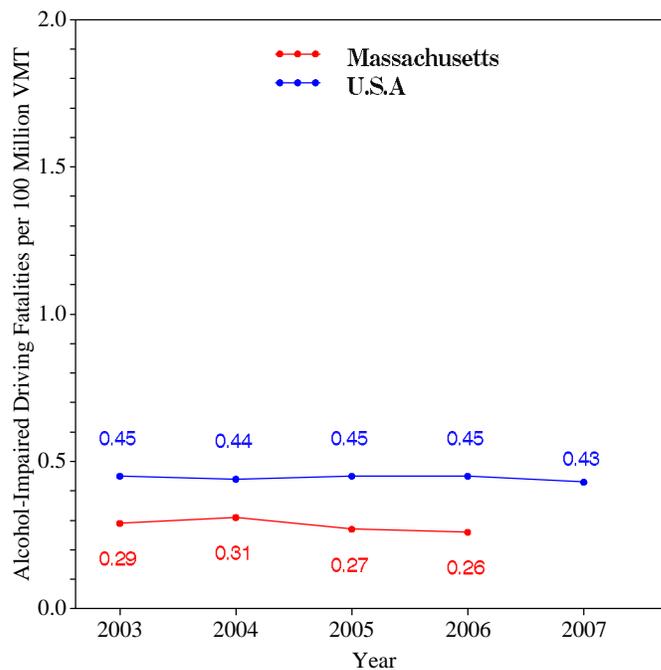


Fatalities per 100 Million VMT



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Alcohol-Impaired Driving Fatalities per 100 Million VMT



2007 National VMT is a Preliminary Estimate and Subject to Change
2007 State Vehicle Miles Traveled (VMT) Data is Not Yet Available

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**Blood Alcohol Concentration (BAC) Reporting Rates
For Drivers/Motorcycle Riders (Operators)
Involved in Fatal Crashes:
Massachusetts , U.S. and Best State**

Year		Surviving Drivers/Motorcycle Riders			Killed Drivers/Motorcycle Riders			Total Drivers/Motorcycle Riders		
		Total	With Blood Alcohol Concentration (BAC) Results Reported to FARS		Total	With Blood Alcohol Concentration (BAC) Results Reported to FARS		Total	With Blood Alcohol Concentration (BAC) Results Reported to FARS	
			Number	Percent		Number	Percent		Number	Percent
2003	Massachusetts	343	4	1	272	165	61	615	169	27
	US	31,738	8,196	26	26,779	18,836	70	58,517	27,032	46
	Best State*			76			98			83
2004	Massachusetts	324	3	1	292	93	32	616	96	16
	US	31,524	8,215	26	26,871	18,275	68	58,395	26,490	45
	Best State*			80			97			82
2005	Massachusetts	312	2	1	286	158	55	598	160	27
	US	31,729	7,415	23	27,491	18,773	68	59,220	26,188	44
	Best State*			77			98			84
2006	Massachusetts	284	7	2	284	196	69	568	203	36
	US	30,498	7,482	25	27,348	18,911	69	57,846	26,393	46
	Best State*			81			99			85
2007	Massachusetts	277	4	1	274	93	34	551	97	18
	US	29,201	6,765	23	26,480	16,991	64	55,681	23,756	43
	Best State*			82			96			84

*State (or States) With Highest Percents: Highest Percents Could Be in Different States

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Daytime Front Seat (Outboard Only) Passenger Vehicle Occupants, Aged 5 and Over, by Restraint Use: Fatalities and Observed Massachusetts , U.S. and Best State

Table with 3 columns: Year, Fatalities - Restrained**, Observed - Restrained***. Rows include years 2003-2007 and categories Massachusetts, US, and Best State*.

*State With Highest Percent. Fatal Crash and Observed Percents Can Be Different States

**Percent Based Only Where Restraint Use Was Known

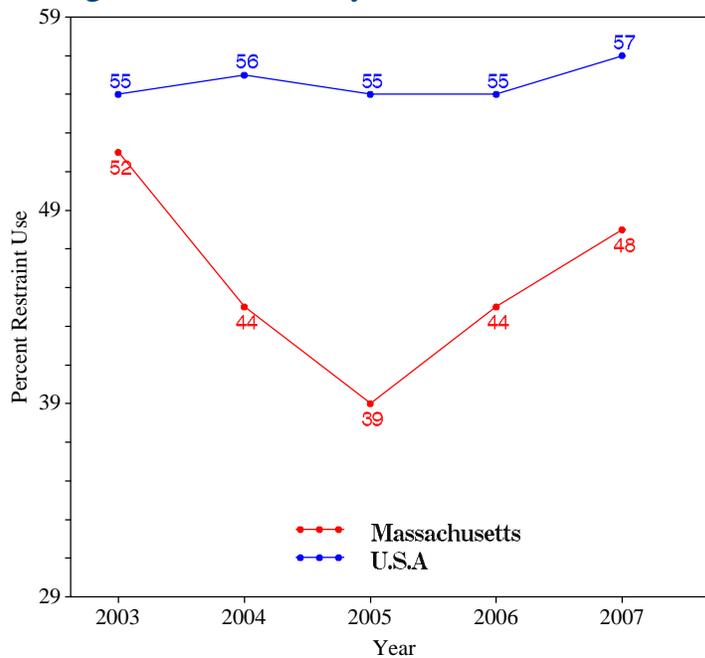
***USA Data: National Occupant Protection Use Survey. Massachusetts Data: State Survey

Note: The Purpose of this Table is to Compare (as closely as possible) the Use of Restraint Systems by Fatally Injured Occupants with Occupants in all Driving Situations

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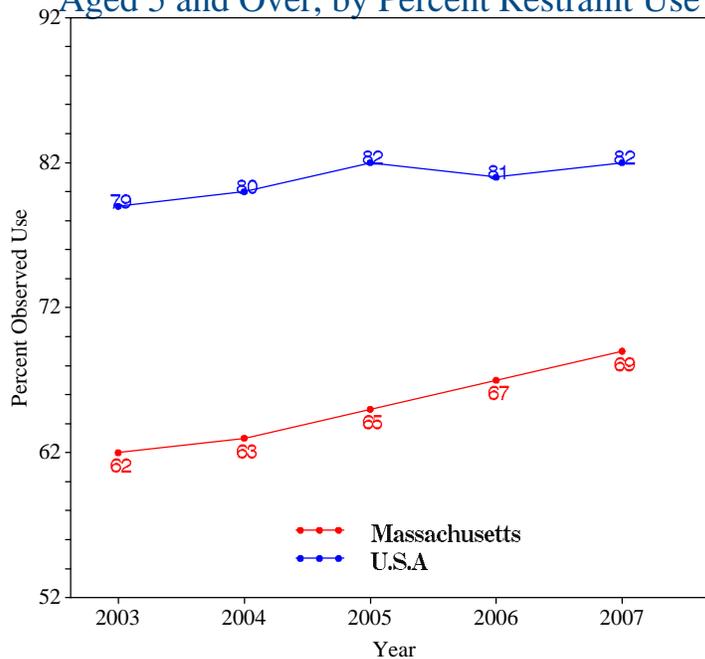
Daytime Front Seat (Outboard Only) Passenger Vehicle Occupant Fatalities, Aged 5 and Over, by Percent Restraint Use*



*Percent Based Only Where Restraint Use Was Known

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Daytime Front Seat (Outboard Only) Passenger Vehicle Occupants Observed, Aged 5 and Over, by Percent Restraint Use*



*USA Data: National Occupant Protection Use Survey. Massachusetts Data: State Survey

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Passenger Vehicle Occupant Fatalities Aged 5 and Above by Restraint Use and Lives Saved Estimates

Year	Fatalities Aged 5 and Above					Lives Saved Estimates**	
	Total	Restrained	Unrestrained	Unknown Restraint Use	Percent Known Restrained*	Lives Saved at Current Belt Use	Potential Additional Lives Savable at 100% Usage
2003	322	91	176	55	34	122	92
2004	306	87	164	55	35	117	88
2005	296	82	171	43	32	106	82
2006	299	79	158	62	33	115	82
2007	276	76	141	59	35	105	80

*Percent Based Only Where Restraint Use Was Known

**Lives Saved Estimates

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Passenger Vehicle Occupant Fatalities Aged Under 5 by Restraint Use and Lives Saved Estimates

Year	Fatalities Aged Under 5					Lives Saved Estimates**	
	Total	Restrained	Unrestrained	Unknown Restraint Use	Percent Known Restrained*	Lives Saved at Current Belt and Child Seat Usage	Potential Additional Lives Savable at 100% Usage
2003	2	1	1	0	50	0	1
2004	2	1	1	0	50	1	1
2005	2	2	0	0	100	2	0
2006	0	0	0	0		0	0
2007	0	0	0	0		0	

*Percent Based Only Where Restraint Use Was Known

**Lives Saved Estimates

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Motorcyclist Fatalities by Helmet Use and Lives Saved Estimates

Year	Fatalities					Lives Saved Estimates**	
	Total	Helmeted	Unhelmeted	Unknown Helmet Use	Percent Known Helmet*	Lives Saved at Current Helmet Use	Potential Additional Lives Savable at 100% Usage
2003	35	30	4	1	88	19	2
2004	60	49	9	2	84	30	3
2005	56	50	4	2	93	31	1
2006	50	43	5	2	90	26	2
2007	61	55	3	3	95	34	1

*Percent Based Only Where Helmet Use Was Known

**Lives Saved Estimates

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Fatalities by Person Type

Person Type		2003		2004		2005		2006		2007	
		#	%*	#	%*	#	%*	#	%*	#	%*
Occupants	Passenger Car	237	51	215	45	197	45	219	51	188	45
	Light Truck - Pickup	27	6	21	4	22	5	25	6	25	6
	Light Truck - Utility	42	9	50	11	61	14	41	10	51	12
	Light Truck - Van	17	4	23	5	17	4	15	3	13	3
	Light Truck - Other	1	0	0	0	1	0	0	0	0	0
	Large Truck	3	1	9	2	1	0	6	1	4	1
	Other/Unknown Occupants	2	0	4	1	1	0	5	1	3	1
	<i>Total Occupants</i>	329	71	322	68	300	68	311	72	284	68
Motorcyclists	<i>Total Motorcyclists</i>	35	8	60	13	56	13	50	12	61	15
Nonoccupants	Pedestrian	86	19	81	17	76	17	61	14	61	15
	Bicyclist and Other Cyclist	11	2	11	2	5	1	6	1	10	2
	Other/Unknown Nonoccupants	1	0	2	0	4	1	1	0	1	0
	<i>Total Nonoccupants</i>	98	21	94	20	85	19	68	16	72	17
Total	<i>Total</i>	462	100	476	100	441	100	429	100	417	100

*Sum of Percents May Not = 100 Due to Individual Cell Rounding

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Fatalities by Crash Type

Crash Type	2003	2004	2005	2006	2007
Total Fatalities (All Crashes)*	462	476	441	429	417
- (1) Single Vehicle	302	313	279	273	278
- (2) Involving a Large Truck	35	43	24	34	28
- (3) Involving Speeding	156	158	145	148	140
- (4) Involving a Rollover	88	92	95	89	91
- (5) Involving a Roadway Departure	271	301	274	279	263
- (6) Involving an Intersection (or Intersection Related)	110	94	92	91	76

(1) Crash Involved Only One Coded Vehicle

(2) Crash Involved at Least One Large Truck

(3) Crash Involved at Least One Vehicle Speeding

(4) Crash Involved at Least One Vehicle That Rolled Over

(5) Crash Involved at Least One Vehicle That Departed the Roadway (FHWA Definition)

(6) Crash Occured Within an Intersection or Within the Approach to an Intersection

*A Fatality Can Be in More Than One Category. Therefore Sum of the Individual Cells Will Not Equal the Total Due to Double Counting

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Motorcyclist Fatalities by Age

Year	Age						Total
	<20	20-29	30-39	40-49	50-59	>59	
2003	1	10	11	8	4	1	35
2004	1	14	19	19	5	2	60
2005	5	13	14	10	12	2	56
2006	1	20	8	10	10	1	50
2007	4	21	14	8	8	6	61

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Motorcyclist Fatalities Per 100,000 Registered Motorcycles

Year	Motorcyclist Fatalities	Total Motorcycle Registrations*	Motorcyclist Fatalities Per 100,000 Motorcycle Registrations
2003	35	130,355	26.85
2004	60	136,887	43.83
2005	56	139,796	40.06
2006	50	143,853	34.76
2007	61		

*Data Source: FHWA

*2007 Motorcycle Registrations are Not Yet Available

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Fatalities by Person Type and Race/Hispanic Origin

Person Type by Race/Hispanic Origin		2003	2004	2005	2006
Occupants (All Vehicle Types)	Hispanic	35	25	29	31
	White Non-Hispanic	293	320	270	278
	Black, Non-Hispanic	22	12	17	23
	American Indian, Non-Hispanic/Unknown	1	0	0	0
	Asian, Non-Hispanic/Unknown	3	5	5	4
	Pacific Islander, Non-Hispanic/Unknown	1	0	0	0
	Multiple Races, Non-Hispanic/Unknown	0	1	0	0
	All Other Non-Hispanic or Race	5	15	14	15
	Unknown Race and Unknown Hispanic	4	4	21	10
	Total	364	382	356	361
Non-Occupants (Pedestrians, Pedalcyclists and Other/Unknown NonOccupants)					
	Hispanic	12	7	6	5
	White Non-Hispanic	70	69	63	48
	Black, Non-Hispanic	6	5	6	9
	American Indian, Non-Hispanic/Unknown	0	0	0	1
	Asian, Non-Hispanic/Unknown	6	8	3	1
	Pacific Islander, Non-Hispanic/Unknown	0	0	0	0
	Multiple Races, Non-Hispanic/Unknown	0	0	0	0
	All Other Non-Hispanic or Race	3	5	4	1
	Unknown Race and Unknown Hispanic	1	0	3	3
Total	98	94	85	68	
Total	462	476	441	429	

2007 Race/Hispanic Origin Data is Not Yet Complete

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5 Year Trend For The Top 10 Counties of 2007 - Fatalities

Counties by 2007 Ranking		Fatalities					Percent of Total				
		2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
1	Worcester County	74	73	58	67	66	16	15	13	16	16
2	Middlesex County	74	55	69	63	56	16	12	16	15	13
3	Bristol County	56	54	60	51	52	12	11	14	12	12
4	Plymouth County	48	59	46	45	41	10	12	10	10	10
5	Suffolk County	32	31	26	31	38	7	7	6	7	9
6	Essex County	41	52	46	35	37	9	11	10	8	9
7	Norfolk County	39	46	31	48	36	8	10	7	11	9
8	Hampden County	46	39	43	28	35	10	8	10	7	8
9	Barnstable County	25	21	24	21	30	5	4	5	5	7
10	Hampshire County	10	6	12	9	10	2	1	3	2	2
Sub Total 1.*	Top Ten Counties	447	454	418	408	401	97	95	95	95	96
Sub Total 2.**	All Other Counties	15	22	22	21	16	3	5	5	5	4
Total	All Counties	462	476	440	429	417	100	100	100	100	100

*This Sub Total is the Total for the Top Ten Counties

**This Sub Total is the Total for all Counties Outside the Top Ten

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5 Year Trend For The Top 10 Counties of 2007 - Fatalities Year to Year Percent Change

Counties by 2007 Ranking		Fatalities					Percent Change From Previous Year				
		2003	2004	2005	2006	2007	2004	2005	2006	2007	
1	Worcester County	74	73	58	67	66	-1	-21	16	-1	
2	Middlesex County	74	55	69	63	56	-26	25	-9	-11	
3	Bristol County	56	54	60	51	52	-4	11	-15	2	
4	Plymouth County	48	59	46	45	41	23	-22	-2	-9	
5	Suffolk County	32	31	26	31	38	-3	-16	19	23	
6	Essex County	41	52	46	35	37	27	-12	-24	6	
7	Norfolk County	39	46	31	48	36	18	-33	55	-25	
8	Hampden County	46	39	43	28	35	-15	10	-35	25	
9	Barnstable County	25	21	24	21	30	-16	14	-13	43	
10	Hampshire County	10	6	12	9	10	-40	100	-25	11	
	Sub Total 1.*	Top Ten Counties	447	454	418	408	401	2	-8	-2	-2
	Sub Total 2.**	All Other Counties	15	22	22	21	16	47	0	-5	-24
	Total	All Counties	462	476	440	429	417	3	-8	-3	-3

*This Sub Total is the Total for the Top Ten Counties

**This Sub Total is the Total for all Counties Outside the Top Ten

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5 Year Trend For The Top 10 Counties of 2007 - Fatality Rates

Median Rate for all U.S. Counties: 21.77

Counties by 2007 Ranking		Fatalities Per 100,000 Population				
		2003	2004	2005	2006	2007
1	Barnstable County	10.96	9.25	10.66	9.40	13.50
2	Bristol County	10.28	9.91	11.04	9.40	9.58
3	Nantucket County	0.00	0.00	0.00	9.64	9.50
4	Worcester County	9.58	9.42	7.46	8.59	8.45
5	Franklin County	6.96	18.08	11.12	12.55	8.38
6	Plymouth County	9.90	12.13	9.43	9.21	8.36
7	Hampden County	10.01	8.49	9.36	6.11	7.64
8	Berkshire County	9.06	18.20	11.45	14.59	6.93
9	Hampshire County	6.53	3.92	7.85	5.88	6.53
10	Norfolk County	5.97	7.05	4.76	7.36	5.50
	Sub Rate 1.* Top Ten Counties	8.41	9.37	8.73	8.63	8.14
	Sub Rate 2.** All Other Counties	4.81	3.94	4.45	4.51	4.46
	Total Rate All Counties	7.18	7.40	6.84	6.67	6.47

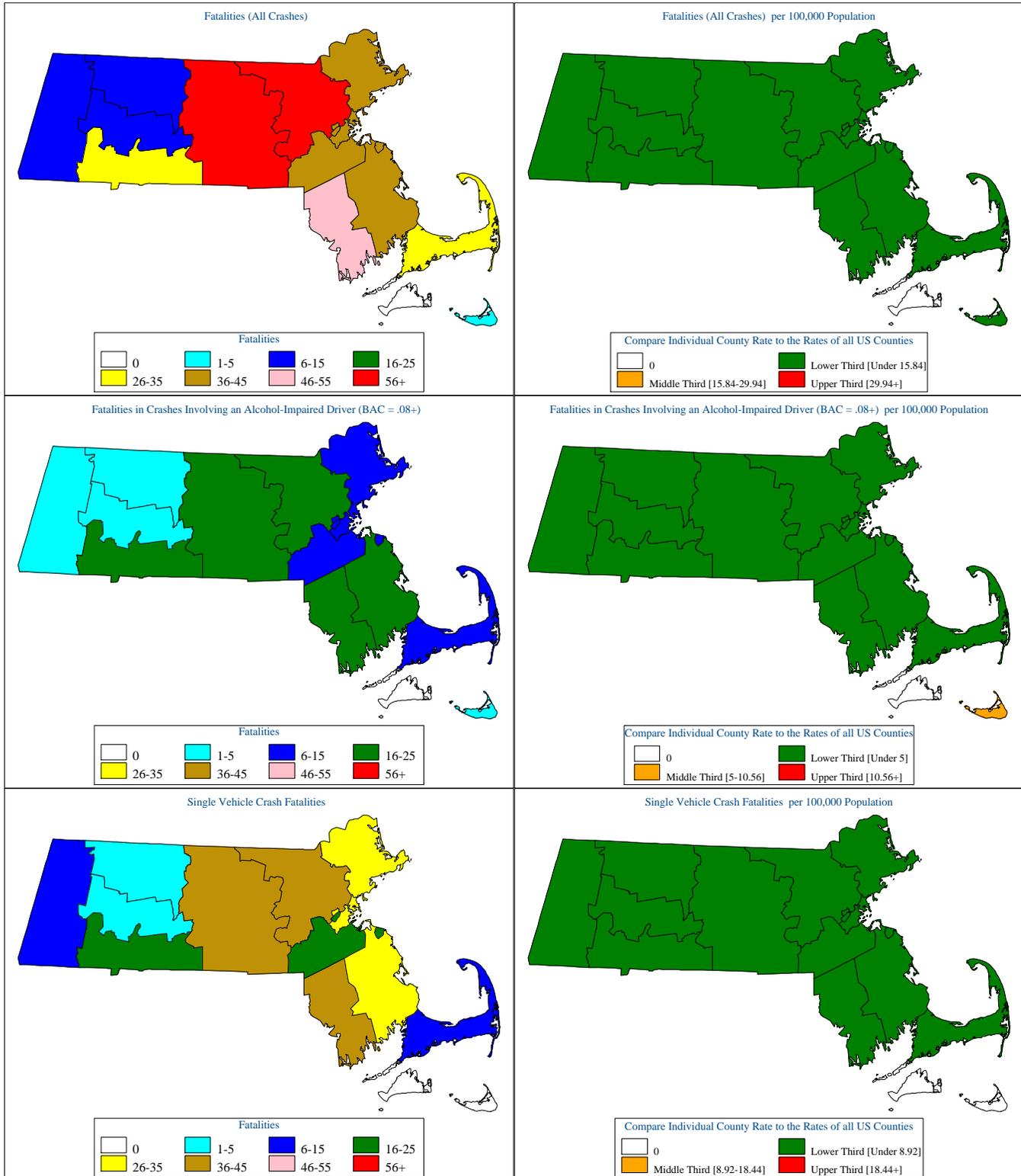
*This Sub Rate is the Rate for the Top Ten Counties

**This Sub Rate is the Rate for all Counties Outside the Top Ten

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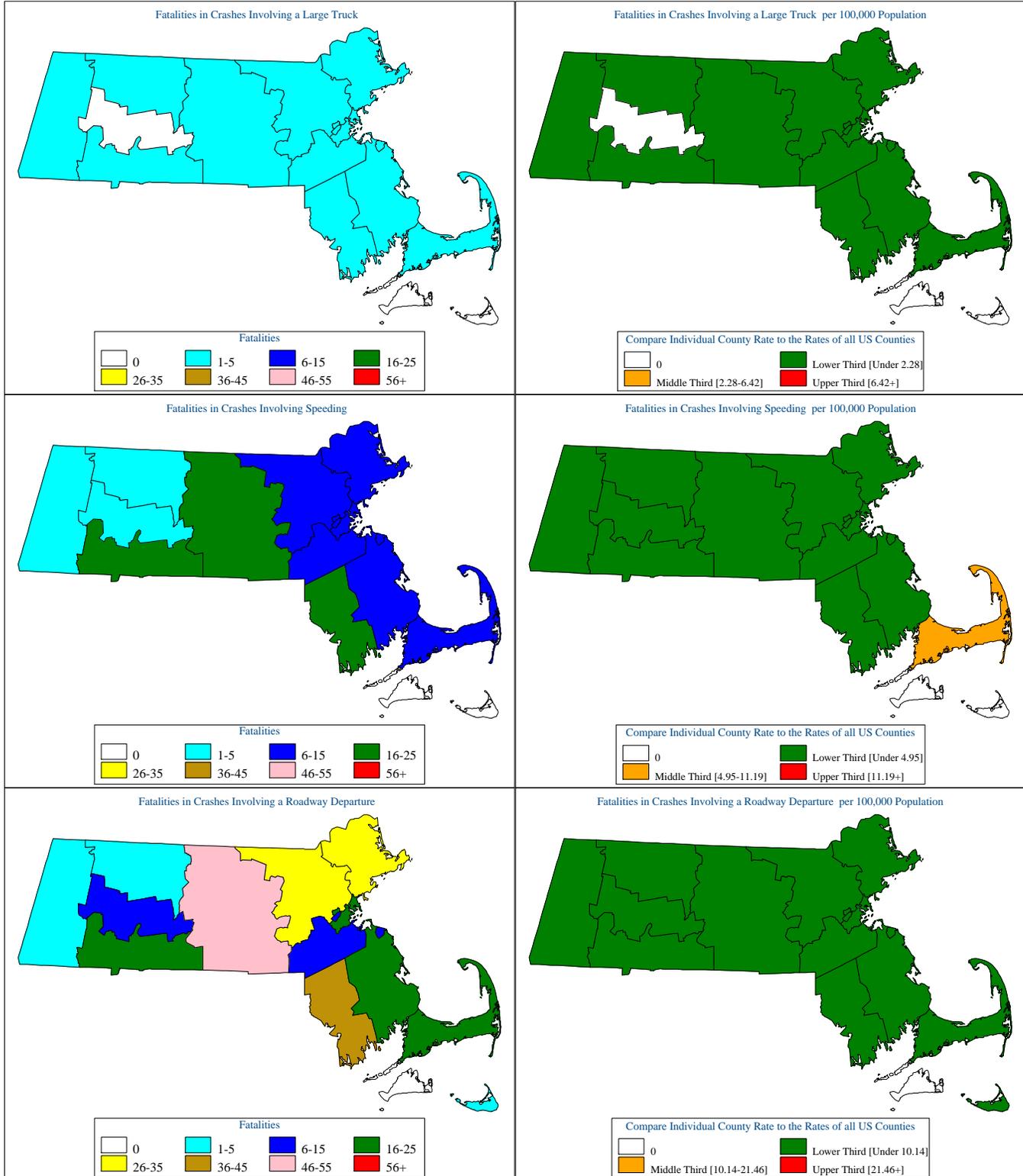
Massachusetts Motor Vehicle Crash Fatality Maps for 2007



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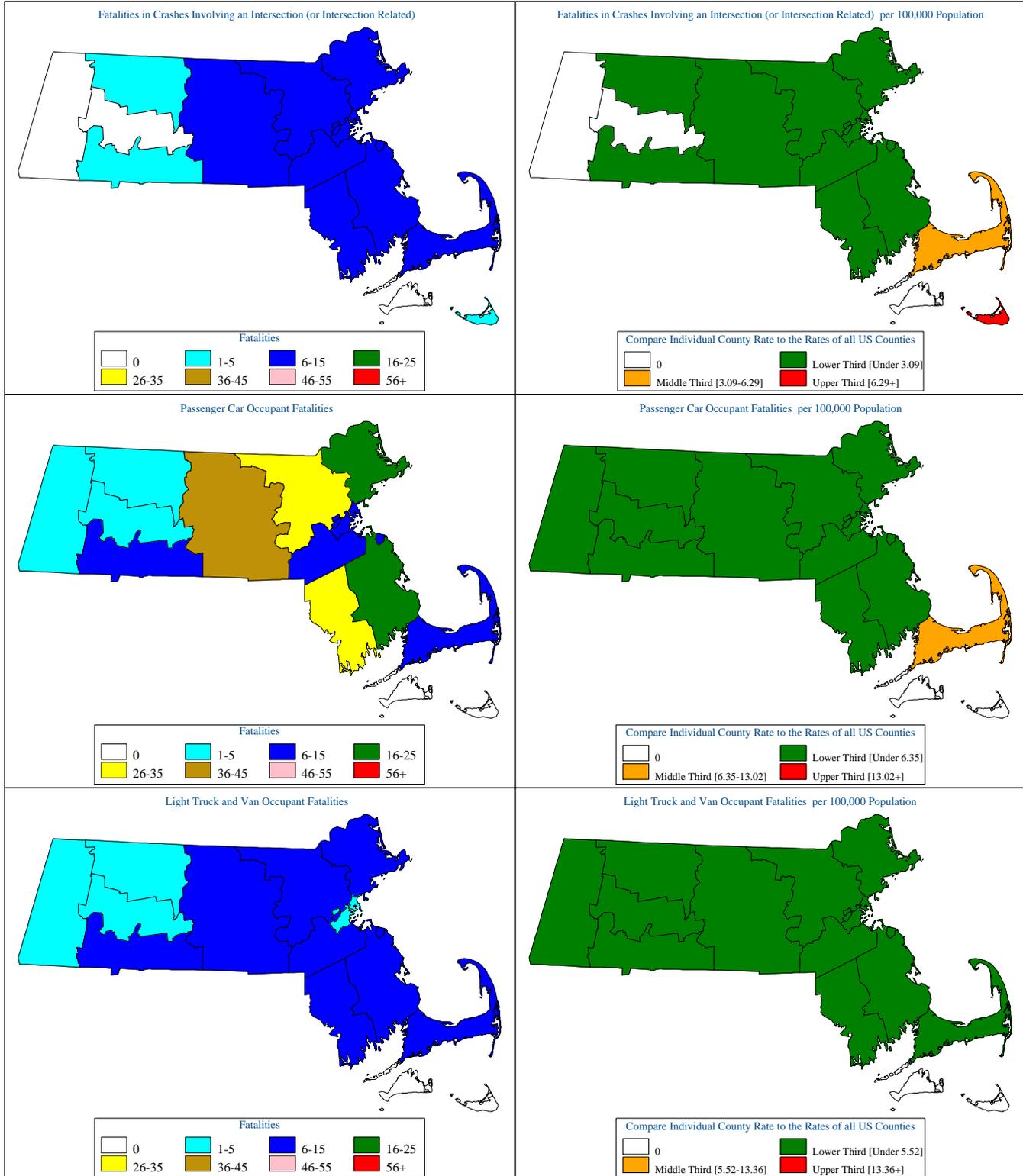
Massachusetts Motor Vehicle Crash Fatality Maps for 2007



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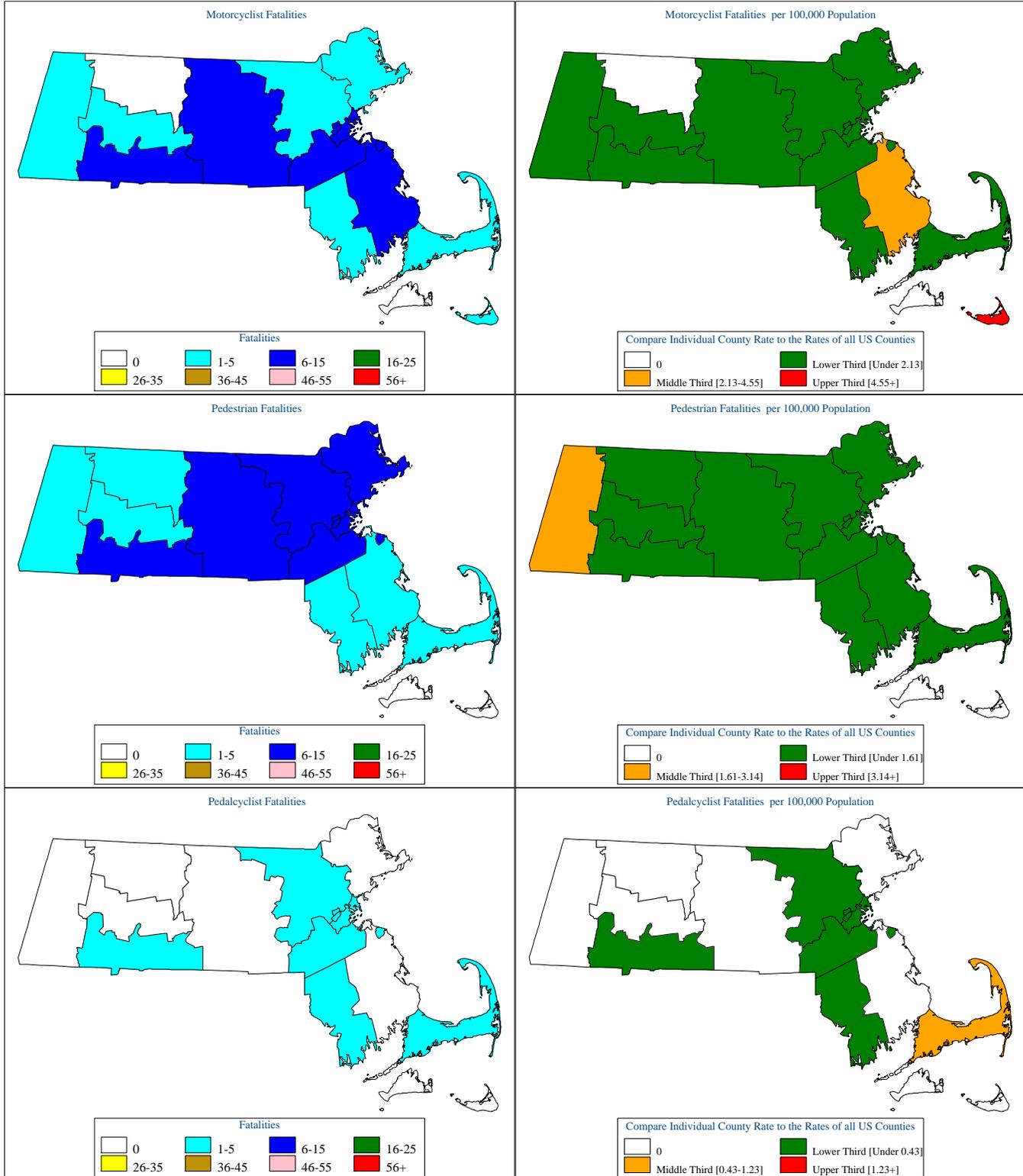
Massachusetts Motor Vehicle Crash Fatality Maps for 2007



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Massachusetts Motor Vehicle Crash Fatality Maps for 2007



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