

North Carolina Department of Transportation
Transportation Mobility and Safety Division
Traffic Safety Unit
2013 ~ 2015 Three Year Crash Rates

ITEMS		TOTAL CRASH RATE (1)	FATAL CRASH RATE (1)	NON-FATAL INJURY CRASH RATE (1)	WET CRASH RATE (1)	NIGHT CRASH RATE (1)	RUN-OFF-ROAD CRASH RATE (1, 3)	SEVERITY INDEX (2)
INTERSTATES	RURAL	60.80	0.45	13.18	14.57	20.79	25.91	3.76
	URBAN	109.14	0.37	26.02	26.11	27.39	24.08	3.35
	STATE-WIDE	97.32	0.39	22.88	23.29	25.78	24.53	3.42
US ROUTES	RURAL	109.01	1.10	30.92	21.86	39.74	37.33	4.84
	URBAN	233.17	0.96	69.70	44.92	50.74	28.17	4.02
	STATE-WIDE	183.63	1.02	54.23	35.72	46.35	31.82	4.22
NC ROUTES	RURAL	164.87	1.80	50.07	28.25	64.01	59.38	4.92
	URBAN	276.07	1.06	85.70	49.55	61.59	32.76	4.09
	STATE-WIDE	221.24	1.42	68.13	39.05	62.78	45.88	4.41
PRIMARY	RURAL	117.79	1.20	33.65	22.45	44.02	42.56	4.75
	URBAN	190.26	0.74	54.78	38.01	43.26	27.44	3.89
	STATE-WIDE	163.45	0.91	46.96	32.25	43.54	33.03	4.14
SECONDARY ROAD	RURAL	249.43	2.68	71.26	44.75	109.67	122.55	4.76
	URBAN	301.98	1.07	92.32	56.28	72.46	54.57	4.06
	STATE-WIDE	284.24	1.62	85.21	52.39	85.02	77.52	4.28
STATEWIDE ALL SYSTEM ROUTES	RURAL	148.76	1.55	42.50	27.70	59.46	61.38	4.76
	URBAN	219.50	0.82	64.60	42.79	50.90	34.54	3.96
	STATE-WIDE	193.90	1.09	56.61	37.33	54.00	44.25	4.19

(1) CRASH RATES ARE IN CRASHES PER 100 MILLION VEHICLE MILES OF TRAVEL

(2) SEVERITY INDEX = (76.8*(F+A) + 8.4*(B+C) + PDO) / TOTAL CRASHES

(3) RUN-OFF ROAD CRASHES INCLUDE: RUN-OFF ROAD (RIGHT, LEFT OR STRAIGHT), FIXED OBJECT, OVERTURN/ROLLOVER, SIDESWIPE OPPOSITE DIRECTION, PARKED VEHICLE, AND HEAD ON CRASH TYPES.

**2013-2015 Three Year Crash Rates
By Road System, Type and Control
Crash Rate per 100 Million Vehicle Miles Traveled**

RURAL INTERSTATE ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED							
2 LANES CONT. LEFT TURN LANE							
3 LANES UNDIVIDED							
4 OR MORE LANES UNDIVIDED							
4+ LANES CONT. LEFT TURN LANE							
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS							
PARTIAL CONTROL ACCESS							
FULL CONTROL ACCESS							
TOTAL	543	60.80	0.45	13.18	14.57	20.79	25.91

URBAN INTERSTATE ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED							
2 LANES CONT. LEFT TURN LANE							
3 LANES UNDIVIDED							
4 OR MORE LANES UNDIVIDED							
4+ LANES CONT. LEFT TURN LANE							
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS							
PARTIAL CONTROL ACCESS							
FULL CONTROL ACCESS							
TOTAL	706	109.14	0.37	26.02	26.11	27.39	24.08

ALL INTERSTATE ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED							
2 LANES CONT. LEFT TURN LANE							
3 LANES UNDIVIDED							
4 OR MORE LANES UNDIVIDED							
4+ LANES CONT. LEFT TURN LANE							
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS							
PARTIAL CONTROL ACCESS							
FULL CONTROL ACCESS							
TOTAL	1,249	97.32	0.39	22.88	23.29	25.78	24.53

NOTE: INCLUDES ONLY ROUTE SEGMENTS WITH COMPUTERIZED TRAFFIC VOLUMES

**2013-2015 Three Year Crash Rates
By Road System, Type and Control
Crash Rate per 100 Million Vehicle Miles Traveled**

RURAL UNITED STATES ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	2,393	146.62	1.67	44.86	26.22	53.33	49.93
2 LANES CONT. LEFT TURN LANE *	22	104.70	1.38	30.44	24.45	23.52	38.28
3 LANES UNDIVIDED *	12	258.75	0.00	85.79	52.58	51.20	63.65
4 OR MORE LANES UNDIVIDED *	62	166.63	0.77	42.35	31.61	34.52	29.61
4+ LANES CONT. LEFT TURN LANE	111	114.87	1.20	34.11	20.63	33.80	20.82
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	368	87.01	0.76	24.42	15.33	32.38	24.51
PARTIAL CONTROL ACCESS	238	68.59	0.62	18.77	15.17	27.48	24.54
FULL CONTROL ACCESS	378	68.33	0.56	13.66	21.53	29.12	35.78
TOTAL	3,584	109.01	1.10	30.92	21.86	39.74	37.33

URBAN UNITED STATES ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	614	241.66	1.18	76.28	44.71	51.61	40.89
2 LANES CONT. LEFT TURN LANE *	50	253.66	1.02	80.22	47.49	57.42	35.95
3 LANES UNDIVIDED *	29	536.31	1.55	144.51	98.72	114.37	43.66
4 OR MORE LANES UNDIVIDED	137	467.79	1.47	141.16	86.66	83.22	37.14
4+ LANES CONT. LEFT TURN LANE	268	291.51	1.30	92.91	52.06	54.76	20.38
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	370	305.77	0.99	89.52	55.88	67.54	24.64
PARTIAL CONTROL ACCESS	223	185.84	0.86	56.73	38.55	46.08	24.72
FULL CONTROL ACCESS	313	83.08	0.52	20.64	21.69	23.74	26.53
TOTAL	2,004	233.17	0.96	69.70	44.92	50.74	28.17

ALL UNITED STATES ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	3,007	180.47	1.50	56.05	32.81	52.72	46.71
2 LANES CONT. LEFT TURN LANE *	72	217.82	1.11	68.24	41.94	49.27	36.51
3 LANES UNDIVIDED *	41	502.31	1.36	137.32	93.07	106.63	46.11
4 OR MORE LANES UNDIVIDED	199	409.76	1.33	122.12	76.05	73.83	35.69
4+ LANES CONT. LEFT TURN LANE	379	253.90	1.28	80.39	45.36	50.30	20.47
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	738	231.78	0.91	67.50	42.17	55.65	24.60
PARTIAL CONTROL ACCESS	461	144.31	0.78	43.28	30.27	39.49	24.66
FULL CONTROL ACCESS	691	77.83	0.54	18.16	21.63	25.66	29.83
TOTAL	5,588	183.63	1.02	54.23	35.72	46.35	31.82

NOTE: INCLUDES ONLY ROUTE SEGMENTS WITH COMPUTERIZED TRAFFIC VOLUMES
* RATES WERE CALCULATED USING LESS THAN 100 SYSTEM MILES - USE WITH CAUTION

**2013-2015 Three Year Crash Rates
By Road System, Type and Control
Crash Rate per 100 Million Vehicle Miles Traveled**

RURAL NORTH CAROLINA ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	6,091	174.39	1.94	53.32	29.92	68.53	64.98
2 LANES CONT. LEFT TURN LANE *	9	213.69	0.00	62.08	29.84	47.75	31.04
3 LANES UNDIVIDED *	13	151.31	0.00	42.15	33.50	37.83	42.15
4 OR MORE LANES UNDIVIDED *	24	140.79	0.00	43.28	23.78	31.39	23.31
4+ LANES CONT. LEFT TURN LANE *	72	100.77	1.61	25.87	17.31	32.41	18.32
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	126	94.92	0.49	27.11	15.54	35.54	21.05
PARTIAL CONTROL ACCESS*	17	65.77	1.00	16.57	10.04	30.12	23.09
FULL CONTROL ACCESS*	14	39.03	0.00	14.97	9.09	10.69	12.83
TOTAL	6,366	164.87	1.80	50.07	28.25	64.01	59.38

URBAN NORTH CAROLINA ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	1,087	241.37	1.31	75.62	41.52	57.56	41.66
2 LANES CONT. LEFT TURN LANE *	42	216.44	0.67	68.91	36.46	42.99	25.93
3 LANES UNDIVIDED *	17	684.84	2.85	205.99	123.09	138.39	44.47
4 OR MORE LANES UNDIVIDED	134	507.30	1.13	160.68	92.78	103.27	39.14
4+ LANES CONT. LEFT TURN LANE	158	282.47	1.02	82.51	50.40	55.70	24.05
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	209	277.76	0.71	87.46	51.11	62.01	23.20
PARTIAL CONTROL ACCESS*	53	241.93	1.08	78.36	47.26	64.24	23.76
FULL CONTROL ACCESS*	43	98.59	0.23	23.49	21.47	20.70	20.23
TOTAL	1,743	276.07	1.06	85.70	49.55	61.59	32.76

ALL NORTH CAROLINA ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	7,178	196.64	1.73	60.73	33.77	64.89	57.24
2 LANES CONT. LEFT TURN LANE *	51	216.10	0.59	68.07	35.65	43.57	26.55
3 LANES UNDIVIDED *	30	552.71	2.14	165.41	100.91	113.49	43.90
4 OR MORE LANES UNDIVIDED	158	477.68	1.04	151.19	87.20	97.47	37.86
4+ LANES CONT. LEFT TURN LANE	230	240.81	1.15	69.52	42.82	50.36	22.74
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	335	239.89	0.66	74.96	43.74	56.53	22.75
PARTIAL CONTROL ACCESS*	70	222.19	1.07	71.44	43.09	60.41	23.68
FULL CONTROL ACCESS*	57	91.05	0.20	22.41	19.90	19.43	19.29
TOTAL	8,109	221.24	1.42	68.13	39.05	62.78	45.88

NOTE: INCLUDES ONLY ROUTE SEGMENTS WITH COMPUTERIZED TRAFFIC VOLUMES
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**2013-2015 Three Year Crash Rates
By Road System, Type and Control
Crash Rate per 100 Million Vehicle Miles Traveled**

RURAL PRIMARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	8,484	164.70	1.85	50.37	28.63	63.23	59.73
2 LANES CONT. LEFT TURN LANE *	31	135.07	1.00	39.26	25.95	30.28	36.26
3 LANES UNDIVIDED *	25	198.43	0.00	61.29	41.87	43.69	51.58
4 OR MORE LANES UNDIVIDED *	86	160.33	0.58	42.58	29.70	33.76	28.07
4+ LANES CONT. LEFT TURN LANE	183	109.42	1.36	30.93	19.35	33.26	19.86
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	494	88.71	0.70	24.99	15.37	33.06	23.77
PARTIAL CONTROL ACCESS	255	68.43	0.65	18.65	14.88	27.63	24.46
FULL CONTROL ACCESS	935	62.66	0.47	13.33	16.41	22.96	28.47
TOTAL	10,493	117.79	1.20	33.65	22.45	44.02	42.56

URBAN PRIMARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	1,701	241.48	1.26	75.87	42.71	55.34	41.37
2 LANES CONT. LEFT TURN LANE *	92	236.30	0.86	74.95	42.35	50.69	31.27
3 LANES UNDIVIDED *	46	588.59	2.00	166.15	107.30	122.83	43.95
4 OR MORE LANES UNDIVIDED	271	486.24	1.31	150.27	89.52	92.58	38.07
4+ LANES CONT. LEFT TURN LANE	426	288.22	1.20	89.13	51.45	55.10	21.71
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	579	296.00	0.89	88.80	54.22	65.61	24.14
PARTIAL CONTROL ACCESS	276	197.32	0.91	61.16	40.34	49.80	24.52
FULL CONTROL ACCESS	1,062	104.34	0.40	25.02	25.24	26.61	24.43
TOTAL	4,453	190.26	0.74	54.78	38.01	43.26	27.44

ALL PRIMARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	10,185	190.87	1.65	59.06	33.43	60.54	53.48
2 LANES CONT. LEFT TURN LANE	123	217.08	0.88	68.17	39.23	46.82	32.22
3 LANES UNDIVIDED *	71	521.85	1.66	148.21	96.11	109.29	45.25
4 OR MORE LANES UNDIVIDED	357	439.29	1.20	134.76	80.90	84.11	36.63
4+ LANES CONT. LEFT TURN LANE	609	249.07	1.23	76.38	44.42	50.32	21.31
4 OR MORE LANES DIVIDED WITH NO CONTROL ACCESS	1,073	234.29	0.83	69.81	42.65	55.92	24.03
PARTIAL CONTROL ACCESS	531	156.59	0.83	47.73	32.29	42.79	24.50
FULL CONTROL ACCESS	1,997	93.30	0.42	21.92	22.90	25.64	25.50
TOTAL	14,946	163.45	0.91	46.96	32.25	43.54	33.03

NOTE: INCLUDES ONLY ROUTE SEGMENTS WITH COMPUTERIZED TRAFFIC VOLUMES
* RATES WERE CALCULATED USING LESS THAN 100 SYSTEM MILES - USE WITH CAUTION

**2013-2015 Three Year Crash Rates
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RURAL SECONDARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	21,843	250.64	2.70	71.66	45.00	110.36	123.44
2 LANES CONT. LEFT TURN LANE *	5	91.32	0.00	28.41	12.18	36.53	10.15
3 LANES UNDIVIDED *	2	210.75	0.00	52.69	35.12	35.12	70.25
4 OR MORE LANES UNDIVIDED *	4	219.85	0.00	50.74	25.37	46.51	38.05
4+ LANES CONT. LEFT TURN LANE *	4	69.76	12.68	0.00	0.00	19.03	25.37
4 OR MORE LANES DIVIDED WITH							
NO CONTROL ACCESS*	8	249.55	0.00	55.75	45.13	71.68	50.44
PARTIAL CONTROL ACCESS*	0	0.00	0.00	0.00	0.00	0.00	0.00
FULL CONTROL ACCESS*	5	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	21,871	249.43	2.68	71.26	44.75	109.67	122.55

URBAN SECONDARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	5,903	247.39	1.18	76.16	46.04	65.51	65.37
2 LANES CONT. LEFT TURN LANE *	64	324.59	1.66	99.33	60.40	74.81	37.41
3 LANES UNDIVIDED *	51	748.29	1.06	205.78	124.13	150.54	58.88
4 OR MORE LANES UNDIVIDED	284	489.99	0.78	148.99	89.19	97.36	39.49
4+ LANES CONT. LEFT TURN LANE	171	430.62	1.03	131.54	82.11	87.62	30.56
4 OR MORE LANES DIVIDED WITH							
NO CONTROL ACCESS	182	326.28	0.73	100.82	63.15	76.67	29.89
PARTIAL CONTROL ACCESS*	36	215.85	0.98	73.15	40.35	54.89	26.35
FULL CONTROL ACCESS*	26	129.60	0.22	33.80	33.14	37.77	25.10
TOTAL	6,717	301.98	1.07	92.32	56.28	72.46	54.57

ALL SECONDARY ROUTES

ROAD TYPE	SYSTEM MILES	TOTAL	FATAL	NON-FATAL INJURY	WET	NIGHT	RUN OFF ROAD
2 LANES UNDIVIDED	27,746	248.81	1.85	74.19	45.59	85.08	90.72
2 LANES CONT. LEFT TURN LANE *	69	309.69	1.56	94.80	57.32	72.36	35.66
3 LANES UNDIVIDED *	53	743.68	1.05	204.46	123.37	149.55	58.98
4 OR MORE LANES UNDIVIDED	288	488.68	0.78	148.51	88.88	97.11	39.49
4+ LANES CONT. LEFT TURN LANE	175	429.00	1.08	130.95	81.74	87.31	30.54
4 OR MORE LANES DIVIDED WITH							
NO CONTROL ACCESS	190	325.41	0.73	100.30	62.95	76.62	30.13
PARTIAL CONTROL ACCESS*	36	215.85	0.98	73.15	40.35	54.89	26.35
FULL CONTROL ACCESS*	31	121.74	0.21	31.76	31.13	35.48	23.58
TOTAL	28,588	284.24	1.62	85.21	52.39	85.02	77.52

NOTE: INCLUDES ONLY ROUTE SEGMENTS WITH COMPUTERIZED TRAFFIC VOLUMES
* RATES WERE CALCULATED USING LESS THAN 100 SYSTEM MILES - USE WITH CAUTION

Notes

We have made several changes in the *NC Crash Rates*, starting with the 2010-2012 edition. These changes are described below:

- Format Improvements: We have changed the format to make the data easier to read. To help improve readability we removed some of the background data from the tables that follow. Contact us if you need any of the background data that we utilized to calculate the crash rates.
- Changes in Urban/Rural Designation: Past editions of *NC Crash Rates* utilized information from the crash reports to determine the urban/rural designation, where the urban areas were defined as crashes reported as inside a municipal limit. The new approach is based on Federal Highway Administration (FHWA) guidelines which classify “urban” areas as places inside urbanized area boundaries where the population is greater than 5,000 persons. Crash rate users are encouraged to examine the roadway characteristics, surrounding population and land uses to determine if a roadway section is “urban”.
- No Rates for Non-system Roads: Past editions of *NC Crash Rates* included rates for non-state system routes. These rates have been dropped because NCDOT does not have adequate data for routes outside of the NCDOT roadway system to guarantee the accuracy of these rates.
- No Rates for Truck Crashes: Past editions of *NC Crash Rates* included a separate listing of crash rates for crashes involving trucks. After discussion with crash rate users it was decided to drop truck crash rates from the yearly update.
- Secondary Route Data: Due to roadway inventory policy changes, the rates for secondary routes are based only on secondary roads that are part of the routine traffic count program. Routes included in the routine program include roads classified as arterial or collector and approximately one-third of local roads.
- Mileposted Crash Data: The attached crash data is based on crashes that were successfully located and mileposted by the Traffic Engineering Accident Analysis System.