

1. Clarify, the most current profile of our roads system, by “owner” – Number of miles of interstate, primary, federal-aid secondary, non-federal aid secondary, county, etc.

Attached is a report titled “Federal Aid Eligibility 2014 YearEnd.pdf” which contains all the information requested in item 1.

2. Clarify, using the most currently available measure, road condition data. To whom may I speak about this because I am interested in seeing how road conditions have changed overtime.

The attached “SCDOT Pavement data 2014.pdf” gives an overview of the 2014 pavement data by system in a pie chart format, and bar charts showing how road conditions have changed overtime. The last page also gives a brief explanation of PQI.

3. How does SCDOT actually measure road condition?

We measure road condition using a combination of SCDOT staff and a contractor. Both use vans equipped with instruments which automatically collect the rutting and roughness of the roads. The remaining distresses are visually identified and quantified based on severity and extent. All of these values are then entered into a formula to determine the PQI.

4. Which roads are assessed? How frequently? How are they selected for assessment?

We measure road condition using a combination of SCDOT staff and a contractor. Both use vans equipped with instruments which automatically collect the rutting and roughness of the roads. The remaining distresses are visually identified and quantified based on severity and extent. All of these values are then entered into a formula to determine the PQI.

All roads maintained by SCDOT are assessed, but at different schedules depending on the priority of the route. Below is the current schedule:

- a. Interstates are assessed every year.
- b. Primary routes are assessed every 3 years (1/3 annually). Note that Primary routes on the NHS system are partially assessed every year to meet FHWA requirements, but the full assessment occurs every 3 years.
- c. Secondary routes with an average annual daily traffic (AADT) of 400 or greater are assessed every 3 years (1/3 annually).
- d. Secondary routes with an average annual daily traffic (AADT) of less than 400 assessed every 6 years (1/6 annually).

The Pavement Management system will use predefined deterioration curves to determine the expected PQI rating between assessments. For example, if a road assessed in 2013 is assigned a PQI value of 3.1; the software may assign it a PQI of 2.95 in 2014 and then 2.75 in 2015, etc....

**FEDERAL AID ELIGIBILITY
AS OF DECEMBER 31, 2014**

	Interstate	Primary	Eligible for Fed-Aid	Not Eligible for Fed-Aid	Total Secondary	Total SCDOT System	Other than SCDOT	Percent State Maintained	Total State Public Road Miles
ABBEVILLE	0.000	183.420	134.270	338.080	472.350	655.770	341.210	66%	996.980
AIKEN	45.160	306.650	417.973	739.832	1,157.805	1,509.615	1,367.835	52%	2,877.450
ALLENDALE	0.000	107.270	87.350	289.230	376.580	483.850	146.840	77%	630.690
ANDERSON	36.570	350.620	409.376	464.474	873.850	1,261.040	1,892.740	40%	3,153.780
BAMBERG	0.000	136.120	117.270	298.280	415.550	551.670	215.530	72%	767.200
BARNWELL	0.000	146.710	150.250	295.480	445.730	592.440	229.050	72%	821.490
BEAUFORT	0.000	137.432	132.290	262.320	394.610	532.042	1,252.058	30%	1,784.100
BERKELEY	22.990	237.980	208.544	538.212	746.756	1,007.726	1,291.614	44%	2,299.340
CALHOUN	17.440	125.070	81.910	303.640	385.550	528.060	245.200	68%	773.260
CHARLESTON	31.920	247.200	249.506	620.484	869.990	1,149.110	874.295	57%	2,023.405
CHEROKEE	22.800	154.100	145.666	418.224	563.890	740.790	454.560	62%	1,195.350
CHESTER	18.820	197.060	105.570	489.080	594.650	810.530	253.110	76%	1,063.640
CHESTERFIELD	0.000	229.390	254.530	550.930	805.460	1,034.850	786.138	57%	1,820.988
CLARENDON	34.220	129.010	221.330	390.390	611.720	774.950	505.410	61%	1,280.360
COLLETON	28.300	250.440	189.677	577.023	766.700	1,045.440	519.180	67%	1,564.620
DARLINGTON	14.580	154.240	287.780	553.990	841.770	1,010.590	455.010	69%	1,465.600
DILLON	23.770	122.010	119.440	401.470	520.910	666.690	306.690	68%	973.380
DORCHESTER	32.610	149.500	144.320	354.750	499.070	681.180	640.575	52%	1,321.755
EDGEFIELD	0.000	136.110	171.990	296.160	468.150	604.260	333.300	64%	937.560
FAIRFIELD	21.460	168.110	177.950	342.590	520.540	710.110	297.130	71%	1,007.240
FLORENCE	29.010	241.930	410.596	678.114	1,088.710	1,359.650	791.701	63%	2,151.351
GEORGETOWN	0.000	155.120	165.850	334.090	499.940	655.060	798.100	45%	1,453.160
GREENVILLE	51.230	349.020	581.161	481.166	1,062.327	1,462.577	2,392.696	38%	3,855.273
GREENWOOD	0.000	205.910	208.600	322.970	531.570	737.480	476.926	61%	1,214.406
HAMPTON	6.610	131.240	120.310	323.310	443.620	581.470	285.050	67%	866.520
HORRY	0.000	384.900	414.851	540.059	954.910	1,339.810	2,406.585	36%	3,746.395
JASPER	33.900	176.530	76.060	231.270	307.330	517.760	157.140	77%	674.900
KERSHAW	21.260	173.490	250.280	581.210	831.490	1,026.240	536.580	66%	1,562.820
LANCASTER	0.000	187.310	312.850	395.310	708.160	895.470	576.900	61%	1,472.370
LAURENS	38.200	255.740	250.363	507.927	758.290	1,052.230	648.790	62%	1,701.020
LEE	20.330	118.450	191.580	275.920	467.500	606.280	152.850	80%	759.130
LEXINGTON	51.940	240.350	443.907	774.130	1,218.037	1,510.327	1,580.820	49%	3,091.147
MCCORMICK	0.000	101.280	68.210	281.210	349.420	450.700	334.790	57%	785.490

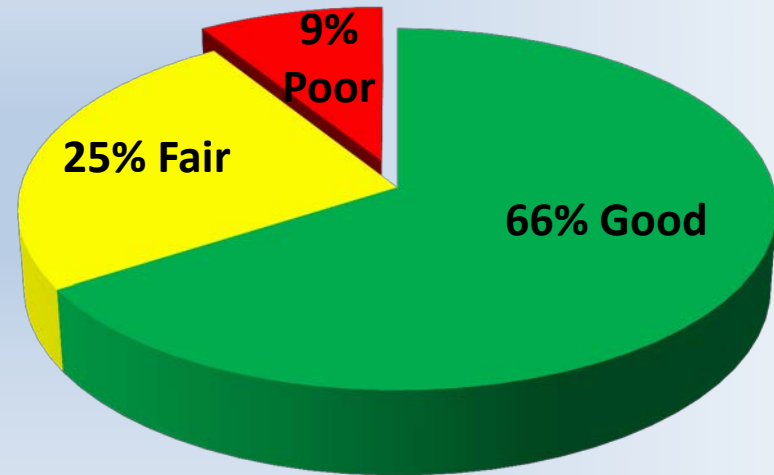
**FEDERAL AID ELIGIBILITY
AS OF DECEMBER 31, 2014**

	Interstate	Primary	Secondary			Total SCDOT System	Other than SCDOT	Percent State Maintained	Total State Public Road Miles
			Eligible for Fed-Aid	Not Eligible for Fed-Aid	Total Secondary				
MARION	0.000	142.840	150.007	280.941	430.948	573.788	450.302	56%	1,024.090
MARLBORO	0.000	162.050	101.452	454.618	556.070	718.120	304.040	70%	1,022.160
NEWBERRY	27.760	178.390	221.231	425.979	647.210	853.360	476.340	64%	1,329.700
OCONEE	4.030	220.060	203.411	398.879	602.290	826.380	1,411.930	37%	2,238.310
ORANGEBURG	43.120	428.270	239.839	881.278	1,121.117	1,592.507	1,263.790	56%	2,856.297
PICKENS	0.000	227.740	228.744	252.229	480.973	708.713	1,278.637	36%	1,987.350
RICHLAND	62.830	283.870	436.111	830.369	1,266.480	1,613.180	1,244.290	56%	2,857.470
SALUDA	0.000	160.450	133.012	350.838	483.850	644.300	400.021	62%	1,044.321
SPARTANBURG	75.530	386.152	407.342	498.484	905.826	1,367.508	2,201.832	38%	3,569.340
SUMTER	12.860	228.320	267.471	534.599	802.070	1,043.250	843.560	55%	1,886.810
UNION	0.000	149.380	152.964	313.676	466.640	616.020	238.730	72%	854.750
WILLIAMSBURG	0.000	207.500	237.549	532.611	770.160	977.660	407.290	71%	1,384.950
YORK	21.340	305.940	331.914	651.097	983.011	1,310.291	843.061	61%	2,153.352
Grand Totals	850.590	9,470.674	10,412.657	20,656.923	31,069.580	41,390.844	34,910.226	54%	76,301.070

Interstate System Pavement Condition

Federal Aid Eligible

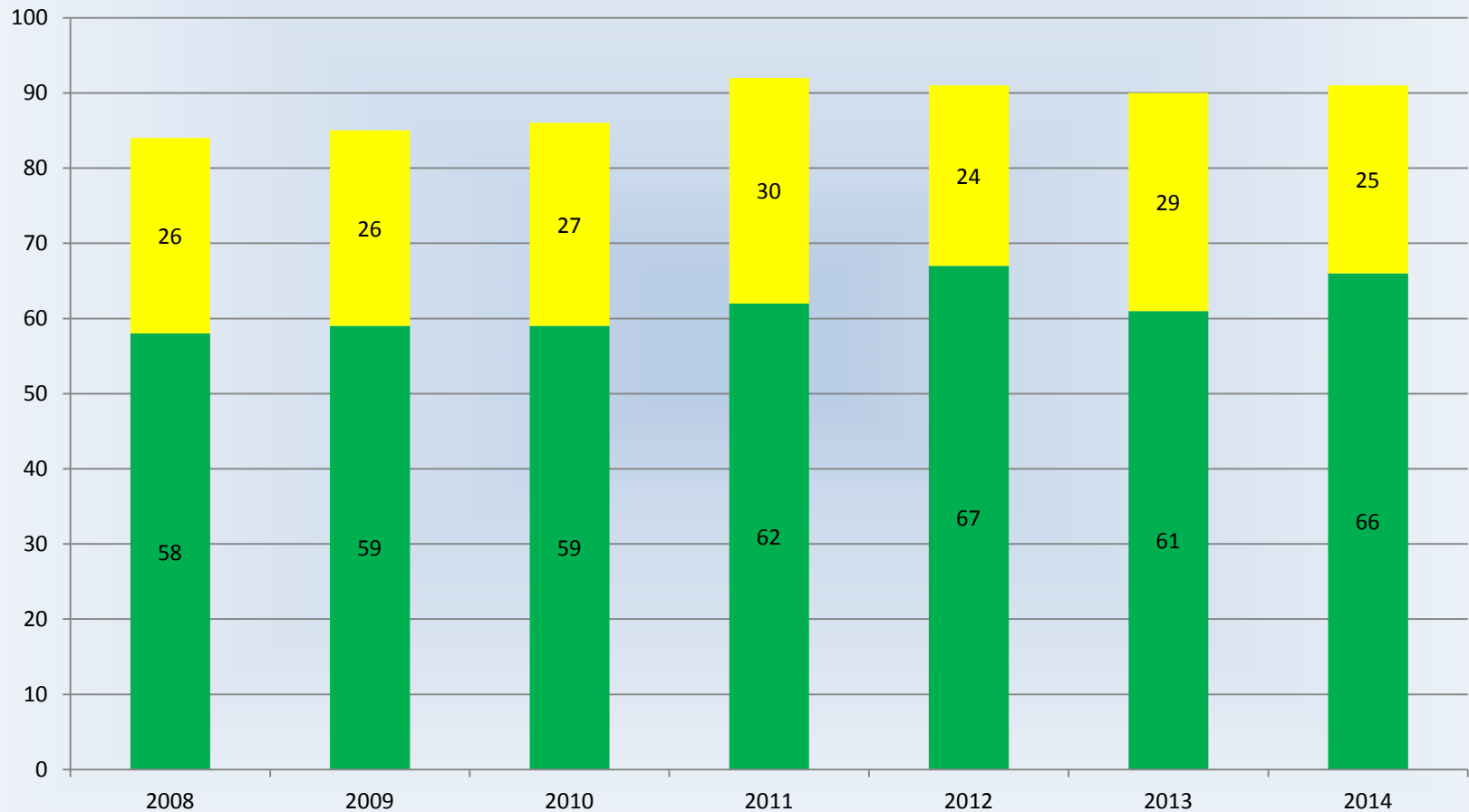
- 851 centerline miles
- 3796 lane miles
- Interstate system is over 50 years old
- Nearly 29% of all roadway travel in SC occurs on the interstates
- Key component of Freight Network
- Heavy Truck volumes
- 14% of interstate are high usage, carrying over 70,000 vehicles per day



December 31, 2014 Data



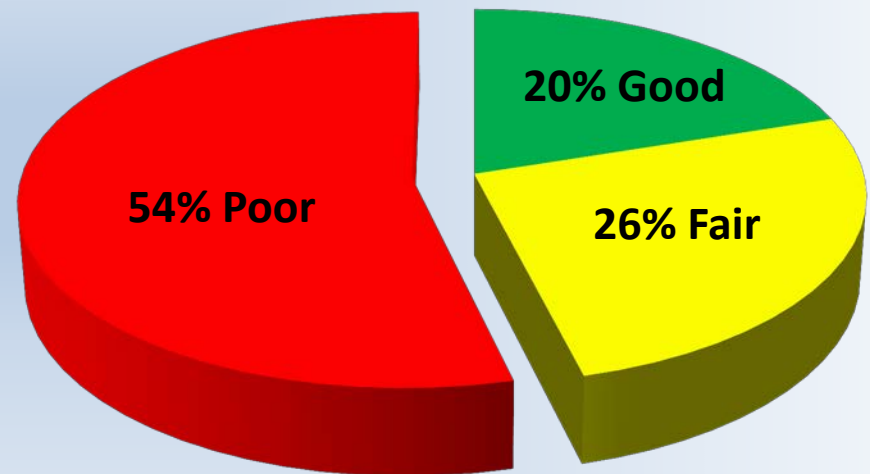
Interstate System: % Pavement in Good & Fair Condition



Primary System Pavement Condition

Federal Aid Eligible

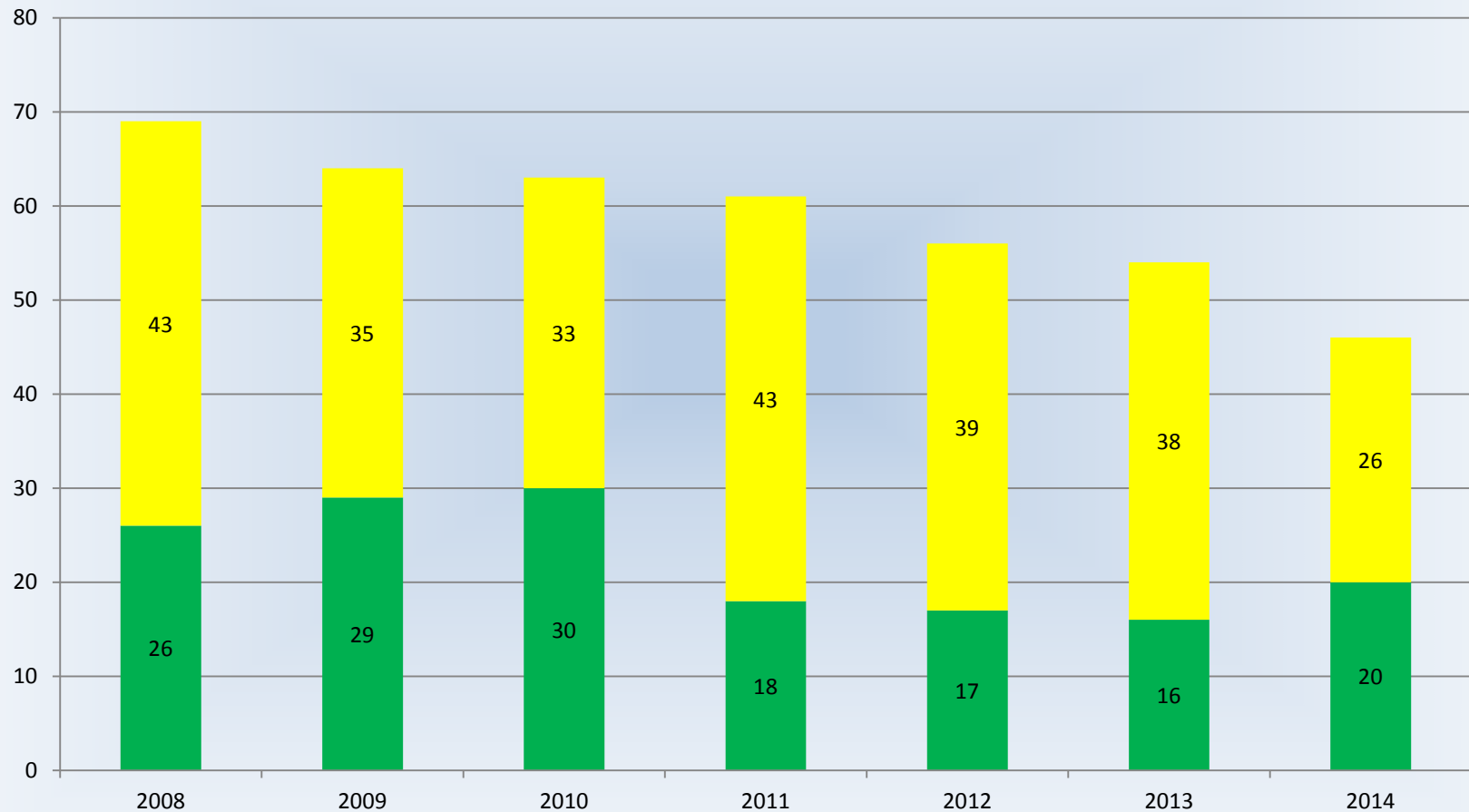
- 9,471 centerline miles
- 23,896 lane miles
- Comprised of US and SC routes
- Includes routes on the National Highway System (NHS)
- 44% of all travel in SC occurs on the primary system



December 31, 2014 Data

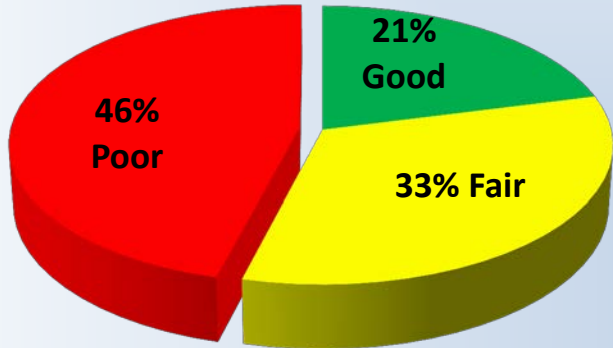


Primary System: % Pavement in Good & Fair Condition



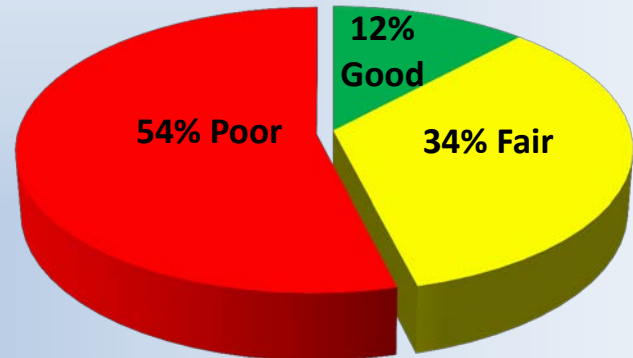
Secondary System Pavement Condition

Federal Aid Eligible Portion



- 10,413 centerline miles
- 21,405 lane miles
- Higher volume secondary
- 16% of travel occurs on the federal aid secondary system

Non Federal Aid Eligible Portion

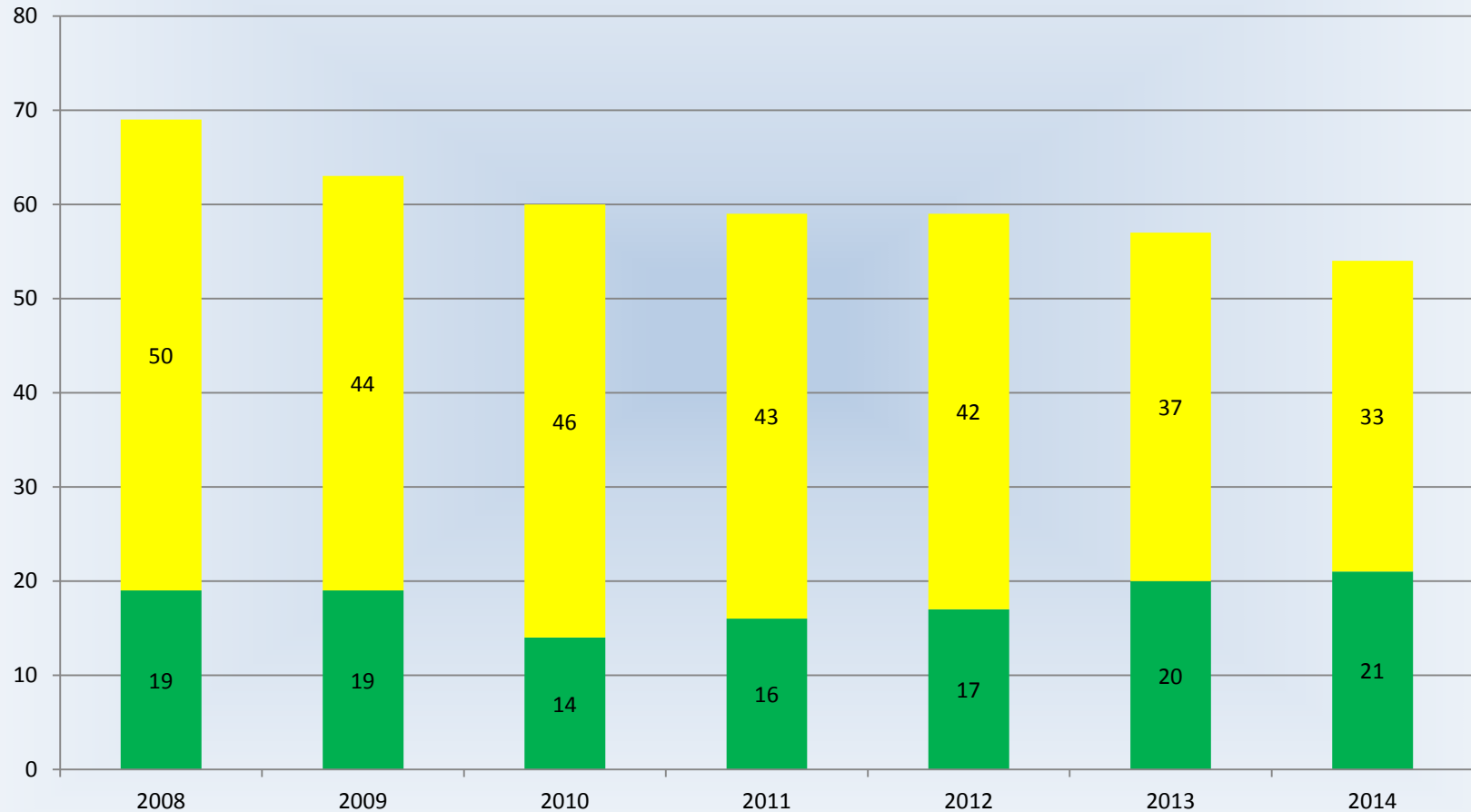


- 20,657 centerline miles
- 41,416 lane miles
- 28% are in urban areas, comprising over 17,745 individual road segments
- 7% of travel occurs on the non federal aid secondary system

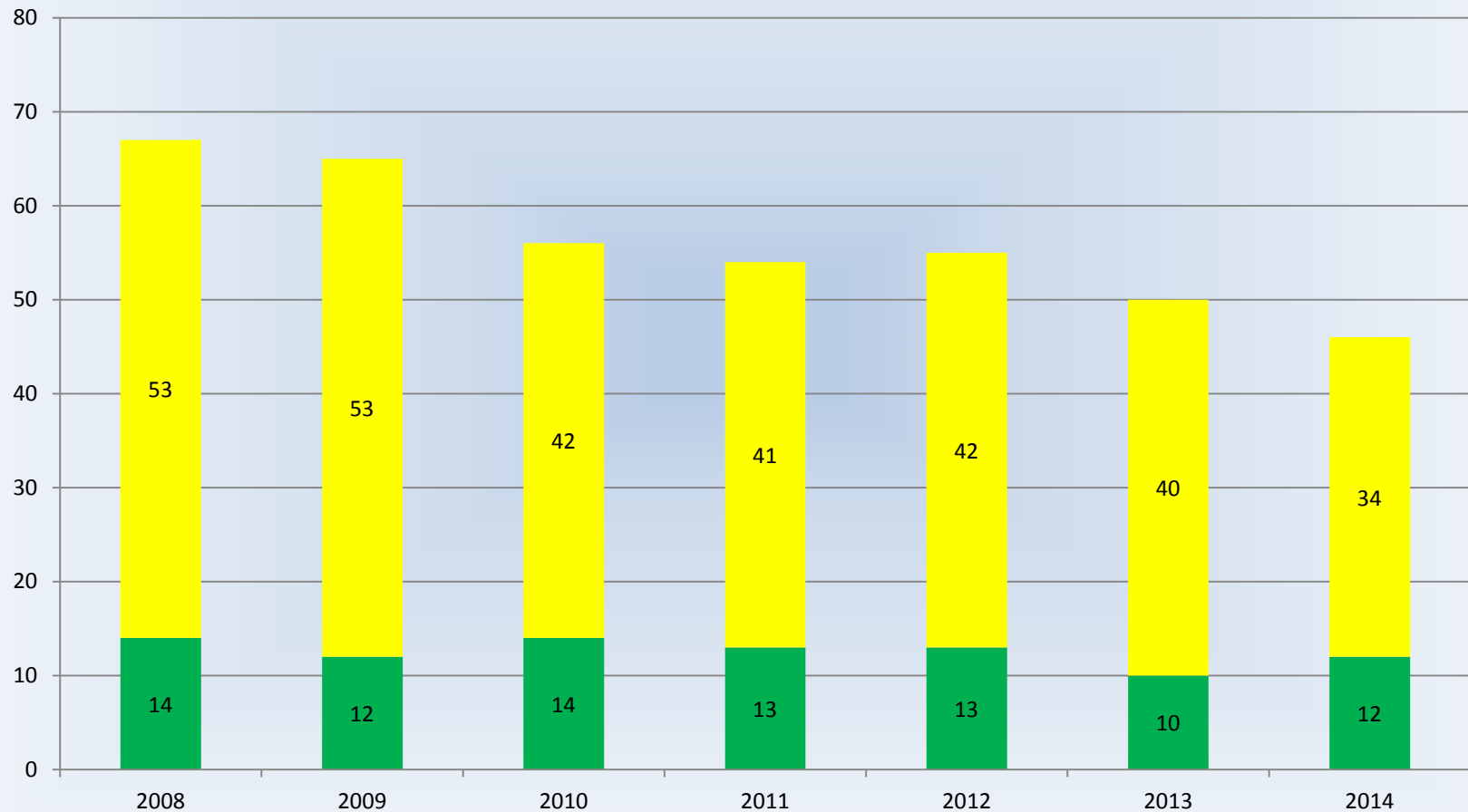
December 31, 2014 Data



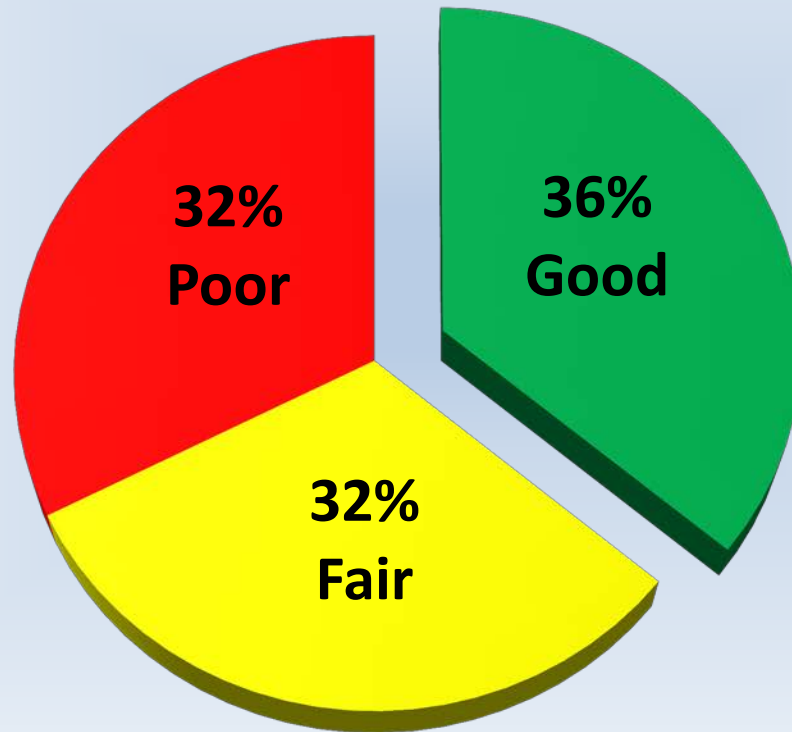
Federal Aid Secondary System: % Pavement in Good & Fair Condition



Non Federal Aid Secondary System: % Pavement in Good & Fair Condition



% VMT on Pavement Condition Type



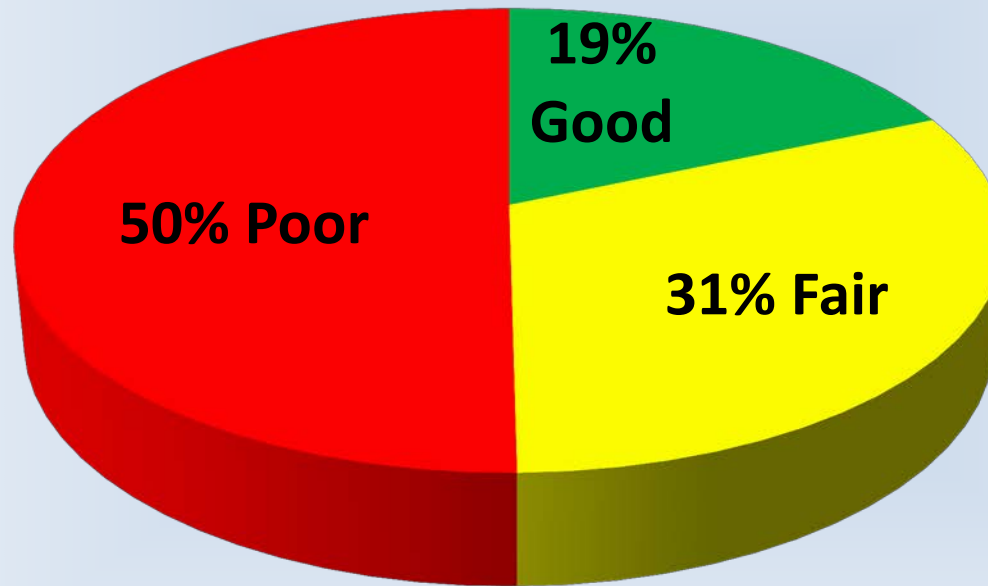
*36% of SC's
traffic is
riding on
good
pavements*

December 31, 2014 Data



Overall Assessment of SC's Pavements

*Based on
Lanes Miles!*



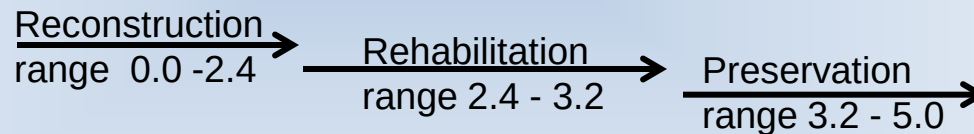
December 31, 2014 Data



Grading Pavement Condition

- Grade for pavement condition is called a Pavement Quality Index (PQI)
- PQI is made up of two components – one that measures rutting and roughness and one that measures pavement distress (cracking, raveling)

Pavement Condition	Poor	Fair	Good
PQI Range	0.0 – 2.6	2.7 – 3.3	3.4 – 5.0



Reconstruction – usually involves the complete replacement of the pavement structure

Rehabilitation – structural enhancements to improve a pavement's load carrying capability – i.e. adding additional layers of asphalt

Preservation – low cost treatments such as chip seal, crack sealing, or ultra thin asphalt overlays placed at the right time to slow pavement deterioration



October 21, 2014

TABLE HM-81

STATE	RURAL							URBAN						RURAL AND URBAN							
	MILES	LANE- MILES (3)	DVMT (4)	AADT/ LANE (5)	% OF STATEWIDE TOTAL RURAL (2)			MILES	LANE- MILES (3)	DVMT (4)	AADT/ LANE (5)	% OF STATEWIDE TOTAL URBAN (2)			MILES	LANE- MILES (3)	DVMT (4)	AADT/ LANE (5)	% OF STATEWIDE TOTAL (2)		
					MILES	LANE- MILES	DVMT					MILES	LANE- MILES	DVMT					MILES	LANE- MILES	DVMT
Texas	66,234	148,045	183,636	1,240	31.1	33.5	88.4	14,089	47,200	308,372	6,533	14.0	20.2	66.7	80,323	195,245	492,008	2,520	25.6	28.9	73.4
North Carolina	62,094	128,794	76,638	595	90.3	90.7	68.9	17,452	42,516	133,918	3,150	46.6	51.2	75.7	79,546	171,310	210,555	1,229	74.9	76.1	73.0
Virginia	47,509	99,975	70,718	707	94.5	94.7	85.8	10,902	26,388	88,030	3,336	44.6	46.8	63.4	58,411	126,363	158,749	1,256	78.1	78.0	71.7
South Carolina	30,267	63,906	56,794	889	61.0	62.3	88.5	11,128	26,466	63,371	2,394	66.9	70.5	90.5	41,396	90,371	120,164	1,330	62.5	64.5	89.5
Pennsylvania	28,801	60,903	67,572	1,110	39.0	40.2	69.8	10,986	27,427	124,824	4,551	23.8	27.8	72.0	39,787	88,329	192,396	2,178	33.2	35.3	71.2
Missouri	30,815	65,905	60,457	917	28.7	30.0	77.4	3,072	10,372	68,081	6,564	12.6	19.1	60.7	33,887	76,277	128,538	1,685	25.7	27.9	67.5
West Virginia	31,331	64,004	25,357	396	94.8	94.7	82.6	3,076	6,942	18,636	2,684	54.0	56.4	84.8	34,407	70,946	43,993	620	88.8	88.8	83.5
Kentucky	25,206	54,472	58,554	1,075	37.6	39.5	78.7	2,414	7,364	42,926	5,829	19.1	26.3	79.0	27,620	61,836	101,480	1,641	34.7	37.3	78.8
California	10,315	26,204	96,339	3,677	12.8	15.6	67.8	4,789	25,122	392,084	15,607	5.1	11.1	51.5	15,104	51,326	488,423	9,516	8.6	13.0	54.1
Ohio	13,562	30,358	60,529	1,994	17.9	19.5	66.5	5,664	19,037	123,656	6,495	11.9	17.7	56.8	19,226	49,395	184,185	3,729	15.6	18.8	59.6
Georgia	12,599	29,973	51,485	1,718	16.3	18.8	73.4	5,328	18,633	128,123	6,876	10.4	16.5	55.8	17,926	48,606	179,608	3,695	13.9	17.9	59.9
Florida	5,976	16,666	61,722	3,704	14.8	19.4	64.9	6,123	26,692	226,107	8,471	7.5	14.4	52.2	12,099	43,357	287,830	6,639	9.9	16.0	54.5
Illinois	10,736	24,710	47,950	1,941	10.9	12.4	69.0	5,250	17,467	108,871	6,233	11.0	16.4	49.7	15,986	42,176	156,821	3,718	11.0	13.8	54.4
Louisiana	13,163	29,142	42,635	1,463	29.9	32.1	78.6	3,526	10,199	59,623	5,846	20.3	26.0	77.8	16,689	39,340	102,259	2,599	27.2	30.3	78.2
Arkansas	14,048	30,823	34,893	1,132	16.5	17.8	79.2	2,363	7,534	33,194	4,406	14.4	20.9	69.6	16,411	38,357	68,087	1,775	16.1	18.3	74.2
New York	9,958	22,060	38,777	1,758	15.0	16.3	43.4	5,075	16,160	124,322	7,693	10.5	15.1	46.7	15,034	38,220	163,099	4,267	13.1	15.8	45.9
Tennessee	10,898	26,175	60,678	2,318	15.6	18.1	79.3	3,001	10,918	75,469	6,912	11.8	18.9	63.9	13,899	37,093	136,146	3,670	14.5	18.3	69.9
Oklahoma	10,855	25,011	36,940	1,477	11.4	12.8	65.5	1,410	5,343	30,437	5,696	8.0	13.4	40.5	12,265	30,354	67,377	2,220	10.9	12.9	51.2
Alabama	8,753	22,239	49,369	2,220	11.4	14.1	59.5	2,149	7,741	48,047	6,207	8.5	14.1	50.5	10,902	29,979	97,416	3,249	10.7	14.1	54.7
Wisconsin	9,588	22,048	50,543	2,292	10.5	11.9	60.0	2,178	7,604	46,481	6,113	9.2	14.6	59.0	11,766	29,652	97,024	3,272	10.2	12.5	59.5
New Mexico	11,100	26,125	27,437	1,050	33.0	36.7	69.7	933	3,182	15,006	4,716	2.5	4.2	51.1	12,034	29,307	42,443	1,448	17.0	19.9	61.8
Minnesota	10,249	23,442	39,861	1,700	8.8	9.9	62.4	1,562	5,820	50,043	8,598	7.0	11.9	54.3	11,811	29,262	89,904	3,072	8.5	10.3	57.6
Indiana	8,802	20,843	52,127	2,501	12.7	14.7	65.2	2,374	7,948	53,416	6,720	8.5	13.0	39.7	11,175	28,792	105,543	3,666	11.5	14.1	49.2
Mississippi	9,486	23,150	38,759	1,674	15.0	17.7	64.2	1,412	4,726	24,681	5,223	11.8	17.8	53.9	10,899	27,875	63,440	2,276	14.5	17.8	59.7
Michigan	6,849	16,069	43,788	2,725	8.1	9.4	57.0	2,815	11,385	93,207	8,187	7.4	13.3	50.7	9,664	27,454	136,995	4,990	7.9	10.7	52.6
Montana	10,495	23,572	17,597	747	14.8	16.4	77.0	511	1,515	5,475	3,614	12.3	17.1	54.2	11,006	25,087	23,071	920	14.7	16.4	70.0
Kansas	9,524	21,103	24,972	1,183	7.5	8.2	63.0	775	2,867	17,353	6,052	5.7	9.4	40.2	10,298	23,971	42,325	1,766	7.3	8.3	51.1
Colorado	7,675	17,601	30,128	1,712	11.1	12.6	74.1	1,385	5,331	47,281	8,869	7.0	12.0	53.7	9,061	22,931	77,409	3,376	10.2	12.4	60.2
Iowa	7,802	18,882	34,508	1,828	7.7	9.1	69.2	1,081	3,910	18,112	4,632	8.5	14.0	49.2	8,883	22,793	52,620	2,309	7.8	9.7	60.7
Nebraska	9,542	20,908	24,309	1,163	10.9	11.9	79.0	406	1,576	9,583	6,079	6.3	11.0	43.3	9,948	22,484	33,892	1,507	10.6	11.8	64.0
Arizona	5,566	14,105	30,078	2,133	13.9	16.9	77.1	1,234	5,406	46,937	8,683	4.7	8.9	37.0	6,800	19,510	77,015	3,947	10.2	13.5	46.4
Oregon	6,797	15,612	28,687	1,837	11.7	13.2	69.8	864	2,980	25,471	8,548	6.7	10.7	49.7	7,661	18,592	54,158	2,913	10.8	12.7	58.6
Washington	5,508	12,470	28,453	2,282	9.7	10.8	66.5	1,546	5,965	58,256	9,767	6.1	10.7	51.1	7,054	18,435	86,709	4,703	8.6	10.8	55.3
South Dakota	7,527	17,026	13,464	791	9.5	10.6	76.5	240	849	3,262	3,841	7.4	12.0	44.2	7,767	17,875	16,726	936	9.4	10.7	66.9
Maine	7,409	15,334	19,083	1,245	37.3	37.9	68.1	969	2,234	8,868	3,970	32.2	35.1	83.1	8,378	17,568	27,951	1,591	36.6	37.5	72.2
North Dakota	7,155	16,249	14,780	910	8.4	9.5	71.8	223	785	3,259	4,151	10.4	16.6	46.1	7,378	17,034	18,039	1,059	8.5	9.7	65.2
Utah	4,701	11,301	15,348	1,358	13.4	15.7	77.3	1,168	4,798	33,904	7,067	10.4	18.8	62.6	5,869	16,099	49,252	3,059	12.7	16.5	66.6
Wyoming	6,304	14,416	13,231	918	24.2																