

**Starke County Highway Department**  
**Monthly Report**  
**January 2016**

**SNOW REMOVAL OPERATIONS**

The relatively good weather continued in December. There was almost no measurable snowfall. Our only two events were caused by one day of freezing rain and the corresponding cleanup day. Next Friday we plan on using brine for the first time on our County roads.

**2015-6 WINTER PLOWING**

MONTH	WINTER EVENTS	SNOWFALL IN INCHES	PLOW HOURS	PLOW HOURS PER DRIVER	MILES CLEARED	MILES CLEARED PER HOUR PER DRIVER	SALT USED	SAND USED
NOVEMBER	3	9.13	311.5	22.9	5978	19.19	128	864
DECEMBER	2	0	324.5	20.28	5079	15.65	45	584
JANUARY								
FEBRUARY								
MARCH								
<b>TOTALS</b>	<b>5</b>	<b>9.13</b>	<b>636</b>	<b>43.18</b>	<b>11057</b>	<b>19.19</b>	<b>173</b>	<b>1448</b>

**2014-5 WINTER PLOWING**

MONTH	WINTER EVENTS	SNOWFALL IN INCHES	PLOW HOURS	PLOW HOURS PER DRIVER	MILES CLEARED	MILES CLEARED PER HOUR PER DRIVER	SALT USED	SAND USED
NOVEMBER	1	0.1	12	3	287.7	23.98	20	80
DECEMBER	1	0.2	120	8	3181.6	26.51	30	120
JANUARY	12	8.25	1515	91.2	28154.4	18.58	576	2352
FEBRUARY	18	36.4	2745.5	158.1	48730	17.75	683	3404
MARCH	5	7.93	712.8	42	12517	17.56	21	1664
<b>TOTALS</b>	<b>37</b>	<b>52.88</b>	<b>5105.3</b>	<b>302.3</b>	<b>92870.7</b>	<b>18.19</b>	<b>1330</b>	<b>7620</b>

**2013-14 WINTER PLOWING**

MONTH	WINTER EVENTS	SNOWFALL IN INCHES	PLOW HOURS	PLOW HOURS PER DRIVER	MILES CLEARED	MILES CLEARED PER HOUR PER DRIVER	SALT USED	SAND USED
NOVEMBER	4	8.9	360.45	22.5	7328	20.32	150	655
DECEMBER	9	9.9	954.56	59.66	18243	19.31	275	1112
JANUARY	30	46.6	2923.17	182.7	54985	18.81	917	4632
FEBRUARY	13	19.7	2373.75	148.31	43321	18.25	486	2876
MARCH	11	6.85	1510.39	100.9	27450	18.17	176	987
<b>TOTALS</b>	<b>67</b>	<b>91.95</b>	<b>8122.32</b>	<b>514.07</b>	<b>151327</b>	<b>18.63</b>	<b>2004</b>	<b>10262</b>

**FUEL**

The new fuel system should help us better track the County fuel usage. The higher diesel usage in the last two years reflects the heavier winters and the increased number of road improvement miles completed by the highway Department. We were simply doing more work than in the past.

We are going to continue to request fuel bids for each tankful instead of locking down a price for the year with one company. By bidding each fuel purchase we saved approximately 50% on our overall fuel cost for 2016.

**DIESEL**

**GAS**

FUEL USAGE BY MONTH	<u>DIESEL</u>					<u>GAS</u>				
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>AVG</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>AVG</u>
JANUARY	9564	7524	14952	12915	11239	2638	2654	2327	2463	2521
FEBRUARY	7547	6664	11384	14115	9928	2472	2276	2338	2656	2436
MARCH	4634	6771	10785	9463	7913	2609	2600	2458	2016	2421
APRIL	3659	4154	6940	5738	5123	2730	2411	2561	2433	2534
MAY	3989	5306	5152	5552	5000	2581	2528	2843	2590	2636
JUNE	4050	4972	6775	7500	5824	2313	2427	2828	2201	2442
JULY	4562	6679	6298	6270	5952	2417	2670	2745	2811	2661
AUGUST	5811	6841	6162	8117	6733	2465	2619	2807	2722	2653
SEPTEMBER	5034	7171	6746	6798	6437	2364	2488	2986	2730	2642
OCTOBER	4773	4944	6800	5025	5386	2456	2139	2252	2542	2347
NOVEMBER	3646	2545	8644	7224	5515	2497	2069	2215	2696	2369
DECEMBER	4903	9867	8077	7156	7501	2226	2320	2197	2252	2249
	<b>62172</b>	<b>73438</b>	<b>98715</b>	<b>95873</b>	<b>82550</b>	<b>29768</b>	<b>29201</b>	<b>30557</b>	<b>30112</b>	<b>29910</b>

ANNUAL FUEL USAGE BY DEPARTMENT	<u>DIESEL</u>					<u>GAS</u>				
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>AVG</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>AVG</u>
HIGHWAY	53122	65057	89631	88478	74072	4517	5440	8703	7642	6576
SHERIFF	24	0	25	0	12	20898	19364	16976	17886	18781
EMS	9026	8341	9058	7306	8433	602	687	639	740	667
COMMUNITY	0	0	1	0	0	1520	1432	1725	1730	1602
CORRECTIONS	0	0	0	0	0	648	593	679	496	604
SURVEYOR	0	40	0	0	10	431	545	599	499	519
EMA	0	0	0	0	0	0	183	337	153	224
IT	0	0	0	0	0	210	201	161	160	183
HEALTH	0	0	0	0	0	909	719	684	751	766
PLANNING	0	0	0	0	0	33	37	54	57	45
Carl/Jim	0	0	0	0	0	29768	29201	30557	30113	29910
	<b>62172</b>	<b>73438</b>	<b>98715</b>	<b>95784</b>	<b>82527</b>	<b>29768</b>	<b>29201</b>	<b>30557</b>	<b>30113</b>	<b>29910</b>

# ASSET MANAGEMENT SUMMARY

As you may know, over the last two and a half years we have put in place an Asset Management plan that includes long term planning and policies for our County roads, bridges, and culverts; and our Department's personnel, equipment and facilities. Below is a brief outline of the progress for each phase of our asset management plan. We will be providing a draft report next month that goes into much more detail than the summary below. We are still accumulating data from the end of 2015 for that report from. We will be presenting that in conjunction with a draft of our Department Operations Manual next month for approval by the Board. Local governments across the County have benefitted from such a plan in terms of overall operating costs, insurance liability, and many other aspects which we will detail in the report.

The overall goal of our Department is to provide the public with a safe and reliable transportation infrastructure without overburdening the taxpayer. In 2015 we reduced our Department budget while improving and adding to the services we provide. In 2016 we have reduced our overall budget by over \$200,000 yet plan to provide additional services with an improvement in quality.

## ROADS

- 1) We have increased the number of roads we have improved each of the last three years.
- 2) We have reduced the overall cost of our existing road improvement methods such as asphalt paving and chip seal
- 3) We have reduced our dust control costs by over \$20,000 a year by doing the work ourselves and not using an outside contractor
- 4) We have reduced the accidents on our County by instituting a sign/road safety program that has decrease3d the number of accidents on County roads by over 50% over the last three years
- 5) We have completed our first ever comprehensive road inventory survey which includes a repair history and a prospected improvement schedule for each roadway in the County (see chart)

## BRIDGES AND CULVERTS

- 1) We have a long term bridge replacement program in place that will reduce our number of deficient bridges from 22 in 2011 to zero in 2020.
- 2) We have completed a first ever inventory of the County's over 600 roadway culverts and pipes.
- 3) We have instituted a three phase maintenance plan for our County's 58 bridges that includes 1) Routine preventive maintenance, 2) a bridge rehabilitation and repair plan 3) and the aforementioned bridge replacement program
- 4) By using more local funds and avoiding the requirements of using state and federal funds on small bridges we have reduced our overall replacement costs by over 200%. (Bridge 154)

## FACILITIES



- 1) The rear bay door has been replaced.
- 2) The new fuel pumps and card system have been installed(see pic) The new fuel cards have been issued to each Department and oversight is being provided by the auditor's office.
- 3) The front gate has been repaired. The new card reader system is in place a ready to go. We are waiting for the installer to train us on the new software. Once that is complete we will issue the new gate entry key fobs to each Department and ititiate the system. The Auditor will provide oversight of these as well.
- 4) We will be cleaning and painting the vehicle repair bay walls and ceiling in the next month. This has not been done since the building was built in 197

## **EQUIPMENT**

Our long term equipment acquisition and replacement plan will be included in next month's report

## **PERSONNEL**

- 1) Training
- 2) Evaluations
- 3) Safety

Sec No.	Street Name	Township	From	To	Length	Width	Func. Class	Passer/Ra	Pav. Type	Curb	Sidewalk	Const. Yr	Last Rehab Yr	1999	2000	200-
1002	300N	Davis	300E	US35	5280	24	Local	4	Rock	N	0	1987	2014			
1003	300N	Davis	US35	500E	5280	27	Collector	2	Rock	N	0	1991	1991			
1004	300N	Davis	500E	600E	5280	35	Collector	2	CS	N	0	1991	1991			
1005	600E	Davis	300N	400N	5280	35	Collector	7	CS	N	0	1991	1991			
1006	600E	Davis	400N	HAMLET LIMITS	4009	35	Collector	7	CS	N	0	1991	1991			
1007	400N	Davis	600E	500E	5280	35	Collector	6	CS	N	0	2009	2010			
1008	400N	Davis	500E	US35	5280	34	Collector	6	CS	N	0	2009	2010			
1009	400N	Davis	US35	300E	5280	33	Collector	7	CS	N	0	2009	2010			
1010	400N	Davis	300E	200E	5280	25	Local	5	CS	N	0	2014	2014			
1011	400N	Davis	200E	100E	5280	25	Local	4	CS	N	0	2014	2014			
1012	400N	Davis	100E	Range Rd.	5280	25	Local	7	CS	N	0	2014	2014			
1013	300N	Davis	Range Road	County Line	8132	30	Local	3	CS	N	0	2014	2014			
1014	Range Rd.	Davis	300N	400N	5280	25	Local	6	CS	N	0	2014	2014			
1015	Range Rd.	Davis	400N	500N	5280	25	Local	9	HM	N	0	2014	2014			
1016	450N	Davis	Range Rd.	Dead End	5094	28	Local	2	Rock	N	0	1991	2001			
3016	200 E	Davis	400 N	500 N	386	23	Local	4	Comp	N	0	1991	2001			
1017	300 E	Davis	400 N	500 N	402	24	Local	6	CS+2	N	0	2011	2012			
1018	500 N	Davis	300 E	US35	450	24	Local	6	HM	N	0	2011	2014			
1019	500 N	Davis	500 N	600 N	432	24	Local	7	HM	N	0	2011	2014			
1020	500 N	Davis	Range Rd.	100 E	455	24	Local	7	HM	N	0	2011	2014			
1021	480 N	Davis	200 E	300 E	457	27	Local	3 over 2	HM	N	0	2011	2014			
1022	100 E	Davis	400 N	500 N	511	24	Local	4	HM	N	0	2011	2014			
1023	100 E	Davis	400 N	300 N	511	24	Local	X	Comp	N	0	1991	1991			
3025	300 E	Davis	500 N	US 30	543	24	Local	X	Comp	N	0	1991	1991			
1026	200 E	Davis	300 N	400 N	287	29	Local	X	Comp	N	0	2002	2002			
1027	300 E	Davis	400 N	300 N	290	30	Local	6	Comp	N	0	1991	1991			
3028	150 E	Davis	500 N	600 N	229	29	Local	6	Comp	N	0	1991	1991			
3029	Range Rd.	Davis	500 N	600 N	301	29	Local	5	Comp	N	0	1991	1991			
1028	600 N	Davis	500 N	600 N	331	25	Local	5	Comp	N	0	1992	1992			
1030	600 N	Davis	RANGE RD	150 E	365	26	Local	9	HM	N	0	2011	2011			
1031	Range Rd.	Davis	150 E	300 E	492	30	Local	5 over 4	HM	N	0	2004	2014			
1032	500 E	Davis	300 N	400 N	402	24	Local	X	CS	N	0	2014	1998			
1033	500 E	Davis	400 N	500 N	450	24	Local	4	CS	N	0	2014	1998			
1034	500 N	Davis	US35	500 E	432	24	Local	4	CS	N	0	2014	1998			
1035	500 N	Davis	US35	500 E	455	28	Local	6	CS+2	N	0	2011	2011			
1036	500 E	Davis	500 E	HAMLET LIMITS	457	25	Local	6	CS+H	N	0	2011	2011			
1037	550 N	Davis	500 N	Old US 30	424	26	Local	X	CS+H	N	0	2011	2011			
1038	Old US 30	Davis	500 E	HAMLET LIMITS	380	15	Local	7	Rock	N	0	1970	1970			
1039	500 E	Davis	500 E	HAMLET LIMITS	432	26	Local	5	HM	N	0	2005	2014			
1040	600 N	Davis	Old US 30	600 N	408	27	Local	6	HM	N	0	2005	2014			
1041	550 E	Davis	500 E	HAMLET LIMITS	402	29	Local	X	CS+2	N	0	2005	2011			
1042	600 N	Davis	600 N	HAMLET LIMITS	450	27	Local	6	CS+2	N	0	2005	2011			
1043	Old US 30	Davis	500 E	US35	432	29	Local	X	CS+2	N	0	2005	2011			
1044	Old US 30	Davis	US35	300 E	495	30	Local	7	CS+2	N	0	2005	2011			
1045	Old US 30	Davis	US35	300 E	457	27	Local	4	CS+H	N	0	2003	2011			
1046	Old US 30	Davis	300 E	US 30	424	26	Local	5	CS+H	N	0	2003	2011			
1047	700 N	Davis	US 30	700 N	430	20	Local	5	HM	N	0	2005	2014			
1048	700 N	Davis	300 E	US35	432	20	Local	6	HM	N	0	2005	2014			
1049	125 E	Davis	300 E	125 E	408	20	Local	5 over 4	HM	N	0	2005	2014			
1050	700 N	Davis	US30	700 N	316	25	Local	X	CS+2	N	0	1995	2010			
1051	300 E	Davis	125 E	50 E	455	26	Local	6 over 5	CS+H	N	0	2003	2011			
1052	800 N	Davis	700 N	800N	457	24	Local	5	CS+H	N	0	2003	2011			
3053	300 E	Davis	300 E	US35	424	21	Local	X	CS	N	0	2004	2014			
3054	900 N	Davis	800 N	900 N	1075	25	Local	X	HM	N	0	2014	2014			
1054	900 E	Davis	US35	500 E	1598	24	Local	X	HM	N	0	2002	2003			
1055	800 N	Davis	900 N	800 N	632	23	Local	7	HM	N	0	2002	2003			
1056	500 E	Davis	US35	500 e	430	21	Local	X	HM	N	0	2002	2003			
1057	700 N	Davis	700 N	800 N	432	20	Collector	4	HM	N	0	2002	2003			
1058	500 E	Davis	US35	500 E	408	22	Collector	7	HM	N	0	2002	2003			
1059	800N	Davis	600 N	700 N	412	25	Collector	X	HM	N	0	2007	2007			
1060	525 E	Davis	500 E	800 E	442	23	Collector	X	HM	N	0	2007	2007			
1061	800 N	Davis	900 N	800 N	443	24	Collector	9	HM	N	0	2007	2007			
1062	700 N	Davis	500 E	600 E	431	25	Collector	6	HM	N	0	2007	2007			
1063	150 E	Davis	700 N	800 E	407	25	Collector	7	HM	N	0	2007	2007			
1064	800 E	Davis	800 N	Dead End	442	25	Collector	X	HM	N	0	2007	2007			
1065	800 E	Davis	700 N	800 N	420	24	Collector	5	HM	N	0	2007	2007			
1066	800 E	Davis	700 N	800 N	452	24	Collector	6	HM	N	0	2007	2007			
1067	50 E	Davis	US30	700 N	1837	24	Collector	X	HM	N	0	2007	2007			
1067	50 E	Davis	US30	1500 S	430	22	Local	X	CS	N	0	2014	2014			