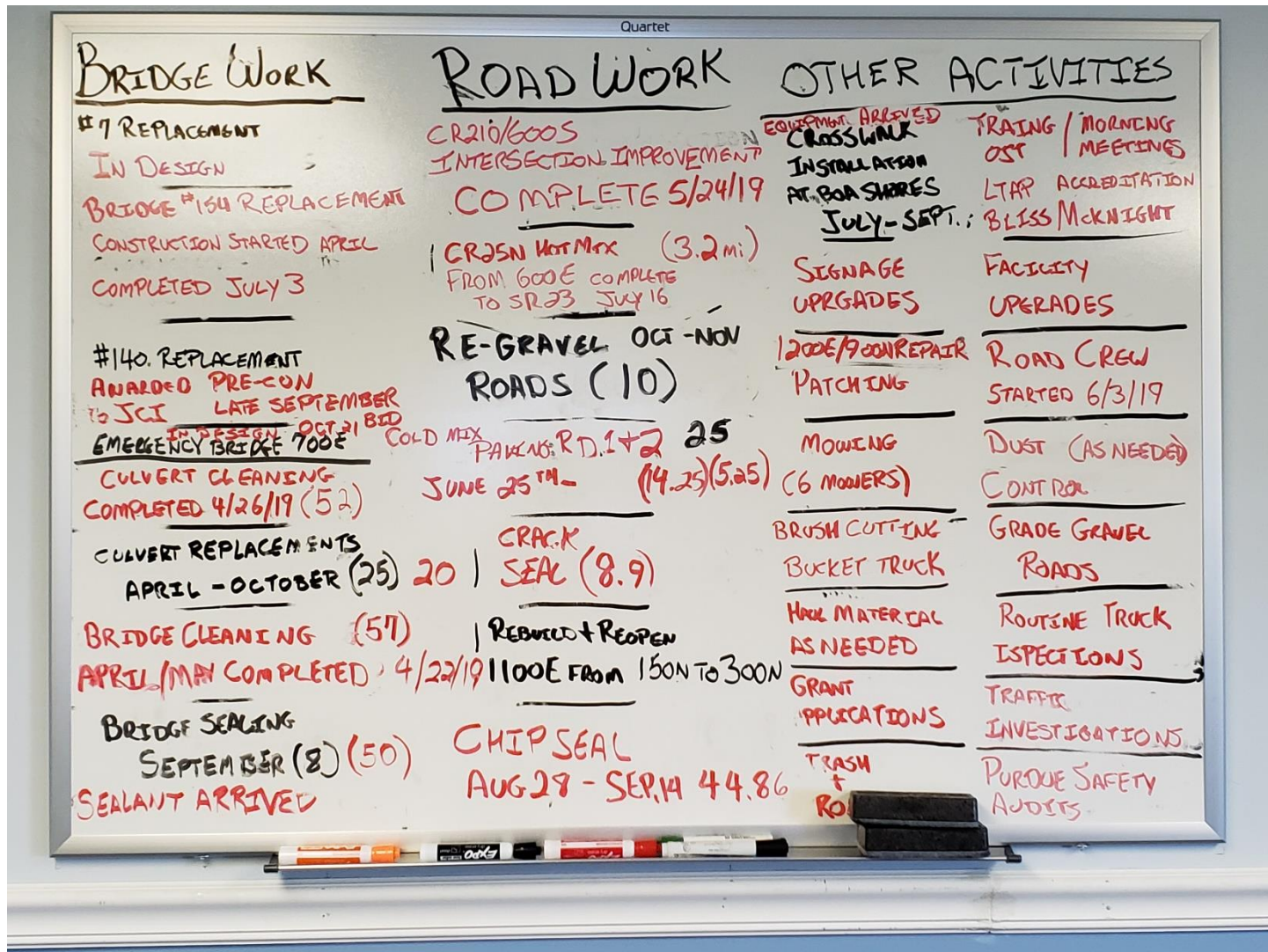


# Starke County Highway Department Monthly Report – October 7th, 2019



The Starke County Highway Department was recognized by the Association of Indiana Counties during their 61<sup>st</sup> annual conference. Superintendent Rik Ritzler was named “Outstanding County Highway Superintendent 2019” at the Oct. 2 awards banquet at French Lick Resort.

The award reflects the department’s implementation of an asset management approach to improving and maintaining the county’s 1,400 lane miles of roads, which is part of the 10-year road improvement plan toward a long-term goal of creating a county-wide truck route. This was all completed without a wheel tax, any other tax hikes, or any money from the general fund. It was all completed with our existing budget.

Commissioners, Council, Auditor, and County attorney contribution. Public Awareness about new methods

## ROADWAY ASSET MANAGEMENT

This year the Starke County Highway Department is on pace to improve 90 miles of county roads, compared to 4 miles in 2012. Road conditions are measured by PASER ratings on a scale from 1 to 10, with 1 being the worst and 10 the best. In 2013 the county’s average road rating was 4.23. This year it’s 6.2. This improvement and others are directly attributable to the dedicated professionals who work for the highway department.

ROAD IMPROVEMENTS	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Future Years
CHIP SEAL	0	39.75	0	12.75	0	47	53	29.25	29.56	19	11.15	44.86	50
FOG SEAL	0	0	0	0	0	0	0	12	0	0	0	0	5
ASPHALT PAVING	7	3.5	8	0	4	2	8	18.63	21.28	6.88	21.83	19.5	25
CRACK SEAL	0	0	0	0	0	0	13	8.25	11	12.5	12.49	11.9	10
RE-STONE	0	0	0	0	0	21	3	8	8	32.37	22	1	10
HOT-MIX	0	10.75*	0	0	0	1.25	0	1	0.1	2	3.59	3.2	5
TOTAL MILES IMPROVED	7	54*	8	12.75	4	71.25	77.00	77.13	69.94	72.75	71.06	80.46	105

2018	PASER Rating	Treatment	Estimated Extend Service Life	Estimated Cost per Mile	Estimated Miles	Total Cost
	10	N/A	0	0	0.00	0
	9	N/A	0	0	0.00	0
	8	Crack Seal 8	4	1,500	6.00	9,000
	7	Chip Seal	4	5,000	6.49	32,450
	6	Chip Seal	7	5,000	6.15	30,750
	5	2" Overlay	10	30,000	5.00	150,000
	4	Patch and 2" Overlay	12	35,000	11.00	385,000
	3	Patch and 2" Overlay	12	35,000	10.83	379,050
	2	Hot Mix 2" overlay	15	100,000	2.20	220,000
1	Hot Mix 2" overlay	15	100,000	1.00	100,000	

1,306,250

2019	PASER Rating	Treatment	Estimated Extend Service Life	Estimated Cost per Mile	Estimated Miles	Total Cost
	10	N/A	0	0	0.00	0
	9	N/A	0	0	0.00	0
	8	Crack Seal 8	4	1,515	22.31	33,795
	7	Chip Seal	4	5,050	24.86	125,543
	6	Chip Seal	7	5,050	20.00	101,000
	5	2" Overlay	10	30,300	8.50	257,550
	4	Patch and 2" Overlay	12	35,350	6.00	212,100
	3	Patch and 2" Overlay	12	35,350	5.00	176,750
	2	Hot Mix 2" overlay	15	101,000	1.20	121,200
1	Hot Mix 2" overlay	15	101,000	2.00	202,000	

1,229,938

2020	PASER Rating	Treatment	Estimated Extend Service Life	Estimated Cost per Mile	Estimated Miles	Total Cost
	10	N/A	0	0	0.00	0
	9	N/A	0	0	0.00	0
	8	Crack Seal 8	4	1,530	10.00	15,302
	7	Chip Seal	4	5,101	30.00	153,015
	6	Chip Seal	7	5,101	20.00	102,010
	5	2" Overlay	10	30,603	10.00	306,030
	4	Patch and 2" Overlay	12	35,704	10.00	357,035
	3	Patch and 2" Overlay	12	35,704	5.00	178,518
	2	Hot Mix 2" overlay	15	102,010	3.00	306,030
	1	Hot Mix 2" overlay	15	102,010	2.00	204,020

1,621,959

2021	PASER Rating	Treatment	Estimated Extend Service Life	Estimated Cost per Mile	Estimated Miles	Total Cost
	10	N/A	0	0	0.00	0
	9	N/A	0	0	0.00	0
	8	Crack Seal 8	4	1,545	10.00	15,455
	7	Chip Seal	4	5,152	30.00	154,545
	6	Chip Seal	7	5,152	20.00	103,030
	5	2" Overlay	10	30,909	10.00	309,090
	4	Patch and 2" Overlay	12	36,061	10.00	360,605
	3	Patch and 2" Overlay	12	36,061	5.00	180,303
	2	Hot Mix 2" overlay	15	103,030	3.00	309,090
	1	Hot Mix 2" overlay	15	103,030	2.00	206,060

1,638,179

2022	PASER Rating	Treatment	Estimated Extend Service Life	Estimated Cost per Mile	Estimated Miles	Total Cost
	10	N/A	0	0	0.00	0
	9	N/A	0	0	0.00	0
	8	Crack Seal 8	4	1,561	10.00	15,609
	7	Chip Seal	4	5,203	30.00	156,091
	6	Chip Seal	7	5,203	20.00	104,060
	5	2" Overlay	10	31,218	10.00	312,181
	4	Patch and 2" Overlay	12	36,421	10.00	364,211
	3	Patch and 2" Overlay	12	36,421	5.00	182,106
	2	Hot Mix 2" overlay	15	104,060	3.00	312,181
	1	Hot Mix 2" overlay	15	104,060	2.00	208,121

1,654,560

Network Average PASER Rating											
Results	0	1	2	3	4	5	6	7	8	9	10
Proposed PASER	5.79	5.90	6.00	6.10	6.20	6.30	6.40	6.55	6.70	6.85	7.00
Existing PASER	5.79	5.89	6.24								

Statewide County road PASER ratings

Average weighted score (By road miles) = 5.9

Approximately 40% of the roads are rated 5 or below.

Safety is a top priority for the highway department. The seasonal mowing crew works diligently to maintain right-of-way visibility at intersections and keep vegetation down along local roadways, and our plow drivers put in long hours to clear roads of snow and ice during the winter months.

The department is very responsive to citizen concerns about traffic safety and works closely with Purdue LTAP to conduct safety studies of dangerous intersections as a first step toward making improvements. One such project was the redesign of the intersection of CR 210 and State Road 10 at Bass Lake. The county received a Community Crossings Matching Grant from INDOT to reengineer that intersection, straighten the curve and add stop signs for improved visibility.

**BRIDGE ASSET MANAGEMENT**

Starke County’s bridges have also improved drastically, thanks to asset management. In 2012, Starke County was ranked 88 out of 92 counties in the percentage of deficient bridges statewide, with an overall deficiency rating of 38.24 percent. By the end of this year, that will be down to 1.7 percent, with zero deficient bridges by September of 2020. This was achieved within the department’s existing budget and without any additional appropriations or taxes. The Starke County Highway Department continues to emphasize preventive maintenance, including cleaning, sealing, brush cutting and inspections to ensure the early detection of any potential problems. One such inspection earlier this year by a highway maintenance worker identified the collapsed culvert on 700 East that will soon be replaced by a bridge.

**SIGN ASSET MANAGEMENT**

The department is also responsible for maintaining and upgrading road signs. The additions of a sign shop, storage building and mobile sign truck have speeded replacements and repairs and resulted in significant cost-savings to taxpayers by allowing the work to be done efficiently and quickly. Low Cost methods such as reflective strips on signs have significantly increased roadway safety in our County

**VEHICLE ASSET MANAGEMENT.**

The highway department’s mechanics also maintain and repair the fleet of trucks, tractors and road equipment, with most work done in-house. That means less down time for trucks and other critical pieces of equipment, not to mention a significant savings in parts and labor costs. The last two years we have been focusing on improving our road improvement capabilities by adding a new paver, distributor truck, roller, skid steer, and a chip box. We are one more distributor and a rubber tire roller away from having all the equipment we need to complete our aggressive road improvement plans.

## **PERSONNEL ASSET MANAGEMENT**

Highway maintenance workers undergo extensive training in all facets of the department's operations, including traffic control, chain saw safety, snow plowing, crack sealing and rating of roadway surfaces. Several employees are working toward achieving the coveted Road Builder status awarded by the Purdue University Local Technical Assistance Program (LTAP) after achieving a combination of work experience and training.

Workman's Comp and Liability savings.

The addition of a full-time certified construction inspector within the highway department has saved taxpayers more than \$240,000 annually on major projects like the intersection reconfiguration, bridge replacements and road improvements. The construction inspector is also able to conduct speed and traffic volume studies to determine whether additional improvements are necessary.

## **Division Road intersection improvement**

SCEDF is requesting that we add this to our Community Crossings applications for 2020.