

# County Wide Road Millage

Emmet County Road Commission

Brian Gutowski P.E.

# Where to start?



# PASER Road Ratings

## Last Rating Entered

PR No.	Road Name	Segment Name	From Description	To Description	P.O.B.	P.O.E.	Length	City/Twp	NFC	Act51	Surf Subtype	Last Resurf	Last Eval	PASER Rating
1170801	Atkins Rd	Atkins Rd			0.241	0.496	0.255	Bear Creek Twp	Urban Coll	ColPrimRfd	Asphalt-Stan	0	2005	3
		Atkins Rd	McDougal	Division	0.496	0.992	0.496	Bear Creek Twp	Urban Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
1171201	Barwell Rd	Barwell Rd	Pickarel Lake	Camp Patosega	0.000	0.500	0.500	Springvale Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd			1.121	1.280	0.139	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd			1.280	1.483	0.203	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd			1.483	1.845	0.352	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd	Coors	Barwell	1.845	2.326	0.481	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd	Barwell	Miller	2.326	2.858	0.542	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Sealcoat-Sta	0	2005	5
		Barwell Rd												
1174300	Barwell Rd	Barwell Rd	Barwell	Lakeview	0.440	0.830	0.390	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd	Lakeview	Mission	0.830	1.810	0.980	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd	BANWELL ROAD & MISSIO	MISSION ROAD	1.810	1.843	0.033	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd	Mission	Mission	1.843	2.202	0.359	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd	MC CARTHY ROAD & BAN		2.202	2.979	0.777	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd												
1174400	Barwell Rd	Barwell Rd	BANWELL ROAD & BANWE	SMITH ROAD	0.063	0.509	0.428	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd	Smith	City/Twp Line	0.509	1.013	0.504	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
		Barwell Rd			1.013	1.019	0.006	Aberson	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
3240611	Barwell Rd	Barwell Rd	Barwell	Barwell	0.000	0.124	0.124	Littlefield Twp	Rural(Ma)Coll	ColPrimRfd	Asphalt-Stan	0	2005	5
1196201	Beach Rd	Beach Rd	Cedar	State Line	1.207	1.229	0.022	Harbor Springs	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd			1.229	1.245	0.018	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd			1.245	1.255	0.010	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd	West Alley	King	1.255	1.317	0.052	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd	King	2nd	1.317	1.470	0.153	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd	County Line	Evergreen	1.470	1.518	0.048	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2005	5
		Beach Rd	2nd	2nd	1.518	1.519	0.001	LRSe Traverse T	Rural Local	ColPrimRfd	Asphalt-Stan	0	2004	5
		Beach Rd												

▶ Educate your Road Commission Board

▶ Educate the Townships

- PASER Training for Township Officials
- 5 year Road Improvement Plan for each Township

# 2006-2007 TOWNSHIP REVENUES

TOWNSHIP	2005 TAXABLE VALUE	2005 ROAD EXPENSE	2006 ROAD EXPENSE
BEAR CREEK	\$ 300,000,000.00	\$ 632,621.70	\$ 393,936.07
BLISS	\$ 17,500,000.00	\$ 19,301.22	\$ 1,302.60
CARP LAKE	\$ 30,000,000.00	\$ 236,546.51	\$ 26,116.62
CENTER	\$ 16,000,000.00	\$ 46,262.89	\$ 3,510.60
CROSS VILLAGE	\$ 40,000,000.00	\$ 5,662.37	\$ 33,800.43
FRIENDSHIP	\$ 80,000,000.00	\$ 70,259.19	\$ 179,744.05
LITTLE TRAVERSE	\$ 200,000,000.00	\$ 243,490.34	\$ 116,358.28
LITTLEFIELD	\$ 100,000,000.00	\$ 111,657.44	\$ 119,808.15
MAPLE RIVER	\$ 35,000,000.00	\$ 4,366.60	\$ 4,865.00
MCKINLEY	\$ 16,000,000.00	\$ 27,239.49	\$ 16,792.71
PLEASANTVIEW	\$ 115,000,000.00	\$ 57,286.05	\$ 151,213.72
READMOND	\$ 60,000,000.00	\$ 9,049.02	\$ 9,450.00
RESORT	\$ 200,000,000.00	\$ 518,988.82	\$ 614,770.88
SPRINGVALE	\$ 65,000,000.00	\$ 8,610.00	\$ 90,668.96
WAWATAM	\$ 53,000,000.00	\$ 9,209.68	\$ 48,528.00
WEST TRAVERSE	\$ 285,000,000.00	\$ 49,713.18	\$ 109,340.80
<b>TOTALS</b>	<b>\$ 1,612,500,000.00</b>	<b>\$ 2,050,264.50</b>	<b>\$ 1,920,206.87</b>

Local Repair Miles

23.99

42.89

Primary Miles

32.7

38.57

2007 LITTLEFIELD TOWNSHIP 5-YEAR ROAD PRIORITY LIST

January 10, 2007

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 800
7	General crack sealing and/or minor patching.	\$ 2,500
6	Patching and sealcoat.	\$ 14,000
5	Asphalt wedging and sealcoat.	\$ 45,000
4	Asphalt wedge and cap.	\$ 95,000
3	Pulverize, gravel and pave. Surface poor.	\$ 160,000
2	Reconstruction. Very poor condition.	\$ 260,000 +/-
1	Reconstruction. Failed road surface.	\$ 260,000 +/-

LITTLEFIELD TOWNSHIP

The township assessed the 1 Mil in 2006 and indicated they would continue to do so. The 1 Mil will bring in approximately \$100,000 per year. The township indicated they would forego their allocation, to allow the Road Commission to repair more primary roads.

TOTAL YEARLY INVESTMENT = \$100,000

TOTAL 5-YEAR ROAD EXPENSE = \$500,000

CATEGORIZATION OF HARD-SURFACED ROADS IN LITTLEFIELD TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	Cincinnati Pointe Powers Road	From U.S.31 then south for 0.14 miles From Luce to Moore for 1.07 miles
9	-	-
8	Armock Road S. Ayr Road Barney Road Barney Road High Street Honeysette Road Luce Street Main Street Mission Road Mission Road Moore Road Old Stagecoach Drive Petoskey Street	From Banwell to Lakeview for 0.51 miles From Powers then south for 0.50 miles From M-68 then south for 0.58 miles From M-68 then north for 0.50 miles From Luce then east for 0.24 miles From Valley then north for 0.61 miles From U.S.31 to Indiana for 0.05 miles From U.S.31 to High for 0.14 miles From Smith to M-68 for 1.01 miles From M-68 to Hilltop for 0.51 miles From Luce to Valley for 2.49 miles From Moore then east for 0.22 miles From U.S.31 to Cedar for 0.06 miles
7	-	-
6	Armock Road Banwell Road Banwell Road Kilmer Road Miller Road	From Lakeview then east for 0.68 miles From Village of Alanson to Burley for 0.93 miles From Lakeview to Miller for 2.15 miles From Valley to Grubaugh for 0.36 miles From Banwell to Hanes for 0.54 miles

	Powers Road	From Milton to U.S.31 for 0.04 miles
5	Banwell Road Banwell Road Kilmer Road Lakeview Road Lakeview Road Luce Street Miller Road Milton Road Mission Road Powers Road	From Springvale Township to Miller for 1.83 miles From Burley to Lakeview for 0.39 miles From Grubaugh then east for 0.24 miles From M-68 to Banwell for 1.51 miles From Banwell to McCarthy for 1.03 miles From Moore to Powers for 0.48 miles From Banwell to M-68 for 2.28 miles From Maple River Township to Alanson for 1.03 miles From Coors to Banwell for 0.60 miles From Luce to L. Traverse Township for 1.20 miles
4	Grubaugh Road Kuebler Drive Lake Street Luce Street Milton Road Mission Road Mission Road Park Avenue Petoskey Street Powers Road Russell Street Smith Road Valley Road	From Kilmer then north for 0.15 miles From Luce then west for 0.23 miles From U.S.31 to Crooked Lake for 0.19 miles From Indiana to Moore for 0.35 miles From U.S.31 to Powers for 1.01 miles From Banwell to Smith for 0.55 miles From Coors then south for 0.33 miles From U.S.31 to Cincinnati for 0.03 miles From Cedar to Lake for 0.22 miles From Moore to Milton for 0.60 miles From Luce then east for 0.14 miles From Lakeview to Mission for 1.01 miles From Milton to Maple River Twp. for 2.42 miles (1.16)
3	Cincinnati Street Lakeview Lane Main Street Rose Street Smith Road Water Street	From U.S.31 to Summerfield for 0.17 miles From Grubaugh then west for 0.36 miles From U.S.31 to Water for 0.02 miles From U.S.31 to High for 0.15 miles From Banwell to Lakeview for 0.49 miles From Luce to U.S.31 for 0.11 miles
2	Luce Street Summerfield Avenue Williams Street	From U.S.31 to Water for 0.04 miles From U.S.31 to Cincinnati for 0.04 miles From U.S.31 to Luce for 0.11 miles
1	-	-

**MILEAGE BREAKDOWN OF ROAD RATINGS FOR LITTLEFIELD TOWNSHIP (all)**

<u>PASER RATING</u>	<u># OF MILES</u>	<u>AVERAGE REPAIR COST</u>	<u>TOTAL</u>
10	1.21	\$ 0	\$ 0
9	0.00	0	0
8	7.42	800	5,936
7	0.00	2,500	0
6	4.70	14,000	65,800
5	10.59	45,000	476,550
4	7.23	95,000	686,850
3	1.30	160,000	208,000
2	0.19	260,000	49,400

TOTAL HARD-SURFACED ROAD MILES = 32.64 MILES                      COST = \$ 1,492,536

2007 AVERAGE ROAD SURFACE RATINGS = 5.69

(2006 AVERAGE ROAD SURFACE RATINGS = 5.43)

(2005 AVERAGE ROAD SURFACE RATINGS = 5.25)

**LOCAL ROAD BREAKDOWN**

<u>PASER RATING</u>	<u># OF MILES</u>	<u>AVERAGE REPAIR COST</u>	<u>TOTAL</u>
10	0.14	\$ 0	\$ 0
9	0.00	0	0
8	7.42	800	5,936
7	0.00	2,500	0
6	1.04	14,000	14,560
5	4.89	45,000	220,050
4	6.63	95,000	629,850
3	1.30	160,000	208,000
2	0.19	260,000	49,400

TOTAL LOCAL HARD-SURFACED MILES = 21.61                      COST = \$ 1,127,796

2007 AVERAGE LOCAL SURFACE RATINGS = 5.66

(2006 AVERAGE LOCAL SURFACE RATINGS = 5.28)

(2005 AVERAGE LOCAL SURFACE RATINGS = 5.10)

The goal of Asset Management is to allocate public resources in the most cost effective manner. It should be our goal to bring our system into a good condition and to maintain the system in a good condition over the next 5 years. Our goal should be to improve the average ratings from the current 5.66 to a good condition. Good is considered to be 7 or better.



**LITTLEFIELD TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST**

**2007 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
6	\$ 14,000	1.04	\$ 14,560	Armock (0.68), Kilmer (0.36)
5	45,000	1.75	78,750	Kilmer (0.24), Lakeview (1.51)
4	95,000	0.15	14,250	Grubaugh (0.15)

TOTAL SUGGESTED 2007 EXPENSE = \$ 107,560

**2008 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 45,000	2.11	\$ 94,950	Lakeview (1.03), Luce (0.48), Mission (0.60)

TOTAL SUGGESTED 2008 EXPENSE = \$ 94,950

**2009 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 45,000	1.03	\$ 46,350	Milton (1.03)
4	95,000	0.55	52,250	Mission (0.55)

TOTAL SUGGESTED 2009 EXPENSE = \$ 98,600

**2010 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
4	\$ 95,000	1.16	\$ 110,200	Valley (Milton to Moore – 1.16 miles)

TOTAL SUGGESTED 2010 EXPENSE = \$ 110,200

**2011 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
4	\$ 95,000	1.01	\$ 95,950	Smith (1.01)

TOTAL SUGGESTED 2011 EXPENSE = \$ 95,950

**TOTAL PROJECTED 5-YEAR COST**

2007	\$ 107,560
2008	\$ 94,950
2009	\$ 98,600
2010	\$ 110,200
2011	\$ 95,950

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TOTAL = \$ 507,260

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs most roads in the township in the next 5 years. This does not take into account the roads that fall further into disrepair from their current rating.

2007 FRIENDSHIP TOWNSHIP 5-YEAR ROAD PRIORITY LIST

January 12, 2007

PASER ROAD RATING SYSTEM

ROAD RATING	SUGGESTED REPAIR	COST PER MILE
10	No maintenance necessary. New Road.	\$ 0
9	No maintenance necessary. Smooth surface.	\$ 0
8	Crack filling or shoulder patching.	\$ 800
7	General crack sealing and/or minor patching.	\$ 2,500
6	Patching and sealcoat.	\$ 14,000
5	Asphalt wedging and sealcoat.	\$ 45,000
4	Asphalt wedge and cap.	\$ 95,000
3	Pulverize, gravel and pave. Surface poor.	\$ 160,000
2	Reconstruction. Very poor condition.	\$ 260,000 +/-
1	Reconstruction. Failed road surface.	\$ 260,000 +/-

FRIENDSHIP TOWNSHIP

The township assessed the 1 Mil for local road improvements. Township officials have stated the township would be able to expend \$74,000 in 2006, \$77,000 in 2007, \$79,000 in 2008 and \$81,000 in 2009 with the millage money. The township allocation in 2007 is \$8,755. The township kept the allocation in 2006. The average amount available over the next 5 years is \$86,500.

TOTAL YEARLY INVESTMENT = \$ 87,500

TOTAL 5-YEAR ROAD EXPENSE = \$ 437,500

CATEGORIZATION OF HARD-SURFACED ROADS IN FRIENDSHIP TOWNSHIP

PASER RATING	ROAD NAME	LIMITS
10	None	-
9	Five Mile Creek Road	From Geary to West Traverse Township line for 0.25 miles
8	Fisher Road	From State to Beacon Hill for 0.90 miles
	Fisher Road	From State then east for 0.33 miles
	Lower Shore Drive	From M-119 to West Traverse Township line for 0.82 miles
	Stutsmanville Road	From State to Welsheimer for 1.60 miles
	Terpening Road	From M-119 to Stutsmanville for 1.53 miles
	Terpening Road	From Stutsmanville then north for 1.05 miles
	Townline Road	From Middle Village to Stutsmanville for 2.99 miles
	Townline Cut-off	Townline Cut-off for 0.07 miles
	Wressel Road	From Lightfoot then east for 0.26 miles
	Wressel Road	From State then west for 1.01 miles
7	Boynton Road	From Townline then east for 0.75 miles
	State Road	From Stutsmanville to Middle Village for 2.03 miles
6	Troup Road	From Terpening then west for 0.44 miles
5	Five Mile Creek Road	From Geary to Stutsmanville for 1.76 miles
	Hurd Road	From State then west for 1.21 miles
	Lightfoot Road	From Lacount to Wressel for 1.01 miles

	State Road State Road Stutsmanville Road	From Lacount to Stutsmanville for 2.07 miles From Middle Village to Tonys for 1.23 miles From M-119 to State for 4.58 miles
4	None	-
3	Wressel Road	From Lightfoot to State for 0.35 miles
2	None	-
1	None	-

**MILEAGE BREAKDOWN OF ROAD RATINGS FOR FRIENDSHIP TOWNSHIP (all)**

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
9	0.25	\$ 0	\$ 0
8	10.56	800	8,448
7	2.78	2,500	6,950
6	0.44	14,000	6,160
5	11.86	45,000	533,700
4	0.00	95,000	0
3	0.35	160,000	56,000

TOTAL HARD-SURFACED MILES = 26.24 miles  
 2007 AVERAGE ROAD SURFACE RATING = 6.44  
 (2006 AVERAGE ROAD RATINGS = 6.00)  
 (2005 AVERAGE ROAD RATINGS = 5.31) TOTAL = \$ 611,258

**LOCAL ROAD BREAKDOWN**

PASER RATING	# OF MILES	AVERAGE REPAIR COST	TOTAL
9	0.25	\$ 0	\$ 0
8	8.96	800	7,168
7	0.75	2,500	1,875
6	0.44	14,000	6,160
5	3.98	45,000	179,100
4	0.00	95,000	0
3	0.35	160,000	56,000

TOTAL HARD-SURFACED MILES = 14.73 miles  
 2007 AVERAGE ROAD SURFACE RATINGS = 6.98  
 (2006 AVERAGE ROAD SURFACE RATING = 5.97)  
 (2005 AVERAGE ROAD SURFACE RATING = 5.23) TOTAL = \$ 250,303

The goal of Asset Management is to allocate public resources in the most cost effective manner. It should be our goal to bring our road system into a good condition and to maintain the system in a good condition over the next 5 years. Our goal should be to improve the average local road ratings from the current 6.98 to a good condition. Good is considered to be 7 or better.

**FRIENDSHIP TOWNSHIP SUGGESTED 5-YEAR ROAD REPAIR LIST**

**2007 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
7	\$ 2,500	0.75	\$ 1,875	Boynnton (0.75)
6	14,000	0.44	6,160	Troup (0.44)
5	45,000	1.76	79,200	Five Mile Creek (1.76)

TOTAL SUGGESTED 2007 EXPENSE = \$ 87,235

**2008 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 45,000	1.21	\$ 54,450	Hurd (1.21)

TOTAL SUGGESTED 2008 EXPENSE = \$ 54,450

**2009 REPAIRS**

RATING	PER MILE	# MILES	COST	SELECTED ROADS (miles)
5	\$ 45,000	1.01	\$ 45,450	Lightfoot (1.01)
4	95,000	0.00	- 0 -	None
3	160,000	0.35	56,000	Wressel (0.35)

TOTAL SUGGESTED 2009 EXPENSE = \$ 101,450

**2010 & 2011 REPAIRS**

**NEW ROAD CONSTRUCTION**

The Asset Management process concentrates resources on roads that are relatively easy to maintain then allows resources to be expended on more expensive roads. The above scenario repairs all of the local hard-surface roads in Friendship Township in the next 5 years. This does not take into account the roads that fall further into disrepair from their current rating.

# 2007 Suggested Repairs

## Bear Creek Township

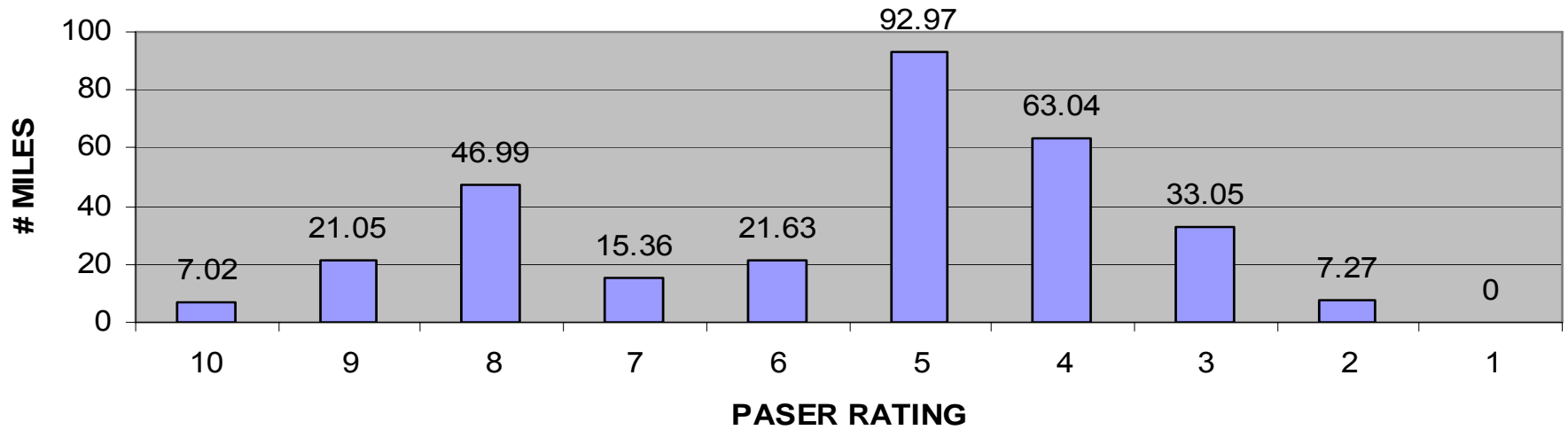
RATING	Cost per Mile	Number of Miles	Cost	Selected Roads
7	\$2500	4.30	\$10,750	Boyer (0.50), Brubaker (0.57), Cedar Valley (0.04), Clarion (0.09), Countryview (0.21), Howard (0.91), Kemp (0.50), Lears (0.20), Lintlong (0.94), Russet (0.09), Sterley (0.25)
6	\$14,000	5.48	\$76,720	Amacher (0.27), Bear River (1.34), Benal (0.12), Brubaker (0.50), Click (0.51), Gokee (0.56), Gregg (0.51), Hiawatha (0.12), Jensen (0.29), Shaw (0.21), Straddling (1.05)
5	\$45,000	6.47	\$291,150	Bellmer (0.39), Brubaker (0.93), Cedar Valley (0.71), Cedar Valley (0.71), Howard (1.10), Howard (0.63), Kemp (0.47), Kolinski (0.76), Williams (0.48)
4	\$95,000	1.72	\$163,400	Howard (1.51), Lincoln Place (0.16), Oxford Lane (0.05)
Total Projected 2007 Expense			\$542,020	

# 2007 Suggested Repairs

## Springvale Township

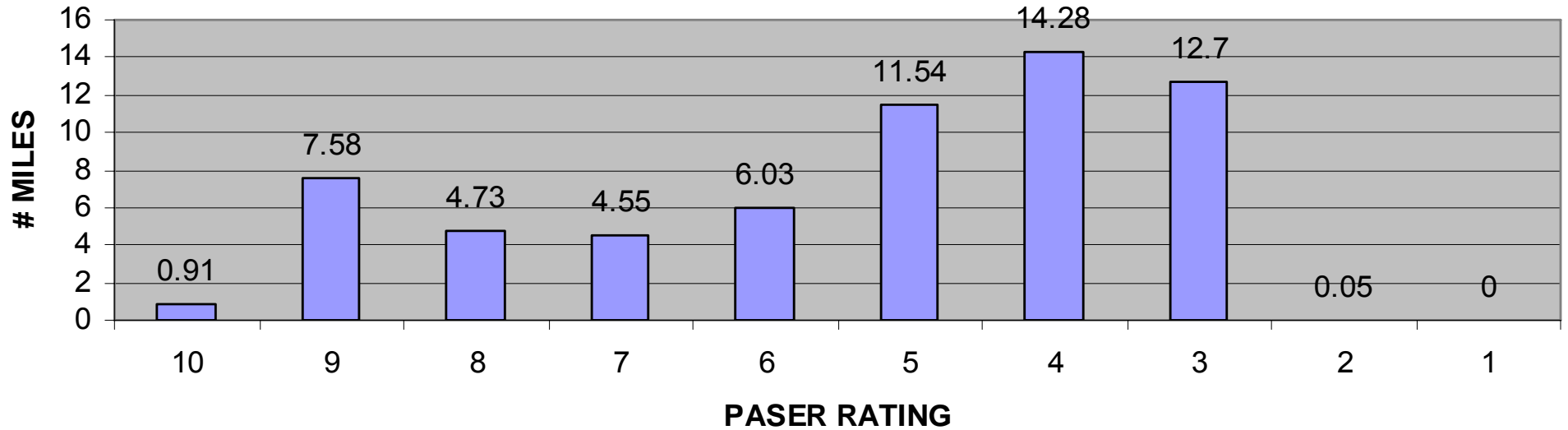
RATING	Cost per Mile	Number of Miles	Cost	Selected Roads
6	\$14,000	2.37	\$33,180	Berger Road (2.11), Newson Road (0.26)
5	\$45,000	0.72	\$32,400	Bear River Road (0.72)
Total Projected 2007 Expense			\$65,580	

## 2007 LOCAL PASER DISTRIBUTION



PASER RATING	# MILES	AVE. COST	TOTAL COST
10	7.02	\$ -	\$ -
9	21.05	\$ -	\$ -
8	46.99	\$ 800.00	\$ 37,592.00
7	15.36	\$ 2,500.00	\$ 38,400.00
6	21.63	\$ 14,000.00	\$ 302,820.00
5	92.97	\$ 45,000.00	\$ 4,183,650.00
4	63.04	\$ 95,000.00	\$ 5,988,800.00
3	33.05	\$ 160,000.00	\$ 5,288,000.00
2	7.27	\$ 260,000.00	\$ 1,890,200.00
1	0		
<b>TOTAL MILES</b>	<b>308.38</b>	<b>TOTAL COST</b>	<b>\$17,729,462.00</b>

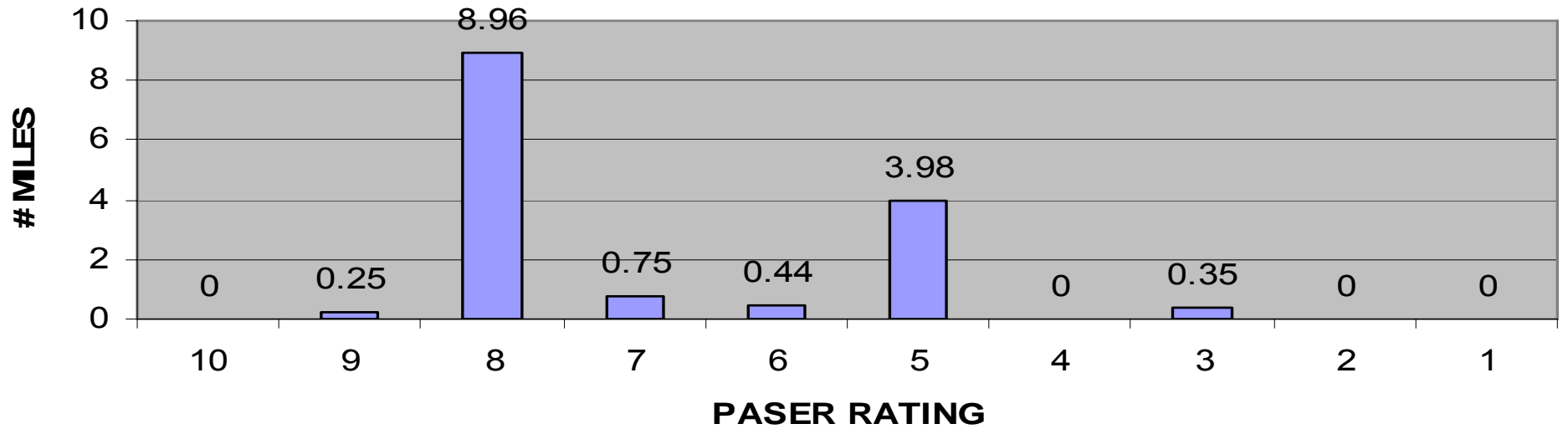
## 2007 BEAR CREEK TOWNSHIP LOCAL ROAD BREAKDOWN



PASER RATING	# MILES	AVE. COST	TOTAL COST
10	0.91	\$ -	\$ -
9	7.58	\$ -	\$ -
8	4.73	\$ 800.00	\$ 3,784.00
7	4.55	\$ 2,500.00	\$ 11,375.00
6	6.03	\$ 14,000.00	\$ 84,420.00
5	11.54	\$ 45,000.00	\$ 519,300.00
4	14.28	\$ 95,000.00	\$ 1,356,600.00
3	12.7	\$ 160,000.00	\$ 2,032,000.00
2	0.05	\$ 260,000.00	\$ 13,000.00
1	0	\$ 260,000.00	\$ -
<b>TOTAL MILES</b>	<b>62.37</b>	<b>TOTAL COST</b>	<b>\$ 4,020,479.00</b>

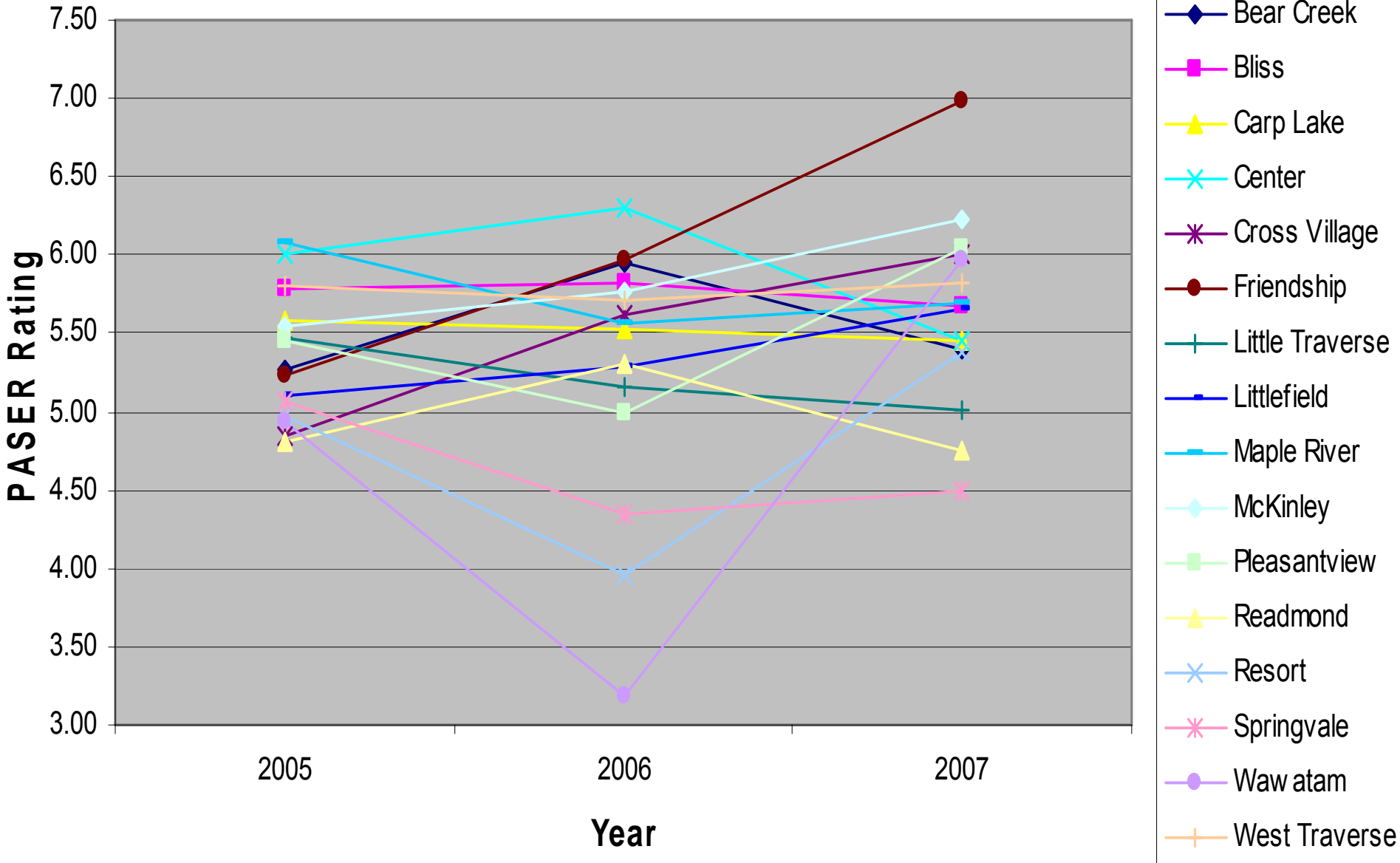


## 2007 FRIENDSHIP TOWNSHIP LOCAL ROAD BREAKDOWN

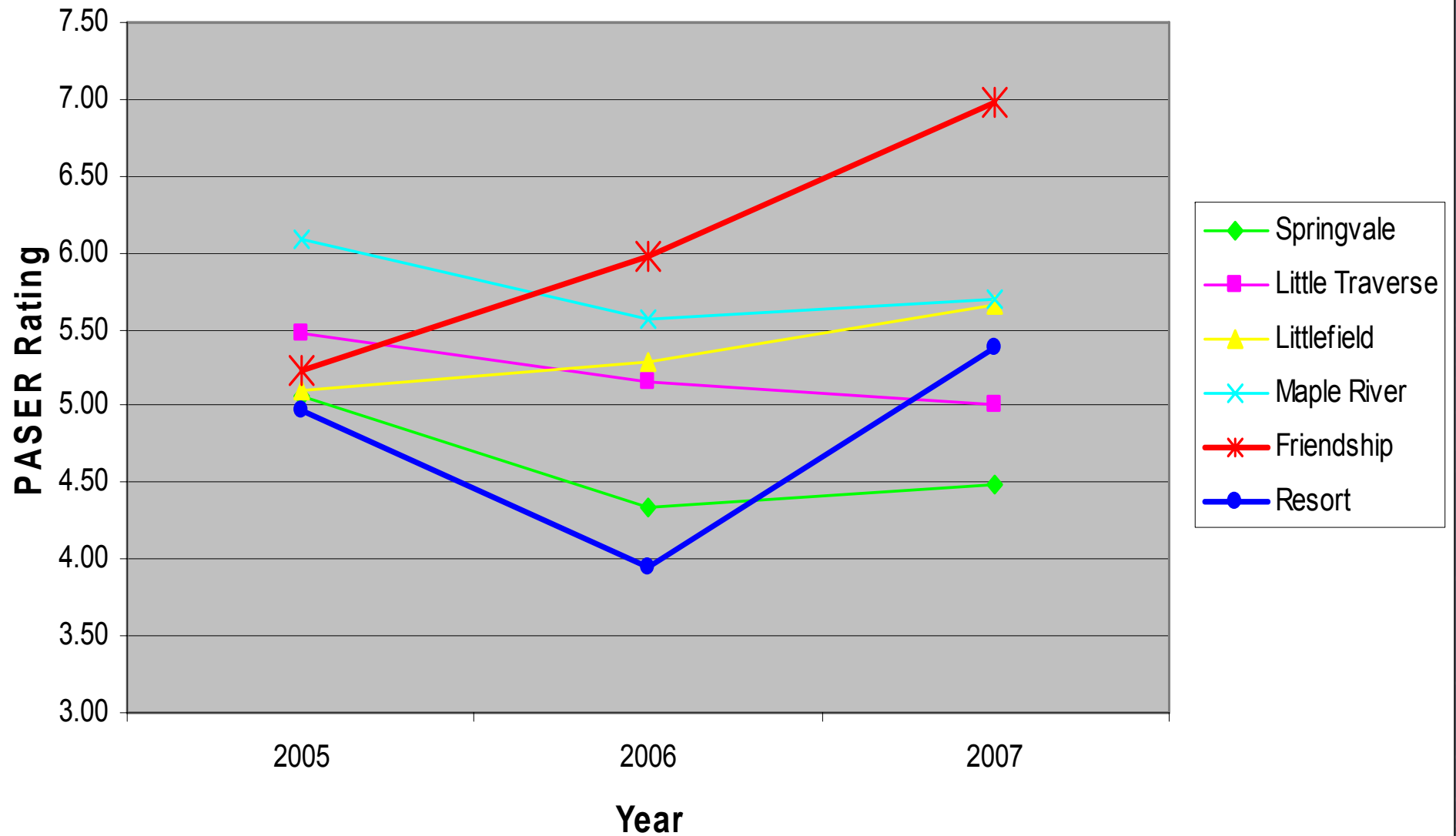


PASER RATING	# MILES	AVE. COST	TOTAL COST
10	0	\$ -	\$ -
9	0.25	\$ -	\$ -
8	8.96	\$ 800.00	\$ 7,168.00
7	0.75	\$ 2,500.00	\$ 1,875.00
6	0.44	\$ 14,000.00	\$ 6,160.00
5	3.98	\$ 45,000.00	\$ 179,100.00
4	0	\$ 95,000.00	\$ -
3	0.35	\$ 160,000.00	\$ 56,000.00
2	0	\$ 260,000.00	\$ -
1	0	\$ 260,000.00	\$ -
<b>TOTAL MILES</b>	<b>14.73</b>	<b>TOTAL COST</b>	<b>\$ 250,303.00</b>

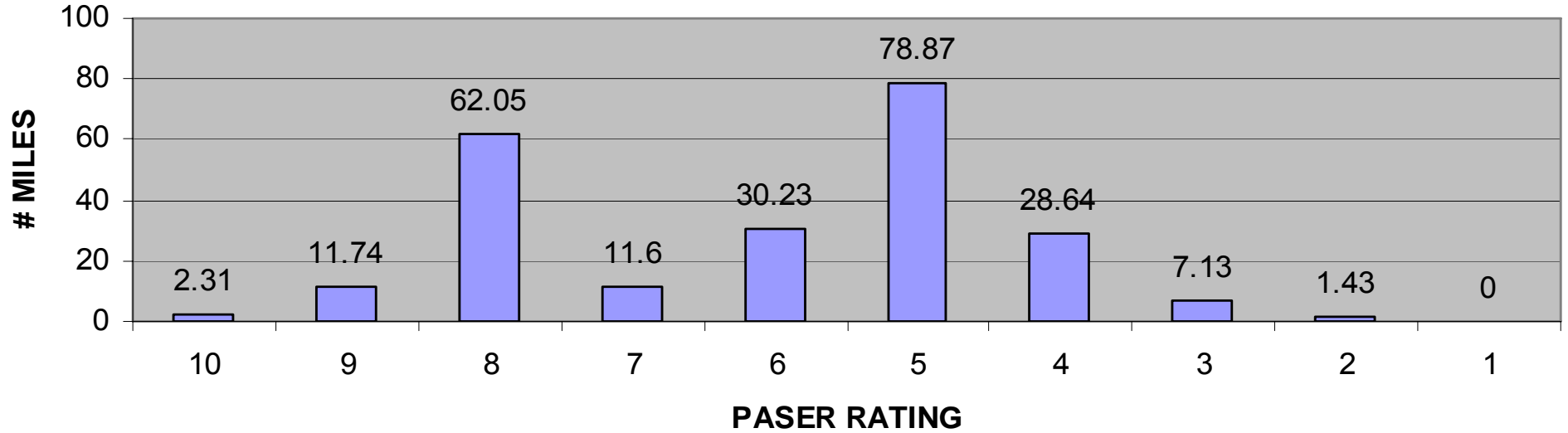
# 2005 - 2007 Local Road Ratings



## 2005 - 2007 Local Road Ratings



## 2007 PRIMARY PASER DISTRIBUTION



PASER RATING	# MILES	AVE. COST	TOTAL COST
10	2.31	\$ -	\$ -
9	11.74	\$ -	\$ -
8	62.05	\$ 800.00	\$ 49,640.00
7	11.6	\$ 2,500.00	\$ 29,000.00
6	30.23	\$ 9,500.00	\$ 287,185.00
5	78.87	\$ 28,000.00	\$ 2,208,360.00
4	28.64	\$ 95,000.00	\$ 2,720,800.00
3	7.13	\$ 180,000.00	\$ 1,283,400.00
2	1.43	\$ 280,000.00	\$ 400,400.00
1	0	\$ 280,000.00	\$ -
<b>TOTAL MILES</b>	<b>234</b>	<b>TOTAL COST</b>	<b>\$ 6,978,785.00</b>

# Emmet County Road Commission

## 2007 Primary Road Improvement Plan

RATING	Cost per Mile	Number of Miles	Cost	Selected Roads
7	\$2500	11.60	\$29,000	Anderson Road (0.75), Beach Road (1.10), Hathaway Road (1.00), Lake Road (1.15), Lears Road (0.16), Paradise Trail (0.49), Pickerel Lake Road (0.98), Pleasantview Road (2.11), State Road (2.03), West Conway Road (0.81), Wilderness Park Drive (1.02)
6	\$9,500	16.18	\$153,710	Beach Road (0.66), Brutus Road (0.54), Lake Shore Drive (2.14), Levering Road (3.99), Mackinaw Highway (0.57), Pickerel Lake Road (1.50), Pleasantview Road (4.31), Wildwood Road (1.67)
5	\$28,000	0.25	\$0	Middle Road (0.25, Federal Aid Project)
4	\$95,000	2.49	\$23,750	Brutus Road (0.25), Middle Road (1.49, Federal Aid Project), Mitchell Road (0.75)
Total Projected 2007 Expense			\$206,460	

# Rating 3

Reconstruction



# Rating 4

Asphalt Wedge and Cap



# Rating 5

Asphalt Wedge and Sealcoat





# Rating 6

Sealcoat

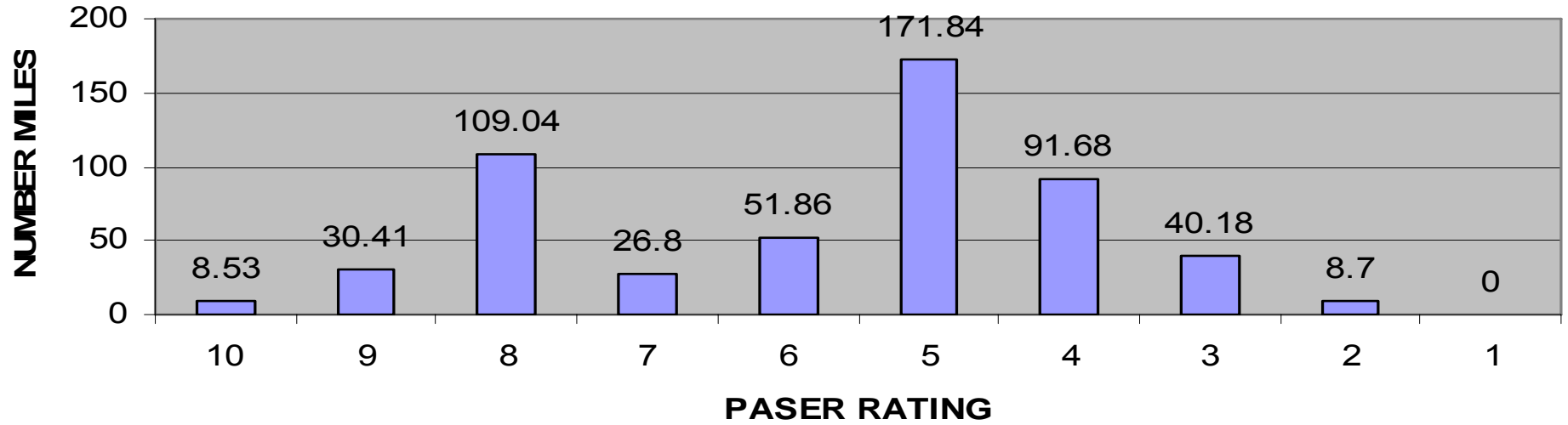


# Rating 7

Crackseal



## 2007 PASER DISTRIBUTION



PASER	# MILES	AVE. COST	TOTAL COST
10	8.53	\$ -	\$ -
9	30.41	\$ -	\$ -
8	109.04	\$ 800.00	\$ 87,232.00
7	26.8	\$ 2,500.00	\$ 67,000.00
6	51.86	\$ 14,000.00	\$ 726,040.00
5	171.84	\$ 45,000.00	\$ 7,732,800.00
4	91.68	\$ 95,000.00	\$ 8,709,600.00
3	40.18	\$ 160,000.00	\$ 6,428,800.00
2	8.7	\$ 260,000.00	\$ 2,262,000.00
<b>TOTAL MILES</b>	<b>539.04</b>	<b>TOTAL COST</b>	<b>\$26,013,472.00</b>