

Indiana's Pavement Preservation Initiative

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October 26, 2011



The Situation Before

- In FY 2008, INDOT's resurfacing budget was \$193,000,000
- In FY 2007, INDOT's maintenance budget was \$75,000,000



Major Moves

- Indiana leased it's toll road in 2005, resulting in nearly \$4 Billion in revenue
- Over 1/2 of this was dedicated to state transportation projects
- Remainder for local transportation
- Majority of state's portion was for EXPANSION



The Situation Now

- Indiana's FY 12 resurface budget is \$120,000,000 (down 35%)
- Our FY 12 maintenance budget is \$60,000,000 (down 20%)
- By the end of 2015, we will have added an additional 2,000 lane miles
- Indiana needed a maintenance plan!



Background

- INDOT's Pavement Preservation Initiative (PPI) was launched in September, 2008
- Full implementation FY 10
- Policy jointly signed by INDOT and FHWA March 2010

**INDOT Pavement Preservation Initiative
Policy Statement
March 19, 2010**

Approved:

Michael B. Cline

Michael B. Cline, Deputy Commissioner
Operations

Date: 4-5-10

Concurrence:

Robert F. Tally

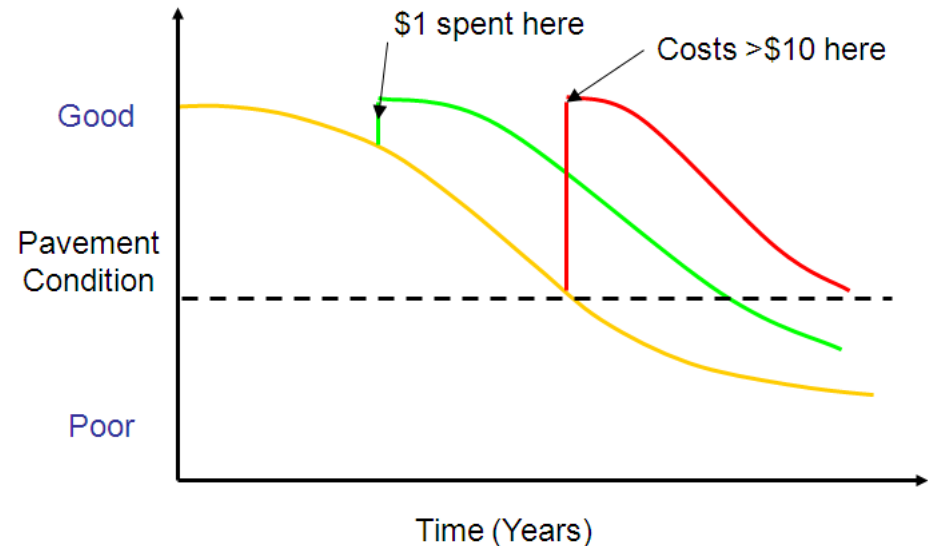
Robert Tally, Indiana Division Administrator
Federal Highway Administration

Date: 6-1-10

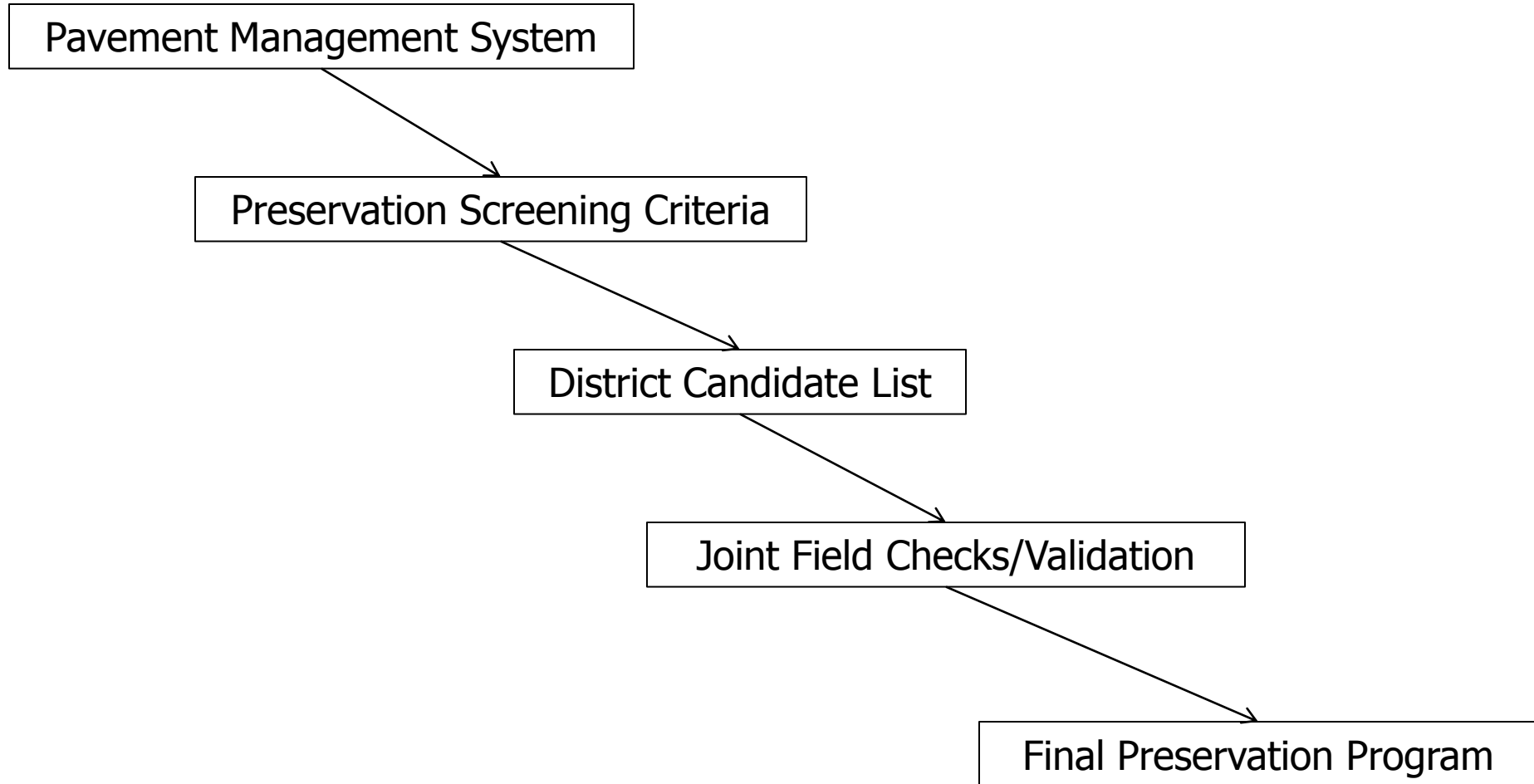


PPI Goals

- Overall improvement in network pavement condition
- Overall reduction in spending to maintain INDOT pavements, compared to traditional methods



PPI Process



PMS Screening Criteria

- HMA Pavement:
 - Age between 8-12 years AND IRI < 130
 - Friction < 25
 - Additional screens for chip seal:
 - Rut < 0.25"
 - ADT < 5,000
- PCCP Pavement:
 - Age between 8-12 years
 - IRI > 130
 - Friction < 25



PPI Surface Treatments

■ HMA

- Chip Seal
- Microsurface
- Ultrathin Bonded Wearing Course
- 4.75mm Thin HMA

■ PCCP

- Joint Resealing
- Patching
- Profiling
- Dowel Bar Retrofit



Funding

- PPI is broken into 2 parts:
 - In-house – state funded – chip seal
 - Contract – federally funded - micro, UBWC, thin HMA, CPR

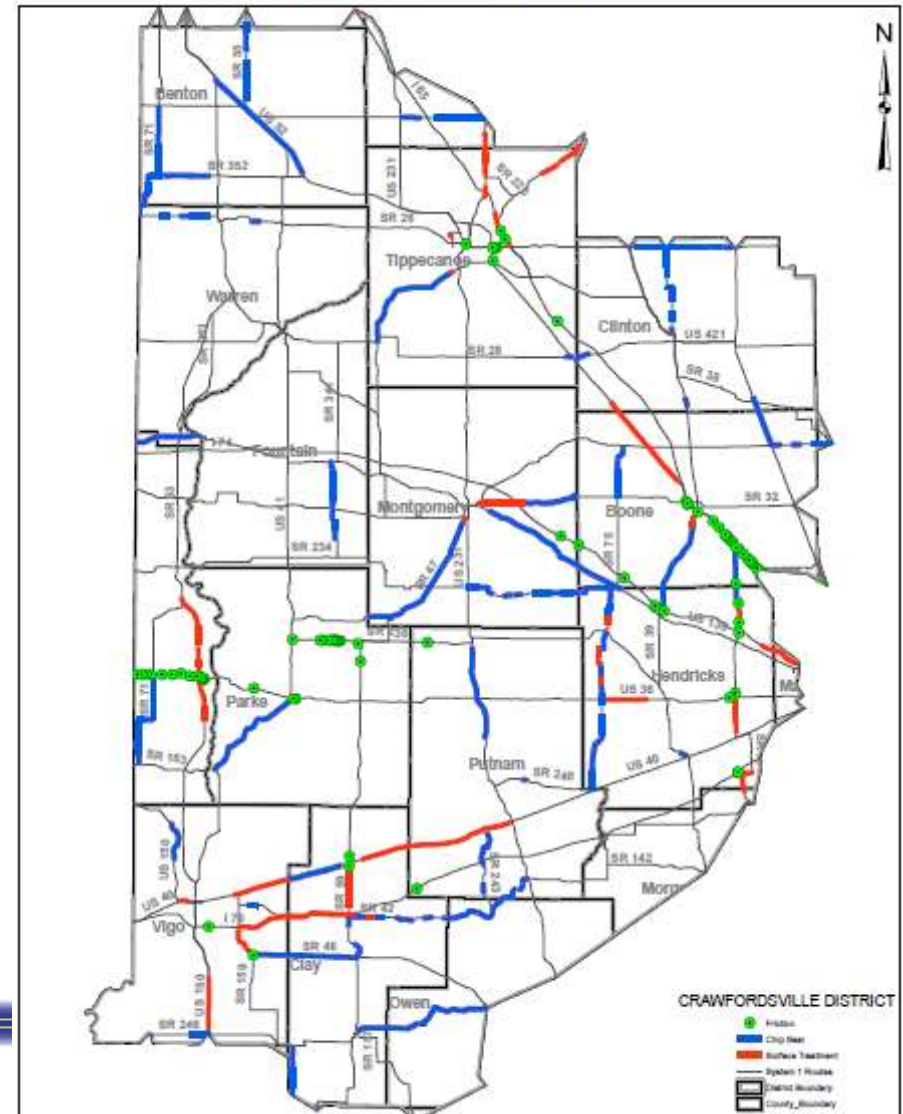


The PPI Process

- Preservation candidates generated by our pavement management system



CRAWFORDSVILLE DISTRICT



The PPI Process

- Using this list as a guide, Districts refine and develop their candidate list

District	Road	Sub	From RP	From Loc	To RP	Year Last Treated	Age	IRI	RUT	AADT
Crawfordsville	SR 39	Frankfort	72.33	Sugar Creek	75.03	1998	14	61	0.07	5,841
Crawfordsville	SR 32	Crawfordsville	38.65	SR 47 E jct	48.38	2000	12	61	0.11	5,535
Crawfordsville	US 231	Frankfort	193.54	0.26 mi N of SR 28	197.83	2005	7	89	0.08	7,994
Crawfordsville	SR 59		34.5	N. of Clay City CL	41.24	2001	11	54.8	0.05	1,539
Crawfordsville	SR 47		58	US 421	62.5	2002	10	63.8	0.09	13144



The PPI Process

- These roads jointly field checked by District and Central Office
- Final preservation list created



The PPI Process

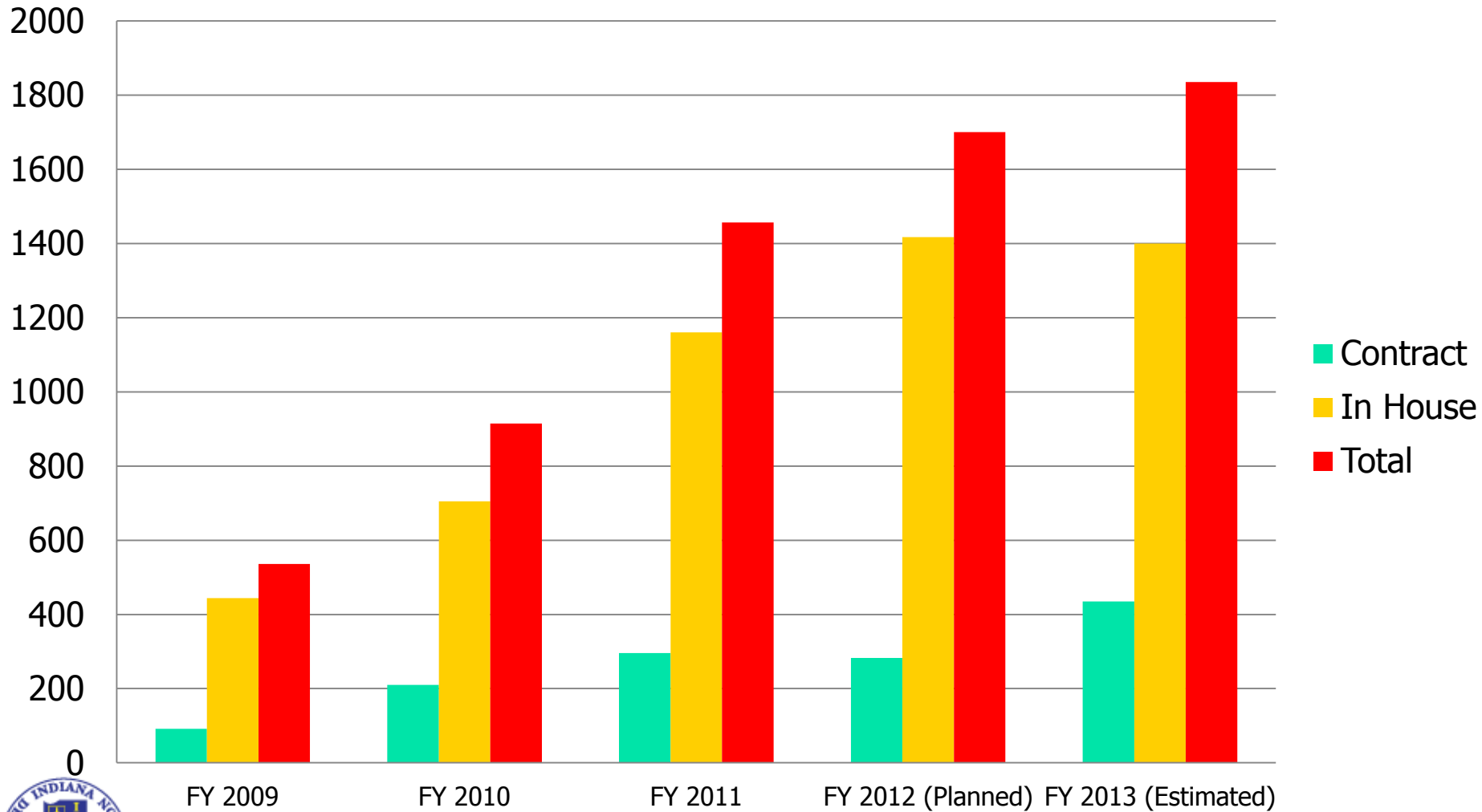
- Final preservation list created

District	Road	Sub	From RP	To RP	Width (total - ft)	Appro x. Ln. Miles	Chip Seal Mat'l Cost	Stone Qty (Tons)	AE 90 S (Tons)	Notes/Comments
FT. Wayne	SR 114	Wabash	39.29	47.05	28	15.52	\$ 112,174.42	1,274.71	179.00	Good Candidate. Previous Chip Seal in 2006
FT. Wayne	SR 15	Wabash	34.20	44.90	30	21.40	\$ 165,721.60	1,883.20	264.45	Wait at least a year. Shoulder cracking
FT. Wayne	SR 13	Wabash	64.76	70.43	28	11.34	\$ 81,962.50	931.39	130.79	Good Candidate.
FT. Wayne	SR 19	Wabash	32.57	46.02	30	26.90	\$ 208,313.60	2,367.20	332.42	Good Candidate
FT. Wayne	SR 19	Wabash	30.80	31.91	30	2.22	\$ 17,191.68	195.36	27.43	Good Candidate.
FT. Wayne	US 35	Bluffton	81.21	89.29	30	16.16	\$ 125,143.04	1,422.08	199.70	Good Candidate.
FT. Wayne	SR 124	Wabash	15.11	26.51	25	22.80	\$ 147,136.00	1,672.00	234.79	Wait at least a year. Shoulder cracking
FT. Wayne	SR 105	Wabash	0.00	5.73	23	11.46	\$ 68,038.78	773.17	108.57	Fair Candidate.
FT. Wayne	SR 218	Wabash	41.61	47.26	28	11.30	\$ 81,673.39	928.11	130.33	May wait a year. Possibly Spring 2012 if funding available



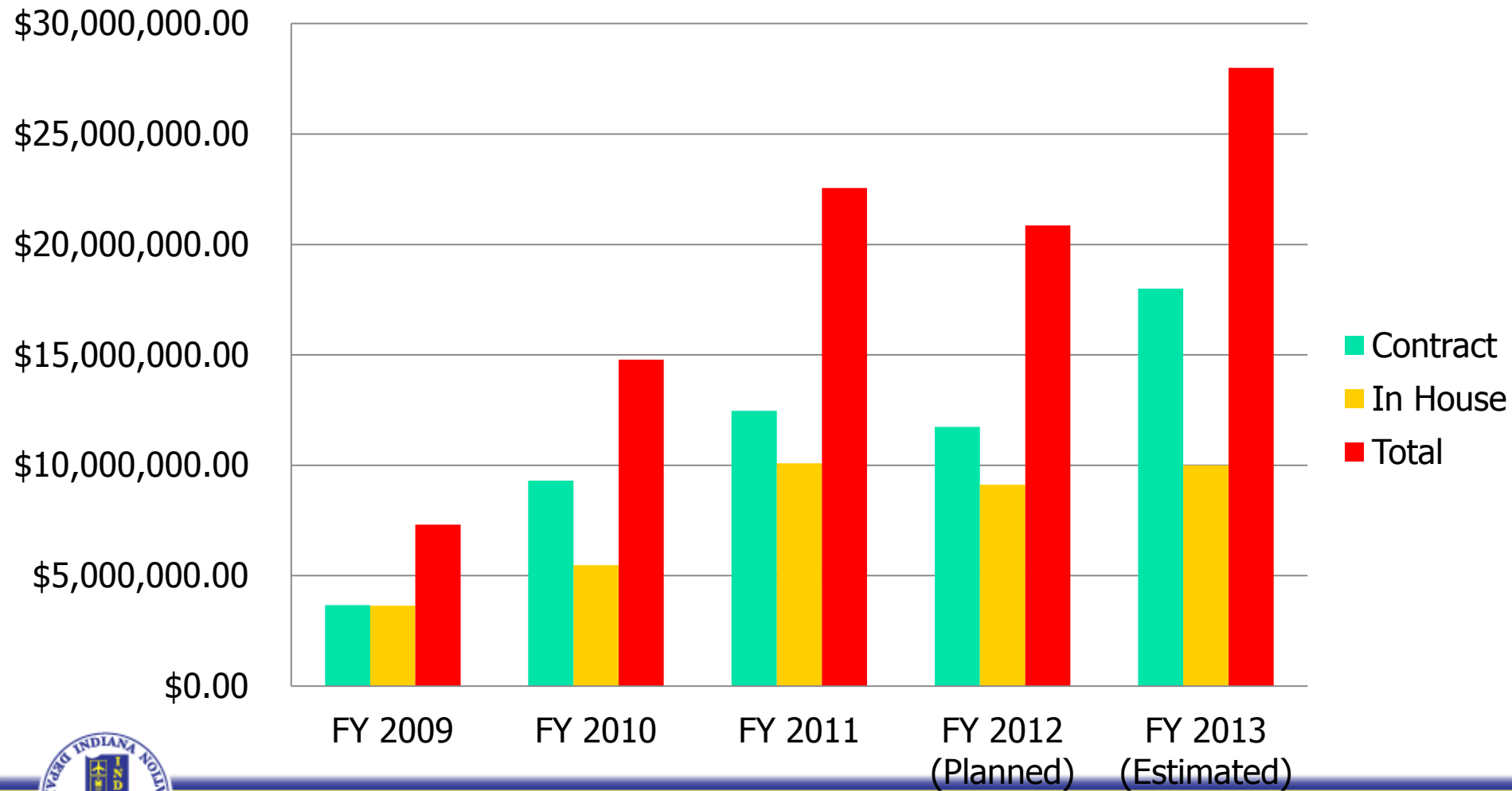
Accomplishments

PPI Accomplishments Lane Miles



Accomplishments

PPI Accomplishment Expenditures



PPI Treatment Review

- INDOT is in the process of developing the FY 13 PPI program
- We now have 3 years of projects built (FY 09, 10, 11)



PPI Treatment Review

- Indiana Design Manual gives the following “design lives”:
 - Chip Seal = 4 years
 - CPR = 6 years
 - Microsurface = 8 years
 - UBWC/Thin HMA = 9 years
- How are our treatments performing?



PPI Treatment Review

■ Findings

- Overall, treatments are performing well.
- For microsurface, cracks tend to reflect through within 1 year.
- Do thermoplastic pavement markings work with microsurface?
- Chip seal seems to do a better job of preventing reflective cracking.
- Larger aggregate chip seals (#11/16) seem to perform better than smaller agg (#12)
- Snow plow damage...



PPI Treatment Review

- 2 year old micro



PPI Treatment Review

- Thermo on micro? Depends...



PPI Treatment Review

- 2 year old chip seal



PPI Treatment Review

- #12 Limestone



PPI Treatment Review

- SC 16 2-face CG



Questions???

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