

Maintenance Management Systems

Mark Burton
Maintenance Management Supervisor
Operations Support Division
INDOT

Maintenance Management

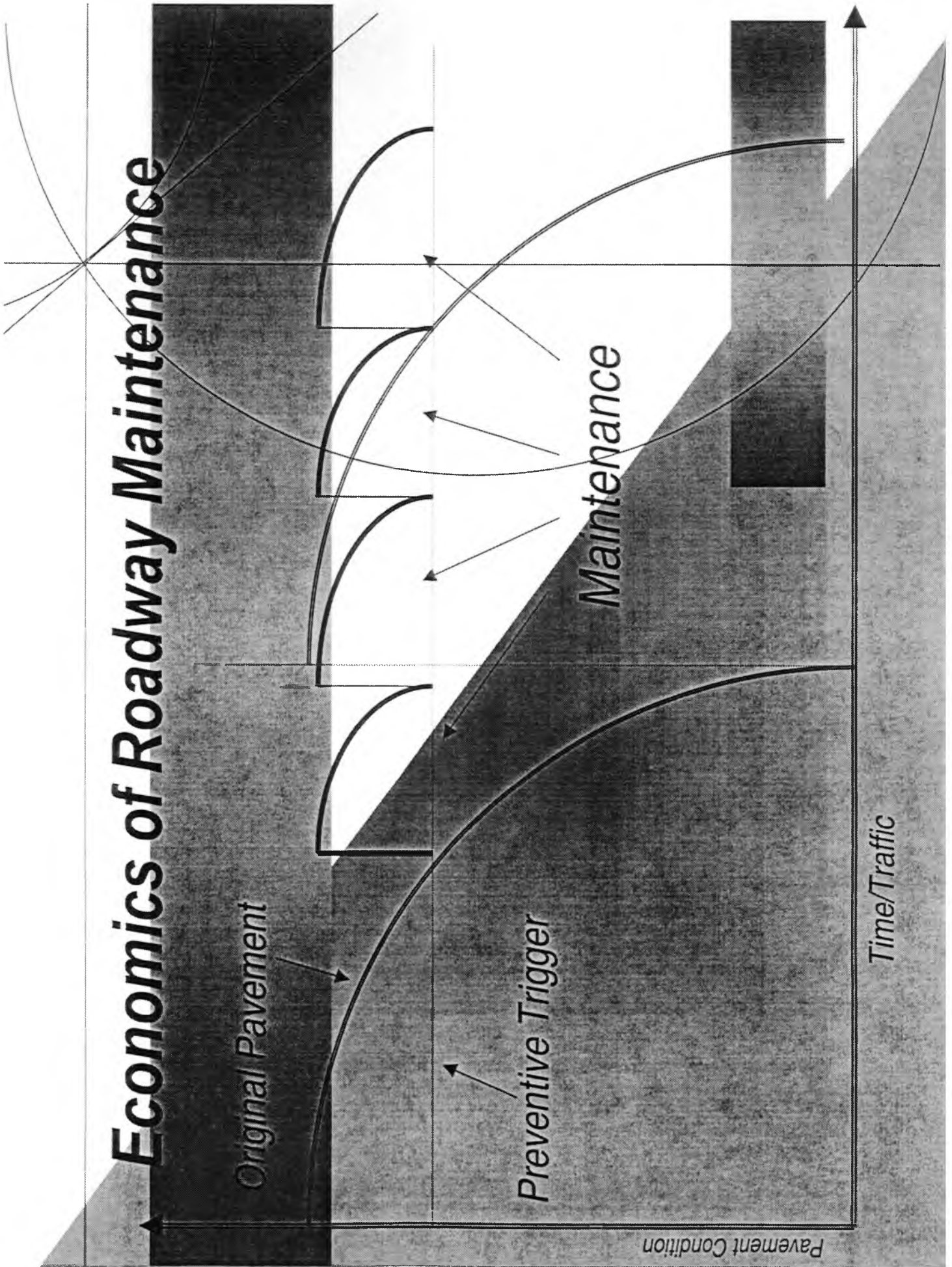
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*Maintenance Management
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Indiana Department of Transportation

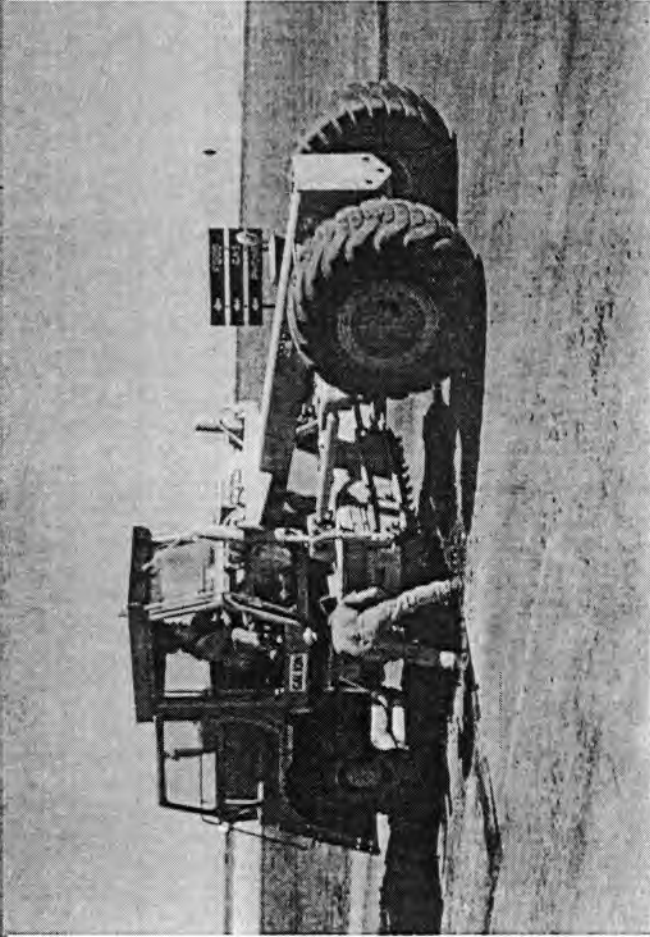
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Economics of Roadway Maintenance



What is Maintenance Management?

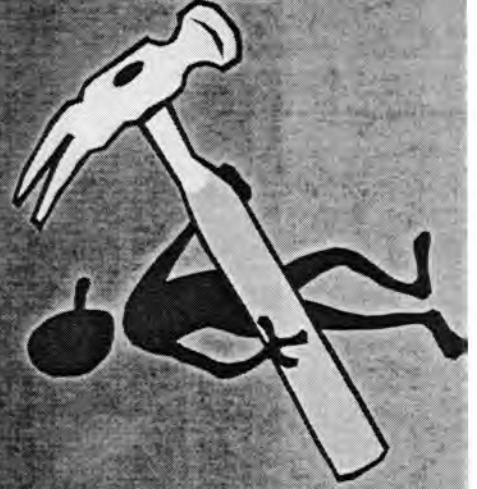
The ability to allocate resources according to the work plan.



Plan your work, work your plan

Why have a Maintenance Management System?

INDOT is responsible for over 11,000 miles of roadway, this includes total feature Inventory of Subdistricts, Toll Road Maintenance Units, and Traffic Districts





INDOT's Maintenance Management System

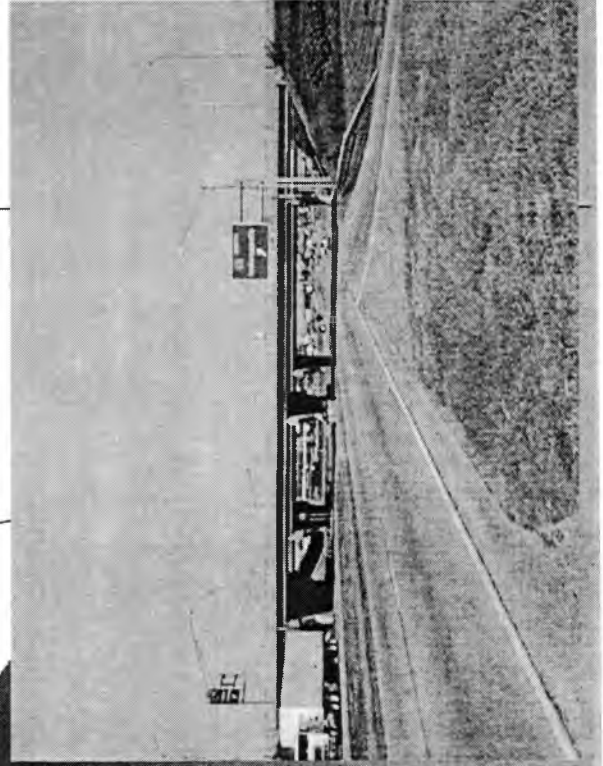
- ◆ Gives the ability to manage resources (Labor, Equipment, and Material)
- ◆ Gives method for tracking work performed.
- ◆ Gives cost of work per road segment.
- ◆ Allows managers to place priorities on specific maintenance tasks
- ◆ Plan and evaluate Resource usage
- ◆ Plan and evaluate Work Performance

Example of Maintenance Management

INDOT Activity 2440, Flushing Bridges

(Flush drains, expansion joints, seat and shoe assemblies, gutter lines, and Truss assembly if applicable)

- ◆ *Recommendation from INDOT's Central Office is 100% of all cleanable bridges*
- ◆ *Each Maintenance Subdistrict plans to accomplish 100% at the start of the year*



Example - Tracking Activity

2440, Flushing Bridges

Fowler Subdistrict

- ◆ *has 75 cleanable bridges*
- ◆ *plans to accomplish 100%*
- ◆ *Planned accomplish 25 bridges per month for March, April, May*

Bridge flushing should be scheduled in late Spring, after the winter weather season



INDOT's Work Management System

Indiana DOT Work Management System

File Edit View Tools Tables Interactive Work Reporting Reports System Maintenance Window Help

Interactive Workload Distribution

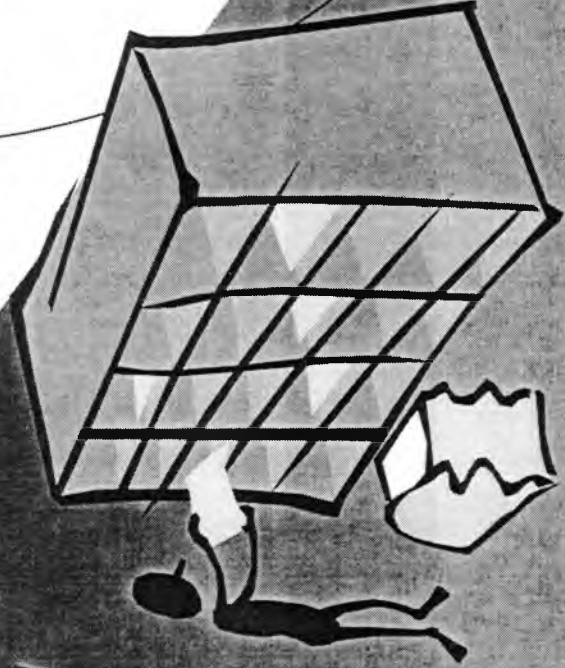
Workload Distribution

Fiscal Year: 2001

Crew	Act	MGMT	RC	Size	PD	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1000 1600 OS	1	10.0			10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000 1602 OS	1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000 1603 OS	1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000 1604 OS	1	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1120 1600 OS	1	744.0	62.7	65.7	62.7	59.7	53.7	62.7	59.8	62.8	68.8	56.8	62.8	65.8			
1120 1602 OS	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1120 1603 OS	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1120 1604 OS	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1170 1600 OS	1	194.0	24.0	17.0	18.0	18.0	27.0	10.0	10.0	12.0	16.0	20.0	12.0				
1170 1602 OS	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Person Days		10,488.5	930.6	920.0	771.6	780.2	772.2	1,029.4	850.2	913.0	995.7	763.5	809.0	953.1			
Avail Person Days		10,110.0	882.0	902.0	840.0	800.0	840.0	800.0	800.0	840.0	840.0	840.0	882.0	924.0			
Difference		378.5	48.6	18.0	-68.4	-19.8	52.2	189.4	50.2	73.0	75.7	3.5	-73.0	29.1			
Estimated Staff		44.3	41.8	36.7	39.0	42.9	49.0	42.5	43.3	40.2	38.5	43.3	43.3	43.3			

Reports

- ◆ *Monthly Reports helps track progress throughout INDOT*
- ◆ *Managers can generate reports for Equipment, Labor, Material usage, Activity cost, Location Maintenance Cost, and many more*
- ◆ *Reports keeps all parties informed as to the status work performed*



Conclusion

- ◆ *The Maintenance Management System is a tool to plan and evaluate Equipment, Labor, and Materials*
- ◆ *The “Plan the Work, Work the Plan” method helps ensure the Equipment, Labor, and Material are available when needed to perform the work.*
- ◆ *Work is scheduled in advance. Users can anticipate the emergency work when planning using historical statistics as a guide.*



Questions? Comments?

