

Determining Pavement Condition

PP-16-04


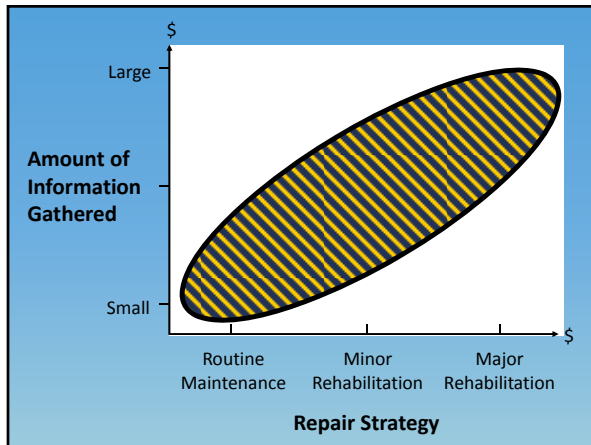
Maintenance Division
Inter Agency Contract

Summer 2016



STEP 2 PAVEMENT CONDITION

- Level of Evaluation
 - Funding available
 - Likely repair strategy
 - Risk reduction
 - Workforce available

Step 2 Pavement Condition

Geometrics (1)

Pavement Condition (2)

Traffic (3)

Thickness Design (4)

- Level 1
 - +Historic Records
 - + Visual Condition
 - +GPR
- Level 2
 - +FWD
 - +DPC
- Level 3
 - +Field Sampling
 - +Lab Testing

Routine Maintenance (6)

Pavement Maintenance (7)

Rehabilitation (8)

Economics (9)


Select Method (10)

STEP 2 PAVEMENT CONDITION

Anticipated Maintenance/Rehabilitation	Pavement Condition Investigation	
	Level	Activities
Routine Maintenance	1	Historic records/visual condition & perhaps GPR
Preventive Maintenance	1 & 2	GPR/FWD & perhaps DCP
Rehabilitation	1, 2 & 3	Field sampling and laboratory testing

STEP 1 GEOMETRICS/PAVEMENT CHARACTERISTICS

- Most important considerations
 - Quantity of existing materials
 - Width of lanes
 - Width of paved shoulder
 - Vertical controls



After widening paved surface is 24 ft. wide

Before widening paved surface was approx. 18 to 19 ft. wide

**STEP 2
PAVEMENT CONDITION**

- Level 1-Visual Condition Survey
 - Type of Distress
 - Severity of Distress
 - Extend of Distress



**STEP 2 - PAVEMENT CONDITION
GPR**



**STEP 2 - PAVEMENT CONDITION
FWD**



**STEP 2
PAVEMENT CONDITION**

Dynamic Cone Penetrometer



**STEP 2
PAVEMENT
CONDITION**



**STEP 2
PAVEMENT
CONDITION**





STEP 2 PAVEMENT CONDITION		
Anticipated Maintenance/ Rehabilitation	Pavement Condition Investigation	
	Level	Activities
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Preventive Maintenance	1 & 2	GPR/FWD & perhaps DCP
Rehabilitation	1, 2 & 3	Field sampling and laboratory testing

Overview of Existing Pavements Documents	
Document Number	Title
ESB-16-03	Project Level Pavement Evaluation Guidelines
IR-15-02	Project Level Pavement Evaluation Guidelines
TM-14-01	Evaluations and Recommendations from FM 99 Foamed Asphalt Stabilization
TM-14-02	Investigation of Longitudinal Cracking and Pavement Structural Load Carry Ability on FM 443
TM-14-03	Rehabilitation Recommendations for FM 468 in La Salle County
TM-14-04	Rehabilitation Recommendations for SH 97 in Gonzales County
TM-14-05	Evaluation of the Structural Strength of Pavements Repaired in the West Texas Energy Sector – SH 349 Martin County
TM-14-06	Rehabilitation Recommendations for SH 72 in Karnes County
TM-14-07	Rehabilitation Recommendations for SH 87 in Gonzales County
TM-15-01	Evaluation of FM 624 in La Salle County

Documents available on TxDOT Maintenance Division SharePoint site at https://txdot.sharepoint.com/sites/division-mnt/site_pages/home.aspx