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16. Abstract: The objectives for this research – to identify and to effectively communicate best practices for pavement edge maintenance – were accomplished by capturing over 3700 years of institutional knowledge from maintenance leaders representing all 25 Districts of TxDOT. The research focuses on maintenance practices for naturally-occurring edge drop-offs with an emphasis on low-volume roads. The key factors causing edge drop-offs are narrow road width/ absence of shoulders, traffic volume/type, and adverse environmental conditions. <i>Tracy's Law</i> , "If you lose the edge, you lose the road," provides a key perspective on meeting these challenges and emphasizes that good edge maintenance strategy is not only important in achieving good roads, but without good edge maintenance, a District cannot achieve good roads. Edge maintenance practices and procedures fall into three broad categories: awareness, preventive maintenance, and edge repair techniques. Road widening – both in-house using TxDOT forces and by formal contract – emerged as the ultimate practice for long-term treatment of edge problems. Districts use conventional, in-house-modified, and commercially-manufactured equipment specifically dealing with pavement edge maintenance to address the edge drop-off issue. Due to the significant financial resources devoted to pavement edge maintenance, several tools are used to better plan and allocate edge maintenance funds.					
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BEST PRACTICES FOR PAVEMENT EDGE MAINTENANCE
DISTRICT SURVEY

by

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Prepared in cooperation with the Texas Department of Transportation and the U.S. Department of Transportation, Federal Highway Administration.

Implementation Statement

This project identified best practices for pavement edge maintenance by capturing over 3700 years of institutional knowledge from TxDOT maintenance leaders. These best practices for pavement edge maintenance were communicated to over 500 TxDOT maintenance personnel through a series of half-day, regional training workshops covering the entire State. This initial training effort can be implemented more widely and deeply within TxDOT through on-going training and follow-on research efforts.

SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol	Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH					LENGTH				
in	inches	25.4	millimeters	mm	mm	millimeters	0.039	inches	in
ft	feet	0.305	meters	m	m	meters	3.28	feet	ft
yd	yards	0.914	meters	m	m	meters	1.09	yards	yd
mi	miles	1.61	kilometers	km	km	kilometers	0.621	miles	mi
AREA					AREA				
in ²	square inches	645.2	square millimeters	mm ²	mm ²	square millimeters	0.0016	square inches	in ²
ft ²	square feet	0.093	square meters	m ²	m ²	square meters	10.764	square feet	ft ²
yd ²	square yards	0.836	square meters	m ²	m ²	square meters	1.195	square yards	yd ²
ac	acres	0.405	hectares	ha	ha	hectares	2.47	acres	ac
mi ²	square miles	2.59	square kilometers	km ²	km ²	square kilometers	0.386	square miles	mi ²
VOLUME					VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL	mL	milliliters	0.034	fluid ounces	fl oz
gal	gallons	3.785	liters	L	L	liters	0.264	gallons	gal
ft ³	cubic feet	0.028	cubic meters	m ³	m ³	cubic meters	35.71	cubic feet	ft ³
yd ³	cubic yards	0.765	cubic meters	m ³	m ³	cubic meters	1.307	cubic yards	yd ³
NOTE: Volumes greater than 1000 l shall be shown in m ³ .									
MASS					MASS				
oz	ounces	28.35	grams	g	g	grams	0.035	ounces	oz
lb	pounds	0.454	kilograms	kg	kg	kilograms	2.202	pounds	lb
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")	Mg (or "t")	megagrams (or "metric ton")	1.103	short tons (2000 lb)	T
TEMPERATURE (exact)					TEMPERATURE (exact)				
°F	Fahrenheit temperature	5(F-32)/9 or (F-32)/1.8	Celcius temperature	°C	°C	Celcius temperature	1.8C + 32	Fahrenheit temperature	°F
ILLUMINATION					ILLUMINATION				
fc	foot-candles	10.76	lux	lx	lx	lux	0.0929	foot-candles	fc
fl	foot-Lamberts	3.426	candela/m ²	cd/m ²	cd/m ²	candela/m ²	0.2919	foot-Lamberts	fl
FORCE and PRESSURE or STRESS					FORCE and PRESSURE or STRESS				
lbf	poundforce	4.45	newtons	N	N	newtons	0.225	poundforce	lbf
lbf/in ²	poundforce per square inch	6.89	kilopascals	kPa	kPa	kilopascals	0.145	poundforce per square inch	lbf/in ²

* SI is the symbol for the International System of Units. Appropriate

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