

DISTRESS	DEFINITION	DISCRIPTION/SEVERITY/HOW TO MEASURE/ EXAMPLES	COMMENTS
Alligator (Fatigue) Cracking	this denotes structural distress; alligator cracks are typically longitudinal cracks forming small elongated pieces at: wheel paths, at the pavement edge, or around cracks in thin pavements.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#fatigue	
Bleeding/Flushing	excess asphalt or an unstable mix may push binder to the surface, resulting in a dark, sometimes shiny appearance. Often combines with rutting if the cause is an unstable mix.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#bleeding	
Block (Age) Cracking	this is an environmental distress; block cracks are cracks forming roughly square blocks (4x4 feet or smaller) throughout the pavement structure (not specifically at the wheel paths); often, block cracking is followed by alligator (fatigue) cracks in the wheel paths as the weakened pavement fails under heavier loads.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#block	
Catastrophic Maintenance	describes work activities generally necessary to return a roadway facility back to a minimum level of service while a permanent restoration is being designed and scheduled.	Examples of situations requiring catastrophic pavement maintenance activities include concrete pavement blow-ups, road washouts, avalanches, or rockslides.	
Corrective Maintenance	activities are performed in response to the development of a deficiency or deficiencies that negatively impact the safe, efficient operations of the facility and future integrity of the pavement section. Corrective maintenance activities are generally reactive, not proactive, and performed to restore a pavement to an acceptable level of service due to unforeseen conditions.	Activities such as pothole repair, patching of localized pavement deterioration, e.g. edge failures and/or grade separations along the shoulders, are considered examples of corrective maintenance of flexible pavements. Examples for rigid	
Longitudinal wheel path cracking	this denotes structural distress; longitudinal cracking in the wheel paths is the typical way a thicker pavement structure fails under heavy loading (thinner pavements typically exhibit alligator cracking instead).	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#wheelpath	
Pavement Preservation	is "a program employing a network level, long-term strategy that enhances pavement performance by using an integrated, cost-effective set of practices that extend pavement life, improve safety and meet motorist expectations." Source: <i>FHWA Pavement Preservation Expert Task Group</i>		
Pavement Reconstruction	is the replacement of the entire existing pavement structure by the placement of the equivalent or increased pavement structure. Reconstruction may require the complete removal and replacement of the existing pavement structure or in-place recycling which treats the sub grade of existing structural segment. Reconstruction may utilize either new or recycled materials incorporated into the materials used for the reconstruction of the complete pavement section.		
Potholes	potholes and/or depressions formed by base failure (or by delamination of the pavement surface in some cases). If caused by base failure, patching/deterioration is a form of structural distress.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#potholes	
Preventative Maintenance	is "a planned strategy of cost-effective treatments, that do not add structural capacity, to an existing roadway system and its appurtenances that preserves the system, retards future deterioration, and maintains or improves the functional condition of the system (without significantly increasing the structural capacity)." Source: <i>AASHTO Standing Committee on Highways, 1997</i>		
Raveling	the loss of aggregate (typically coarse stone) caused by aging, lack of compaction, or material segregation in the mix.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#raveling	
Reflection Cracks (composite pavements only)	these cracks form over the joints in underlying concrete slabs in a composite (Portland-cement concrete overlaid with hot-mix asphalt) pavement.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#nonwheelpath	
Roughness	the ride quality of the roadway, typically measured through the International Roughness Index (IRI) and expressed in vertical displacement over a distance (e.g. inches/mile).		
Routine Maintenance	consists of work, or treatments that do not add structural capacity, that is planned and performed on a routine basis to maintain and preserve the condition of the highway system or to respond to specific conditions and events that restore the highway system to an adequate level of service." Source: <i>AASHTO Highway Subcommittee on Maintenance</i>		
Rutting	depression of the pavement structure in the wheel paths. Can be caused either by pavement structural deficiency/inadequate compaction of the granular base, or by mix instability. Rutting that is caused by mix instability may show small ridges around wheel paths and/or is accompanied by bleeding or flushing.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#rutting	
Settlement/Dip	localized depression of the pavement, often associated with a utility trench, sink holes, or bridge approach.		
Transverse (full-width) cracking	this is an environmental distress caused by shrinkage of the hot-mix asphalt and thermal expansion and contraction.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#transverse	
Transverse and Longitudinal (non-wheel path) Cracking	this is typically an environmental distress that eventually can lead to block cracking.	http://www.tfsrc.gov/pavement/ltp/reports/03031/01.htm#transverse	
Treatment Family - A	Crack Treatment- Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - B	Sealer with or without sand load. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - C	Sealer with aggregate for a wearing course. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - D	In-place recycling. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - E	Thin overlays. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - F	Asphalt interlayers. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		
Treatment Family - G	Injection stabilization and/or pavement jacking. Source: <i>MGPEC TF Roadway Rehabilitation Techniques and Treatments (2009-2010)</i>		