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15. Abstract Objective Past literature has indicated that pavements that are initially built smoother, stay smoother longer, thus improving overall ride quality for a longer period of time. Past research has also shown that smoother pavements reduce maintenance costs over the life of the pavement. The North Dakota Department of Transportation (NDDOT) has developed a Strategic Business Plan (SBP) to help improve customer satisfaction within the state of North Dakota. The plan outlines a number of objectives in order to accomplish this plan. The desired outcome of SBP Objective 1.3 is to improve overall ride quality of North Dakota's roads by 10%. There is a need to replace the profilograph with a device that measures ride quality that simulates what the user feels in the car. Scope Data will be collected with both the LWP and HSP to be used to determine the resources required for implementation of a ride quality specification. Summary It is recommended not to use the shadow vehicle when profiling a project with the LWP. The shadow vehicle made passing the paving train more difficult. Removing the shadow vehicle will allow passing traffic to pass without being in the other lane as long. The HSP will profile projects much faster than the LWP. The HSP is recommended to be used when the traffic speeds allow. For areas where the speed limit and geometrics prevent the HSP from being used the LWP will be used. It is also recommended to use the RoLine lasers for a surface that has longitudinal tining or has been ground. A roadway with the entire surface having a longitudinal tined or ground surface should be profiled with the RoLines lasers. These lasers will provide a more accurate measurement of the IRI.			
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